

2010 Annual Weed Research Report



Texas AgriLife Research Lubbock



December 10, 2010

Dear Cooperator,

This report contains results from the weed research and cotton harvest aid projects of the Texas AgriLife Research and Extension Center at Lubbock for 2010. Off-Station trials were conducted at AG-CARES in Lamesa, Texas AgriLife Research at Halfway, the Helms Farm, and on-farm sites. These studies were conducted by Wayne Keeling, Peter Dotray, Lyndell Gilbert, Jacob Reed, Michael Petty, Will Keeling and Justin Spradley. Included is rainfall data for each location where trials were conducted.

We certainly appreciate the support and cooperation of each agricultural chemical company whose products were evaluated this year. We hope these data are of mutual benefit and we look forward to continued cooperative research in 2011.

A handwritten signature in black ink that reads "Wayne Keeling".

Wayne Keeling
Professor

A handwritten signature in black ink that reads "Peter Dotray".

Peter Dotray
Professor

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2010 Rainfall Reports

Lubbock

January		June	
22	0.05	1	1.09
28	0.34	14	0.05
30	0.73	20	0.13
31	0.01	27	0.87
total	1.13	28	0.07
YTD	1.13	total	2.21
		YTD	13.13
February		July	
3	1.17	1	0.37
4	0.19	2	1.68
11	0.11	3	3.18
23	0.05	4	0.13
28	0.05	8	0.37
total	1.57	10	0.29
YTD	2.70	11	0.43
		12	0.24
March		16	0.17
1	0.56	total	6.86
7	0.03	YTD	19.99
8	0.09		
11	0.08	August	
15	1.98	9	0.70
16	0.17	10	1.34
20	0.02	18	0.12
total	2.93	total	2.16
YTD	5.63	YTD	22.15
April		September	
14	0.01	10	0.26
15	1.54	24	0.23
16	2.31	total	0.49
17	0.22	YTD	22.64
20	0.03		
22	0.08	October	
total	4.19	22	1.67
YTD	9.82	total	1.67
May		YTD	24.31
14	0.81		
17	0.04		
26	0.22		
30	0.03		
total	1.10		
YTD	10.92		

Lamesa

January

10	0.50
28	1.75
total	2.25
YTD	2.25

February

3	1.90
11	0.50
21	0.30
total	2.70
YTD	4.95

March

1	0.40
8	0.30
total	0.70
YTD	5.65

April

15	1.50
16	1.00
17	0.40
22	0.60
total	3.50
YTD	9.15

May

2	0.20
14	0.50
15	0.35
26	0.10
27	0.10
28	0.13
total	1.38
YTD	10.53

June

2	0.25
3	0.20
14	1.90
20	0.50
total	2.85
YTD	13.38

July

2	0.75
3	1.50
4	1.50
5	1.00
7	1.00
9	0.10
10	0.50
12	0.90
28	0.60
total	7.85
YTD	21.23

August

total	0.00
YTD	21.23

September

1	2.00
2	0.50
9	0.50
17	1.90
25	0.40
total	5.30
YTD	26.53

October

3	0.30
total	0.30
YTD	26.83

Halfway

January

28	1.15
total	1.15
YTD	1.15

February

3	1.11
11	0.13
22	0.01
total	1.25
YTD	2.40

March

1	0.35
8	0.15
15	1.5
20	0.03
total	2.03
YTD	4.43

April

15	2.10
16	1.18
21	0.51
22	0.10
total	3.89
YTD	8.32

May

14	1.48
17	1.51
31	0.16
total	3.15
YTD	11.47

June

1	0.20
10	0.36
14	0.50
17	0.35
23	0.16
27	0.05
total	1.62
YTD	13.09

July

2	0.08
3	2.16
8	0.10
9	0.10
11	1.05
14	0.48
28	0.27
total	4.24
YTD	17.33

August

6	1.21
17	0.81
total	2.02
YTD	19.35

September

13	0.30
16	0.12
total	0.42
YTD	19.77

October

21	1.41
total	1.41
YTD	21.18

On-Station Trials

Texas Agricultural Experiment Station

SESAME TOLERANCE TO PROWL H2O APPLIED PREPLANT

Trial ID: 102L-10
Location: ON STATION F305

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LUBBOCK
State/Prov.: TX

Initiation Date: Mar/30/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

SESAME Variety: SESACO S32
Planting Date: Jun/10/2010 Planting Method: 4 ROW
Row Spacing: 40 IN
Soil Temperature: 87.8 F Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 40 FT Reps: 3
Study Design: FACTORIAL

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	Mar/30/2010	Apr/12/2010	May/01/2010	May/13/2010	May/28/2010	Jun/10/2010
Time of Day:	8:30 AM	9:00 AM	6:45 AM	2:00 PM	8:30 AM	7:45 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	A-75 DBP	B-62 DBP	C-43 DBP	D-31 DBP	E-15 DBP	F-0 DBP
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	50.7 F	63 F	53.4 F	71.7 F	71.4 F	75.6 F
% Relative Humidity:	38.5	88	33.5	35	64.6	82
Wind Velocity, Unit:	4.5 MPH	5.4 MPH	3.1 MPH	7.4 MPH	3.5 MPH	8 MPH
Soil Temp., Unit:	50 F	62.7 F	59.7 F	72.6 F	71.1 F	79.5 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE	DRY	ADEQUATE	ADEQUATE
% Cloud Cover:	50	100	100	0	0	20

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
SESAME	SESAME	SESAME	SESAME	SESAME	SESAME	SESAME
Stage Scale: PPI	PPI	PPI	PPI	PPI	PPI	PPI
	N/A	N/A	N/A	N/A	N/A	N/A

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
	N/A	N/A	N/A	N/A	N/A	N/A

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	BLUE CUB	BLUE CUB	BLUE CUB	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI	28 PSI	27 PSI
Nozzle Type:	TURBOTEE	TURBOTEE	TURBOTEE	TURBOTEE	TURBOTEE	TURBOTEE
Nozzle Size:	110015	110015	110015	110015	110015	110015
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN	19 IN	19 IN	19 IN
Boom Height, Unit:	22 IN	22 IN	22 IN	20 IN	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	3 MPH	3 MPH	3 MPH
Incorporation Equip.:	ROLL CULT	ROLL CULT	ROLL CULT	ROLL CULT	ROLL CULT	ROLL CULT
Hours to Incorp.:	1	1	1	1	1	1
Incorp. Depth, Unit:	3 IN	3 IN	3 IN	3 IN	3 IN	3 IN
Carrier:	WATER	WATER	WATER	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA	10 GPA	10 GPA	10 GPA
Propellant:	AIR	AIR	AIR	CO2	CO2	CO2

Treatment Application Comment

3/30/10 - SPRAYED 75 DBP; INCORP 1X W/ROLL. CULT. @ 5 MPH
4/12/10 - SPRAYED 62 DBP; INCORP 1X W/ROLL. CULT. @ 5 MPH
5/1/10 - SPRAYED 43 DBP; INCORP 1X W/ROLL. CULT. @ 5 MPH
5/13/10 - SPRAYED 31 DBP; INCORP 1X W/ROLL. CULT. @ 5 MPH
5/28/10 - SPRAYED 15 DBP; INCORP 1X W/ROLL. CULT. @ 5 MPH
6/10/10 - SPRAYED 0 DBP; INCORP 1X W/ROLL. CULT. @ 5 MPH
6/10/10 - PLANTED AFTER RODWEEDING W/SESACO S32

Texas Agricultural Experiment Station

SESAME TOLERANCE TO PROWL H2O APPLIED PREPLANT

Trial ID: 102L-10
Location: ON STATION F305

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code
Rating Data Type
Rating Unit
Rating Date

SESAME	SESAME	SESAME	SESAME
INJURY	INJURY	INJURY	INJURY
PERCENT	PERCENT	PERCENT	PERCENT
Jun/24/2010	Jul/08/2010	Aug/05/2010	Nov/09/2010

Trt	Treatment	Rate	Product	Product	Appl
No.	Name	Rate	Unit	Rate	Unit
					Code

TABLE OF R MEANS

Replicate 1	1.3	1.7	1.7	1.7
Replicate 2	0.8	1.5	1.5	0.6
Replicate 3	0.6	0.6	1.0	0.4

TABLE OF A MEANS

1 PROWL H2O	0 lb ai/a	0 oz/a	0.0	0.0	0.0	0.0
2 PROWL H2O	0.505 lb ai/a	17 oz/a	0.0	0.0	0.0	0.0
3 PROWL H2O	1.01 lb ai/a	34 oz/a	0.6	0.0	0.0	0.0
4 PROWL H2O	2.02 lb ai/a	68 oz/a	3.1	5.0	5.6	3.6

TABLE OF B MEANS

1 75 DAYS BEFORE PLANTING	A	0.0	0.0	0.0	0.0
2 60 DAYS BEFORE PLANTING	B	0.0	0.0	0.0	0.0
3 45 DAYS BEFORE PLANTING	C	0.0	0.0	0.0	0.0
4 30 DAYS BEFORE PLANTING	D	0.0	0.0	0.0	0.0
5 15 DAYS BEFORE PLANTING	E	0.0	2.1	2.9	1.7
6 0 DAYS BEFORE PLANTING	F	5.4	5.4	5.4	3.8

TABLE OF AB MEANS

1 PROWL H2O	0 lb ai/a	0 oz/a		0.0	0.0	0.0	0.0
1 75 DAYS BEFORE PLANTING			A				
2 PROWL H2O	0.505 lb ai/a	17 oz/a		0.0	0.0	0.0	0.0
1 75 DAYS BEFORE PLANTING			A				
3 PROWL H2O	1.01 lb ai/a	34 oz/a		0.0	0.0	0.0	0.0
1 75 DAYS BEFORE PLANTING			A				
4 PROWL H2O	2.02 lb ai/a	68 oz/a		0.0	0.0	0.0	0.0
1 75 DAYS BEFORE PLANTING			A				
1 PROWL H2O	0 lb ai/a	0 oz/a		0.0	0.0	0.0	0.0
2 60 DAYS BEFORE PLANTING			B				
2 PROWL H2O	0.505 lb ai/a	17 oz/a		0.0	0.0	0.0	0.0
2 60 DAYS BEFORE PLANTING			B				
3 PROWL H2O	1.01 lb ai/a	34 oz/a		0.0	0.0	0.0	0.0
2 60 DAYS BEFORE PLANTING			B				
4 PROWL H2O	2.02 lb ai/a	68 oz/a		0.0	0.0	0.0	0.0
2 60 DAYS BEFORE PLANTING			B				
1 PROWL H2O	0 lb ai/a	0 oz/a		0.0	0.0	0.0	0.0
3 45 DAYS BEFORE PLANTING			C				
2 PROWL H2O	0.505 lb ai/a	17 oz/a		0.0	0.0	0.0	0.0
3 45 DAYS BEFORE PLANTING			C				
3 PROWL H2O	1.01 lb ai/a	34 oz/a		0.0	0.0	0.0	0.0
3 45 DAYS BEFORE PLANTING			C				
4 PROWL H2O	2.02 lb ai/a	68 oz/a		0.0	0.0	0.0	0.0
3 45 DAYS BEFORE PLANTING			C				
1 PROWL H2O	0 lb ai/a	0 oz/a		0.0	0.0	0.0	0.0
4 30 DAYS BEFORE PLANTING			D				
2 PROWL H2O	0.505 lb ai/a	17 oz/a		0.0	0.0	0.0	0.0
4 30 DAYS BEFORE PLANTING			D				
3 PROWL H2O	1.01 lb ai/a	34 oz/a		0.0	0.0	0.0	0.0
4 30 DAYS BEFORE PLANTING			D				
4 PROWL H2O	2.02 lb ai/a	68 oz/a		0.0	0.0	0.0	0.0
4 30 DAYS BEFORE PLANTING			D				
1 PROWL H2O	0 lb ai/a	0 oz/a		0.0	0.0	0.0	0.0
5 15 DAYS BEFORE PLANTING			E				
2 PROWL H2O	0.505 lb ai/a	17 oz/a		0.0	0.0	0.0	0.0
5 15 DAYS BEFORE PLANTING			E				
3 PROWL H2O	1.01 lb ai/a	34 oz/a		0.0	0.0	0.0	0.0
5 15 DAYS BEFORE PLANTING			E				
4 PROWL H2O	2.02 lb ai/a	68 oz/a		0.0	8.3	11.7	6.7
5 15 DAYS BEFORE PLANTING			E				
1 PROWL H2O	0 lb ai/a	0 oz/a		0.0	0.0	0.0	0.0
6 0 DAYS BEFORE PLANTING			F				
2 PROWL H2O	0.505 lb ai/a	17 oz/a		0.0	0.0	0.0	0.0
6 0 DAYS BEFORE PLANTING			F				

Texas Agricultural Experiment Station

Crop Code
Rating Data Type
Rating Unit
Rating Date

SESAME SESAME SESAME SESAME
INJURY INJURY INJURY INJURY
PERCENT PERCENT PERCENT PERCENT
Jun/24/2010 Jul/08/2010 Aug/05/2010 Nov/09/2010

Trt	Treatment		Rate	Product	Product	Appl				
No.	Name		Rate	Unit	Rate	Unit	Code			
3	PROWL H2O		1.01	lb ai/a	34	oz/a		3.3	0.0	0.0
6	0 DAYS BEFORE PLANTING						F			
4	PROWL H2O		2.02	lb ai/a	68	oz/a		18.3	21.7	21.7
6	0 DAYS BEFORE PLANTING						F			15.0

Texas Agricultural Experiment Station

SESAME TOLERANCE TO PROWL H2O APPLIED PREPLANT

Trial ID: 102L-10
Location: ON STATION F305

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Jun/24/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	1066.319444				
R	2	4.861111	2.430556	1.615	0.2156	0.7
A	3	114.930556	38.310185	25.462	0.0008	1.0
RA	6	9.027778	1.504630	1.000	0.4435	1.4
B	5	293.402778	58.680556	24.143	0.0001	1.4
RB	10	24.305556	2.430556	1.615	0.1500	1.8
AB	15	574.652778	38.310185	25.462	0.0001	2.0
RAB	30	45.138889	1.504630			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Jun/24/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	1066.319444				
R	2	4.861111	2.430556	1.425	0.2510	0.8
A	3	114.930556	38.310185	22.457	0.0001	0.9
B	5	293.402778	58.680556	34.398	0.0001	1.1
AB	15	574.652778	38.310185	22.457	0.0001	2.2
ERROR	46	78.472222	1.705918			

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Jul/08/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	1787.500000				
R	2	14.583333	7.291667	1.296	0.2884	1.4
A	3	337.500000	112.500000	15.429	0.0032	2.2
RA	6	43.750000	7.291667	1.296	0.2890	2.8
B	5	291.666667	58.333333	10.370	0.0010	2.2
RB	10	56.250000	5.625000	1.000	0.4654	3.4
AB	15	875.000000	58.333333	10.370	0.0001	4.0
RAB	30	168.750000	5.625000			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Jul/08/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	1787.500000				
R	2	14.583333	7.291667	1.248	0.2966	1.4
A	3	337.500000	112.500000	19.256	0.0001	1.6
B	5	291.666667	58.333333	9.984	0.0001	2.0
AB	15	875.000000	58.333333	9.984	0.0001	4.0
ERROR	46	268.750000	5.842391			

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Aug/05/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	1811.111111				
R	2	4.861111	2.430556	0.854	0.4359	1.0
A	3	416.666667	138.888889	57.143	0.0001	1.3
RA	6	14.583333	2.430556	0.854	0.5395	2.0
B	5	315.277778	63.055556	22.146	0.0001	1.5
RB	10	28.472222	2.847222	1.000	0.4654	2.4
AB	15	945.833333	63.055556	22.146	0.0001	2.8
RAB	30	85.416667	2.847222			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Aug/05/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	1811.111111				
R	2	4.861111	2.430556	0.870	0.4256	1.0
A	3	416.666667	138.888889	49.730	0.0001	1.1
B	5	315.277778	63.055556	22.577	0.0001	1.4
AB	15	945.833333	63.055556	22.577	0.0001	2.8
ERROR	46	128.472222	2.792874			

Texas Agricultural Experiment Station

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Nov/09/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	1066.319444				
R	2	21.527778	10.763889	1.867	0.1720	1.4
A	3	176.041667	58.680556	5.452	0.0378	2.7
RA	6	64.583333	10.763889	1.867	0.1195	2.8
B	5	143.402778	28.680556	4.976	0.0151	2.2
RB	10	57.638889	5.763889	1.000	0.4654	3.5
AB	15	430.208333	28.680556	4.976	0.0001	4.0
RAB	30	172.916667	5.763889			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Nov/09/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	1066.319444				
R	2	21.527778	10.763889	1.678	0.1980	1.5
A	3	176.041667	58.680556	9.146	0.0001	1.7
B	5	143.402778	28.680556	4.470	0.0021	2.1
AB	15	430.208333	28.680556	4.470	0.0001	4.2
ERROR	46	295.138889	6.416063			

Texas Agricultural Experiment Station

SESAME TOLERANCE TO 2,4-D FOLLOWING PREPLANT APPLICATIONS

Trial ID: 103L-10
Location: ON STATION F305

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LUBBOCK
State/Prov.: TX

Initiation Date: May/13/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

SESAME Variety: SESACO S32
Planting Date: Jun/10/2010 Planting Method: 4 ROW
Row Spacing: 40 IN
Soil Temperature: 87.8 F Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	May/13/2010	May/28/2010	Jun/04/2010	Jun/10/2010
Time of Day:	2:15 PM	8:15 AM	7:45 AM	7:45 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	A-30 DBP	B-15 DBP	C-7 DBP	D-0DBP
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	72 F	71.4 F	69.5 F	75.6 F
% Relative Humidity:	35	64.6	70	82
Wind Velocity, Unit:	7 MPH	3.5 MPH	4.8 MPH	8 MPH
Soil Temp., Unit:	72.6 F	71.1 F	69.2 F	79.5 F
Soil Moisture:	DRY	ADEQUATE	ADEQUATE	ADEQUATE
% Cloud Cover:	0	0	0	20

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Stage Scale:	SESAME PREPLANT N/A	SESAME PREPLANT N/A	SESAME PREPLANT N/A	SESAME PREPLANT N/A

APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	30 PSI	28 PSI	28 PSI	27 PSI
Nozzle Type:	TURBOTEE	TURBOTEE	TURBOTEE	TURBOTEE
Nozzle Size:	110015	110015	110015	110015
Nozzle Spacing, Unit:	19 IN	19 IN	19 IN	19 IN
Boom Height, Unit:	20 IN	20 IN	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA	10 GPA
Propellant:	CO2	CO2	CO2	CO2

Treatment Application Comment

6/10/2010-SPRAYED; RODWEDED; PLANTED

Texas Agricultural Experiment Station

SESAME TOLERANCE TO 2,4-D FOLLOWING PREPLANT APPLICATIONS

Trial ID: 103L-10
Location: ON STATION F305

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	SESAME	SESAME	SESAME	SESAME
Rating Data Type	INJURY	INJURY	INJURY	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	Jun/24/2010	Jul/08/2010	Aug/05/2010	Nov/09/2010

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code				
1	UNTREATED						0.0 a	0.0 b	0.0 a	0.0 a
2	4 WEEKS BEFORE PLANT					A	6.7 a	4.3 ab	0.0 a	0.0 a
	2,4-D AMINE	0.95	lb ai/a	32	oz/a	A				
3	2 WEEKS BEFORE PLANT					B	6.7 a	7.7 ab	0.0 a	0.0 a
	2,4-D AMINE	0.95	lb ai/a	32	oz/a	B				
4	1 WEEK BEFORE PLANT					C	6.7 a	6.7 ab	0.0 a	0.0 a
	2,4-D AMINE	0.95	lb ai/a	32	oz/a	C				
5	0 WEEKS BEFORE PLANT					D	13.3 a	11.7 a	16.7 a	11.7 a
	2,4-D AMINE	0.95	lb ai/a	32	oz/a	D				
6	UNTREATED CHECK #2						0.0 a	0.0 b	3.3 a	3.3 a
	LSD (P=.05)						10.97	5.71	12.86	9.54
	Standard Deviation						6.03	3.14	7.07	5.24
	CV						108.58	62.1	212.13	209.76
	Bartlett's X2						4.731	5.301	1.587	0.631
	P(Bartlett's X2)						0.193	0.151	0.208	0.427
	Replicate F						0.725	3.557	0.333	0.152
	Replicate Prob(F)						0.5080	0.0681	0.7242	0.8613
	Treatment F						2.076	6.378	2.667	2.394
	Treatment Prob(F)						0.1523	0.0065	0.0877	0.1125

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

WHEAT TOLERANCE TO VALOR COMBINATIONS

Trial ID: 104L-10
Location: ON STATION F305

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LUBBOCK
State/Prov.: TX

Initiation Date: Mar/23/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

WHEAT Variety: TAM 111
Planting Date: Oct/02/2009 Planting Method: DRILL ON BEDS
Rate: 53 LB/A Depth: 1.5 IN
Row Spacing: 7.5 IN Seed Bed: 40 INCH BEDS
Soil Temperature: 64.7 F Soil Moisture: ADEQUATE Emergence Date: Oct/08/2009

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A
Application Date: Mar/23/2010
Time of Day: 8:30 AM
Application Method: SPRAY
Application Timing: A POST
Applic. Placement: BROADCAST
Air Temp., Unit: 44.8 F
% Relative Humidity: 48.5
Wind Velocity, Unit: 6 MPH
Soil Temp., Unit: 45 F
Soil Moisture: ADEQUATE
% Cloud Cover: 70

CROP STAGE AT EACH APPLICATION

A
WHEAT
Height, Unit: 13 IN

APPLICATION EQUIPMENT

A
Appl. Equipment: BACKPACK
Operating Pressure: 24 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 30 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Treatment Application Comment
SPRAYED 4 ROWS

Texas Agricultural Experiment Station

WHEAT TOLERANCE TO VALOR COMBINATIONS

Trial ID: 104L-10
Location: ON STATION F305

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code					
Crop Code	WHEAT	WHEAT	MUSTARD	WHEAT	WHEAT
Part Rated			PLANTS		
Rating Data Type	INJURY	INJURY	#/PLOT	INJURY	YIELD
Rating Unit	PERCENT	PERCENT		PERCENT	BUSHEL/A
Rating Date	Mar/30/2010	Apr/06/2010	Apr/06/2010	Apr/20/2010	Jun/30/2010
Trt-Eval Interval	7 DA-A	14 DA-A	14 DA-A	14 DA-A	99 DA-A

Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code					
1	UNTREATED						0.0 d	0.0 d	1.0 a	0.0 c	40.33 a
2	VALOR SX	0.064	lb ai/a	2 oz/a	A		13.3 c	12.3 c	0.0 a	6.3 b	47.27 a
3	VALOR SX	0.064	lb ai/a	2 oz/a	A		36.7 a	30.0 a	0.3 a	18.3 a	39.03 a
	NIS	0.25	% v/v	3.2 oz/a	A						
4	VALOR SX	0.064	lb ai/a	2 oz/a	A		31.7 b	20.0 b	0.0 a	13.3 ab	39.87 a
	2,4-D AMINE	0.5	lb ai/a	16.8 oz/a	A						
5	VALOR SX	0.064	lb ai/a	2 oz/a	A		40.0 a	30.0 a	0.0 a	13.3 ab	45.00 a
	ALLY	0.00375	lb ai/a	0.1 oz/a	A						
	NIS	0.25	% v/v	3.2 oz/a	A						
LSD (P=.05)							3.44	2.12	0.97	5.70	13.337
Standard Deviation							1.83	1.13	0.52	3.03	7.083
CV							7.5	6.09	193.65	29.49	16.75
Bartlett's X2							0.0	0.0	0.548	1.515	2.921
P(Bartlett's X2)							.	.	0.459	0.679	0.571
Replicate F							3.500	1.000	1.000	2.364	9.785
Replicate Prob(F)							0.0809	0.4096	0.4096	0.1561	0.0071
Treatment F							262.000	383.105	2.125	16.753	0.784
Treatment Prob(F)							0.0001	0.0001	0.1691	0.0006	0.5666

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

PREPLANT BURNDOWN - COTTON

Trial ID: 105L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. KCHSC	KOCHIA	KOCHIA SCOPARIA
2. SASKR	RUSSIAN THISTLE	SALSOA IBERICA

Crop 1: GOSHI COTTON, SHORT STAPLE
Planting Date: May/19/2010

Variety: FM 9058 B2F

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Apr/22/2010
Time of Day: 2:00PM
Application Method: TRACTOR
Applic. Placement: BROADCAST
Air Temp., Unit: 82 F
% Relative Humidity: 43
Wind Velocity, Unit: 4 MPH
Soil Temp., Unit: 68 F
Soil Moisture: ADEQUATE
% Cloud Cover: 50

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: KCHSC KOCHIA
Stage Scale: 1-2"
Weed 2 Code, Stage: SASKR RSN THST
Stage Scale: 1-2"

APPLICATION EQUIPMENT

A

Appl. Equipment: TRACTOR
Operating Pressure: 30
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: AIR

Texas Agricultural Experiment Station

PREPLANT BURNDOWN - COTTON

Trial ID: 105L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	KOCHIA	RSN THST	KOCHIA	RSN THST	KOCHIA	RSN THST	KOCHIA
Crop Code							
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%	%	%
Rating Date	Apr/29/2010	Apr/29/2010	May/06/2010	May/06/2010	Apr/29/2010	Apr/29/2010	May/06/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code						
1	UNTREATED				0.0 e	0.0 c	0.0 d	0.0 b	0.0 e	0.0 c
2	ROUNDUP POWERMAX	32 oz/a	A		75.0 d	78.3 b	97.7 bc	99.3 a	75.0 d	78.3 b
	NIS	0.25 % v/v	A							
3	ET	1.5 oz/a	A		99.7 a	99.7 a	100.0 a	100.0 a	99.7 a	99.7 a
	ROUNDUP POWERMAX	32 oz/a	A							
	NIS	0.25 % v/v	A							
4	CAPAROL	32 oz/a	A		90.7 b	91.7 a	99.0 ab	100.0 a	90.7 b	91.7 a
	ROUNDUP POWERMAX	32 oz/a	A							
	NIS	0.25 % v/v	A							
5	ET	1.5 oz/a	A		100.0 a	99.7 a	100.0 a	100.0 a	100.0 a	99.7 a
	CAPAROL	32 oz/a	A							
	ROUNDUP POWERMAX	32 oz/a	A							
	NIS	0.25 % v/v	A							
6	GWN-9794	0.5 oz/a	A		99.0 a	99.7 a	99.7 a	100.0 a	99.0 a	99.7 a
	ROUNDUP POWERMAX	1 lb ai/a	A							
7	GWN-9795	3.5 oz/a	A		74.3 d	76.7 b	97.0 c	99.7 a	73.3 d	76.7 b
	ROUNDUP POWERMAX	1 lb ai/a	A							
8	TNT	0.5 oz/a	A		76.7 cd	90.0 a	100.0 a	100.0 a	76.7 cd	90.0 a
	ROUNDUP POWERMAX	1 lb ai/a	A							
9	ROUNDUP POWERMAX	1 lb ai/a	A		81.7 c	78.3 b	96.3 c	98.3 a	81.7 c	78.3 b
LSD (P=.05)					5.31	7.45	1.49	1.87	5.06	7.45
Standard Deviation					3.07	4.30	0.86	1.08	2.92	4.30
CV					3.96	5.43	0.98	1.22	3.78	5.43
Bartlett's X2					11.897	20.311	3.164	4.388	11.873	20.311
P(Bartlett's X2)					0.064	0.005*	0.531	0.111	0.065	0.005*
Replicate F					1.097	0.600	0.050	0.606	1.093	0.600
Replicate Prob(F)					0.3576	0.5609	0.9517	0.5578	0.3591	0.5609
Treatment F					305.593	158.055	4365.144	2850.223	337.210	158.055
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	RSN THST	KOCHIA	RSN THST	COTTON	COTTON
Crop Code				INJURY	INJURY
Rating Data Type	CONTROL	CONTROL	CONTROL		
Rating Unit	%	%	%	%	%
Rating Date	May/06/2010	May/13/2010	May/13/2010	Jun/07/2010	Jun/14/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code					
1	UNTREATED				0.0 b	0.0 c	0.0 b	0.0 b	0.0 b
2	ROUNDUP POWERMAX	32	oz/a	A	99.3 a	96.0 b	98.3 a	0.0 b	0.0 b
	NIS	0.25	% v/v	A					
3	ET	1.5	oz/a	A	100.0 a	100.0 a	100.0 a	0.0 b	0.0 b
	ROUNDUP POWERMAX	32	oz/a	A					
	NIS	0.25	% v/v	A					
4	CAPAROL	32	oz/a	A	100.0 a	99.0 a	100.0 a	0.0 b	0.0 b
	ROUNDUP POWERMAX	32	oz/a	A					
	NIS	0.25	% v/v	A					
5	ET	1.5	oz/a	A	100.0 a	100.0 a	100.0 a	0.0 b	0.0 b
	CAPAROL	32	oz/a	A					
	ROUNDUP POWERMAX	32	oz/a	A					
	NIS	0.25	% v/v	A					
6	GWN-9794	0.5	oz/a	A	100.0 a	100.0 a	100.0 a	0.0 b	0.0 b
	ROUNDUP POWERMAX	1	lb ai/a	A					
7	GWN-9795	3.5	oz/a	A	99.7 a	96.7 b	100.0 a	75.0 a	50.0 a
	ROUNDUP POWERMAX	1	lb ai/a	A					
8	TNT	0.5	oz/a	A	100.0 a	100.0 a	100.0 a	0.0 b	0.0 b
	ROUNDUP POWERMAX	1	lb ai/a	A					
9	ROUNDUP POWERMAX	1	lb ai/a	A	98.3 a	95.7 b	99.3 a	0.0 b	0.0 b
LSD (P=.05)					1.87	1.56	1.83	5.00	5.77
Standard Deviation					1.08	0.90	1.06	2.89	3.33
CV					1.22	1.03	1.19	34.64	60.0
Bartlett's X2					4.388	0.69	1.446	0.0	0.0
P(Bartlett's X2)					0.111	0.876	0.229	.	.
Replicate F					0.606	1.409	0.628	1.000	1.000
Replicate Prob(F)					0.5578	0.2731	0.5463	0.3897	0.3897
Treatment F					2850.223	3974.739	2958.728	225.000	75.000
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

SHARPEN - TANK MIXES

Trial ID: 109L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. KCHSC	KOCHIA	KOCHIA SCOPARIA
2. SASKR	RUSSIAN THISTLE	SALSOLA IBERICA

Crop 1: GOSHI COTTON, SHORT STAPLE
Planting Date: May/14/2010

Variety: DP 161 B2RF

SITE AND DESIGN

Plot Width, Unit: 26.67 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Apr/05/2010
Time of Day: 9:00AM
Application Method: TRACTOR
Application Timing: A - PPBD
Applic. Placement: BROADCAST
Air Temp., Unit: 67 F
% Relative Humidity: 68
Wind Velocity, Unit: 7 MPH
Soil Temp., Unit: 60 F
Soil Moisture: ADEQUATE
% Cloud Cover: 5

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: KCHSC KOCHIA
Stage Scale: 1"
Weed 2 Code, Stage: SASKR RSN THST
Stage Scale: 1"

APPLICATION EQUIPMENT

A

Appl. Equipment: TRACTOR
Operating Pressure: 30
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: AIR

Texas Agricultural Experiment Station

SHARPEN - TANK MIXES

Trial ID: 109L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	KOCHIA	RSN THST	KOCHIA	RSN THST	KOCHIA	RSN THST	UNTREATE
Crop Code							COTTON
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	STAND
Rating Unit	%	%	%	%	%	%	/METER
Rating Date	Apr/12/2010	Apr/12/2010	Apr/19/2010	Apr/19/2010	May/13/2010	May/13/2010	May/27/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code						
1	UNTREATED				0.0 c	0.0 c	0.0 c	0.0 b	0.0 c	0.0 c
2	ROUNDUP POWERMAX	22 oz/a	A		56.7 b	81.7 b	86.7 b	98.3 a	78.3 b	90.0 b
	NIS	0.25 % v/v	A							
	AMS	17 lb/100 gal	A							
3	SHARPEN	1 oz/a	A		98.0 a	100.0 a	98.7 a	100.0 a	94.7 a	99.0 a
	ROUNDUP POWERMAX	22 oz/a	A							
	MSO	1 % v/v	A							
	AMS	17 lb/100 gal	A							
4	SHARPEN	1 oz/a	A		98.3 a	100.0 a	99.7 a	100.0 a	95.7 a	99.0 a
	ROUNDUP POWERMAX	22 oz/a	A							
	2,4-D ESTER	8 oz/a	A							
	MSO	1 % v/v	A							
	AMS	17 lb/100 gal	A							
5	SHARPEN	1 oz/a	A		99.7 a	100.0 a	99.7 a	100.0 a	99.3 a	100.0 a
	ROUNDUP POWERMAX	22 oz/a	A							
	DISTINCT	4 oz/a	A							
	MSO	1 % v/v	A							
	AMS	17 lb/100 gal	A							
6	SHARPEN	1 oz/a	A		98.7 a	100.0 a	99.3 a	100.0 a	99.0 a	99.3 a
	ROUNDUP POWERMAX	22 oz/a	A							
	CLARITY	8 oz/a	A							
	MSO	1 % v/v	A							
	AMS	17 lb/100 gal	A							
7	SHARPEN	2 oz/a	A		98.7 a	100.0 a	99.7 a	100.0 a	97.3 a	99.7 a
	ROUNDUP POWERMAX	22 oz/a	A							
	MSO	1 % v/v	A							
	AMS	17 lb/100 gal	A							
LSD (P=.05)					4.63	5.14	4.21	1.94	9.51	0.90
Standard Deviation					2.60	2.89	2.36	1.09	5.34	0.50
CV					3.31	3.47	2.83	1.28	6.63	0.6
Bartlett's X2					14.186	0.0	19.933	0.0	15.336	0.816
P(Bartlett's X2)					0.014*	.	0.001*	.	0.009*	0.665
Replicate F					0.443	1.000	0.443	1.000	0.922	0.563
Replicate Prob(F)					0.6524	0.3966	0.6521	0.3966	0.4241	0.5841
Treatment F					639.881	500.143	738.011	3581.000	138.255	16298.127
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code			UNTREATE	TEMIK	TEMIK	THIMET	THIMET	UNTREATE	TEMIK
Crop Code			COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Rating Data Type			INJURY	STAND	INJURY	STAND	INJURY	INJURY	INJURY
Rating Unit			%	/METER	%	/METER	%	%	%
Rating Date			May/27/2010	May/27/2010	May/27/2010	May/27/2010	May/27/2010	Jun/09/2010	Jun/09/2010
Trt No.	Treatment Name	Rate Unit	Appl Code						
1	UNTREATED			0.0 b	11.3 a	0.0 b	10.7 a	0.0 a	0.0 b
2	ROUNDUP POWERMAX	22 oz/a	A	0.0 b	11.3 a	0.0 b	10.7 a	0.0 a	0.0 b
	NIS	0.25 % v/v	A						
	AMS	17 lb/100 gal	A						
3	SHARPEN	1 oz/a	A	0.0 b	10.3 a	1.7 b	10.7 a	0.0 a	1.7 b
	ROUNDUP POWERMAX	22 oz/a	A						
	MSO	1 % v/v	A						
	AMS	17 lb/100 gal	A						
4	SHARPEN	1 oz/a	A	0.0 b	11.0 a	0.0 b	11.3 a	0.0 a	0.0 b
	ROUNDUP POWERMAX	22 oz/a	A						
	2,4-D ESTER	8 oz/a	A						
	MSO	1 % v/v	A						
	AMS	17 lb/100 gal	A						
5	SHARPEN	1 oz/a	A	0.0 b	11.7 a	0.0 b	11.7 a	0.0 a	0.0 b
	ROUNDUP POWERMAX	22 oz/a	A						
	DISTINCT	4 oz/a	A						
	MSO	1 % v/v	A						
	AMS	17 lb/100 gal	A						
6	SHARPEN	1 oz/a	A	0.0 b	12.0 a	0.0 b	11.7 a	0.0 a	0.0 b
	ROUNDUP POWERMAX	22 oz/a	A						
	CLARITY	8 oz/a	A						
	MSO	1 % v/v	A						
	AMS	17 lb/100 gal	A						
7	SHARPEN	2 oz/a	A	8.3 a	10.0 a	10.0 a	11.3 a	5.0 a	26.7 a
	ROUNDUP POWERMAX	22 oz/a	A						
	MSO	1 % v/v	A						
	AMS	17 lb/100 gal	A						
LSD (P=.05)				1.94	1.86	3.63	1.11	3.36	4.62
Standard Deviation				1.09	1.05	2.04	0.62	1.89	2.60
CV				91.65	9.43	122.47	5.6	264.58	64.17
Bartlett's X2				0.0	3.515	0.556	1.909	0.0	0.862
P(Bartlett's X2)				.	0.476	0.456	0.928	.	0.353
Replicate F				1.000	1.609	2.000	2.571	1.000	0.176
Replicate Prob(F)				0.3966	0.2405	0.1780	0.1176	0.3966	0.8404
Treatment F				25.000	1.391	10.000	1.673	3.000	44.412
Treatment Prob(F)				0.0001	0.2943	0.0004	0.2107	0.0498	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	THIMET	UNTREATE	TEMIK	THIMET
Crop Code	COTTON	COTTON	COTTON	COTTON
Rating Data Type	INJURY	INJURY	INJURY	INJURY
Rating Unit	%	%	%	%
Rating Date	Jun/09/2010	Jul/07/2010	Jul/07/2010	Jul/07/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code				
1	UNTREATED				0.0 b	0.0 b	0.0 b	0.0 b
2	ROUNDUP POWERMAX	22	oz/a	A	0.0 b	0.0 b	0.0 b	0.0 b
	NIS	0.25	% v/v	A				
	AMS	17	lb/100 gal	A				
3	SHARPEN	1	oz/a	A	3.3 b	0.0 b	0.0 b	0.0 b
	ROUNDUP POWERMAX	22	oz/a	A				
	MSO	1	% v/v	A				
	AMS	17	lb/100 gal	A				
4	SHARPEN	1	oz/a	A	0.0 b	0.0 b	0.0 b	0.0 b
	ROUNDUP POWERMAX	22	oz/a	A				
	2,4-D ESTER	8	oz/a	A				
	MSO	1	% v/v	A				
	AMS	17	lb/100 gal	A				
5	SHARPEN	1	oz/a	A	0.0 b	0.0 b	0.0 b	0.0 b
	ROUNDUP POWERMAX	22	oz/a	A				
	DISTINCT	4	oz/a	A				
	MSO	1	% v/v	A				
	AMS	17	lb/100 gal	A				
6	SHARPEN	1	oz/a	A	0.0 b	0.0 b	0.0 b	0.0 b
	ROUNDUP POWERMAX	22	oz/a	A				
	CLARITY	8	oz/a	A				
	MSO	1	% v/v	A				
	AMS	17	lb/100 gal	A				
7	SHARPEN	2	oz/a	A	21.7 a	46.7 a	38.3 a	38.3 a
	ROUNDUP POWERMAX	22	oz/a	A				
	MSO	1	% v/v	A				
	AMS	17	lb/100 gal	A				
LSD (P=.05)					7.60	10.27	8.46	8.46
Standard Deviation					4.27	5.77	4.76	4.76
CV					119.63	86.6	86.85	86.85
Bartlett's X2					0.635	0.0	0.0	0.0
P(Bartlett's X2)					0.425	.	.	.
Replicate F					1.761	1.000	1.000	1.000
Replicate Prob(F)					0.2135	0.3966	0.3966	0.3966
Treatment F					10.717	28.000	27.842	27.842
Treatment Prob(F)					0.0003	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

VOLUNTEER CORN/WEEDS BURNDOWN

Trial ID: 110L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. KCHSC	KOCHIA	KOCHIA SCOPARIA
2. SASKR	RUSSIAN THISTLE	SALSOLA IBERICA
3. ZEAMX	VOLUNTEER CORN	ZEAMAYS

VOLUNTEER CORN

Variety: DK CG1-72

Planting Date: Apr/08/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: May/05/2010
Time of Day: 9:13AM
Application Method: SPRAY
Application Timing: POST
Applic. Placement: BROADCAST
Air Temp., Unit: 60 F
% Relative Humidity: 34
Wind Velocity, Unit: 9 MPH
Soil Temp., Unit: 60 F
Soil Moisture: ADEQUATE
% Cloud Cover: 5

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: KCHSC KOCHIA
Stage Scale: 1-2"
Weed 2 Code, Stage: SASKR RSN THST
Stage Scale: 1-2
Weed 3 Code, Stage: ZEAMX VOLCORN
Stage Scale: V3

APPLICATION EQUIPMENT

A

Appl. Equipment: TRACTOR
Operating Pressure: 30
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Spray Volume, Unit: 10 GPA
Propellant: AIR

Texas Agricultural Experiment Station

VOLUNTEER CORN/WEEDS BURNDOWN

Trial ID: 110L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code				VOLCORN	VOLCORN	KOCHIA	RSN THST	VOLCORN	KOCHIA
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%
Rating Date				May/10/2010	May/12/2010	May/12/2010	May/12/2010	May/19/2010	May/19/2010
Trt	Treatment	Rate	Appl						
No.	Name	Rate	Unit	Code	Description				
1	UNTREATED					0.0 d	0.0 d	0.0 b	0.0 b
2	GRAMOXONE INTEON	32 oz/a	A	V3	VOL CORN	66.7 a	61.7 ab	88.3 a	100.0 a
	ACTIVATOR 90	0.25 % v/v	A	V3	VOL CORN			55.0 a	96.0 a
3	GRAMOXONE INTEON	32 oz/a	A	V3	VOL CORN	50.0 b	53.3 b	76.7 a	95.0 a
	SILWET L77	0.125 % v/v	A	V3	VOL CORN			35.0 b	86.7 a
4	GRAMOXONE INTEON	40 oz/a	A	V3	VOL CORN	61.7 a	68.3 a	91.7 a	100.0 a
	ACTIVATOR 90	0.25 % v/v	A	V3	VOL CORN			60.0 a	99.3 a
5	EVIK DF	1.5 lb ai/a	A	V3	VOL CORN	18.3 c	23.3 c	82.3 a	91.7 a
	MSO	1 % v/v	A	V3	VOL CORN			15.0 c	85.0 a
6	GRAMOXONE INTEON	32 oz/a	A	V3	VOL CORN	61.7 a	70.0 a	91.7 a	100.0 a
	EVIK DF	0.5 lb ai/a	A	V3	VOL CORN			63.3 a	96.7 a
	ACTIVATOR 90	0.25 % v/v	A	V3	VOL CORN				
7	GRAMOXONE INTEON	32 oz/a	A	V3	VOL CORN	66.7 a	70.0 a	94.3 a	100.0 a
	EVIK DF	1 lb ai/a	A	V3	VOL CORN			63.3 a	98.0 a
	ACTIVATOR 90	0.25 % v/v	A	V3	VOL CORN				
LSD (P=.05)						6.54	9.21	11.62	8.12
Standard Deviation						3.67	5.18	6.53	4.56
CV						7.91	10.45	8.71	5.45
Bartlett's X2						3.583	2.72	5.149	0.956
P(Bartlett's X2)						0.465	0.437	0.398	0.328
Replicate F						0.794	0.844	1.871	0.400
Replicate Prob(F)						0.4744	0.4538	0.1963	0.6789
Treatment F						157.176	83.867	79.510	198.229
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	RSN THST	VOLCORN	KOCHIA	RSN THST
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%
Rating Date	May/19/2010	May/26/2010	May/26/2010	May/26/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description				
1	UNTREATED					0.0 c	0.0 c	0.0 c	0.0 b
2	GRAMOXONE INTEON	32	oz/a	A	V3 VOL CORN	99.0 a	30.0 ab	91.7 a	99.3 a
	ACTIVATOR 90	0.25	% v/v	A	V3 VOL CORN				
3	GRAMOXONE INTEON	32	oz/a	A	V3 VOL CORN	94.7 b	23.3 ab	75.0 b	93.3 a
	SILWET L77	0.125	% v/v	A	V3 VOL CORN				
4	GRAMOXONE INTEON	40	oz/a	A	V3 VOL CORN	100.0 a	35.0 a	98.3 a	100.0 a
	ACTIVATOR 90	0.25	% v/v	A	V3 VOL CORN				
5	EVIK DF	1.5	lb ai/a	A	V3 VOL CORN	98.3 a	15.0 b	86.7 a	96.7 a
	MSO	1	% v/v	A	V3 VOL CORN				
6	GRAMOXONE INTEON	32	oz/a	A	V3 VOL CORN	99.3 a	36.7 a	96.7 a	100.0 a
	EVIK DF	0.5	lb ai/a	A	V3 VOL CORN				
	ACTIVATOR 90	0.25	% v/v	A	V3 VOL CORN				
7	GRAMOXONE INTEON	32	oz/a	A	V3 VOL CORN	100.0 a	30.0 ab	96.7 a	100.0 a
	EVIK DF	1	lb ai/a	A	V3 VOL CORN				
	ACTIVATOR 90	0.25	% v/v	A	V3 VOL CORN				
LSD (P=.05)						3.19	13.21	9.11	5.17
Standard Deviation						1.79	7.43	5.12	2.91
CV						2.12	30.58	6.58	3.45
Bartlett's X2						5.087	2.381	6.984	3.878
P(Bartlett's X2)						0.166	0.794	0.222	0.144
Replicate F						3.668	0.194	3.947	2.053
Replicate Prob(F)						0.0571	0.8260	0.0482	0.1711
Treatment F						1301.441	9.158	142.429	491.827
Treatment Prob(F)						0.0001	0.0007	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE TANK-MIX PIGWEED

Trial ID: 111L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA PALMER AMARANTH	AMARANTHUS PALMERI

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 9250 GTLL

Planting Date: May/20/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B
Application Date:	Jun/15/2010	Jul/01/2010
Time of Day:	10:45 AM	9:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	A - EPOST	B - MPOST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	75 F	73 F
% Relative Humidity:	78	70
Wind Velocity, Unit:	4 MPH	3 MPH
Soil Temp., Unit:	80 F	72 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	90	100

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GOSHI	GOSHI

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	AMAPA	AMAPA
Stage Scale:	4-6"	8-12"

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	TRACTOR	TRACTOR
Operating Pressure:	30	30
Nozzle Type:	TURBO TEE	TURBO TEE
Nozzle Size:	10015	110015
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	AIR	AIR

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE TANK-MIX PIGWEED

Trial ID: 111L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code		AMAPA		AMAPA		AMAPA		AMAPA		AMAPA	
Rating Data Type		CONTROL		CONTROL		CONTROL		CONTROL		CONTROL	
Rating Unit		%		%		%		%		%	
Rating Date		Jun/22/2010		Jun/22/2010		Jul/07/2010		Jul/13/2010		Jul/22/2010	
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code	Appl Description				
1	UNTREATED							0.0 e	0.0 c	0.0 e	
2	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	99.3 a	99.3 a	99.3 a	
3	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS	70.0 bcd	90.0 a	83.3 b	
4	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	76.7 b	85.0 a	83.3 b	
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS				
5	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	75.0 bc	90.0 a	85.0 b	
	IGNITE 280	0.39	lb ai/a	21.3	oz/a	A	2-4" WEEDS				
6	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	70.0 bcd	88.3 a	85.0 b	
	IGNITE 280	0.26	lb ai/a	14.2	oz/a	A	2-4" WEEDS				
7	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	75.0 bc	92.3 a	86.7 b	
	IGNITE 280	0.13	lb ai/a	7.1	oz/a	A	2-4" WEEDS				
8	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS	53.3 cd	66.7 b	66.7 cd	
	ROUNDUP POWERMAX	0.5625	lb ae/a	16	oz/a	A	2-4" WEEDS				
9	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS	60.0 bcd	70.0 b	70.0 c	
	ROUNDUP POWERMAX	0.375	lb ae/a	10.7	oz/a	A	2-4" WEEDS				
10	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS	50.0 d	65.0 b	65.0 cd	
	ROUNDUP POWERMAX	0.1875	lb ae/a	5.33	oz/a	A	2-4" WEEDS				
11	UNTREATED								0.0 e	0.0 c	0.0 c
12	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		96.3 ab	98.0 a	98.3 a
13	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS		70.0 c	60.0 b	65.0 b
14	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		65.0 cd	65.0 b	66.7 b
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS				
15	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		56.7 cd	55.0 b	53.3 b
	IGNITE 280	0.39	lb ai/a	21.3	oz/a	B	5-10" WEEDS				
16	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		53.3 d	51.7 b	58.3 b
	IGNITE 280	0.26	lb ai/a	14.2	oz/a	B	5-10" WEEDS				
17	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		53.3 d	58.3 b	56.7 b
	IGNITE 280	0.13	lb ai/a	7.1	oz/a	B	5-10" WEEDS				
18	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS		56.7 cd	61.7 b	56.7 b
	ROUNDUP POWERMAX	0.5625	lb ae/a	16	oz/a	B	5-10" WEEDS				
19	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS		61.7 cd	60.0 b	56.7 b
	ROUNDUP POWERMAX	0.375	lb ae/a	10.7	oz/a	B	5-10" WEEDS				
20	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS		61.7 cd	56.7 b	56.7 b
	ROUNDUP POWERMAX	0.1875	lb ae/a	5.33	oz/a	B	5-10" WEEDS				
LSD (P=.05)								14.34	10.26	9.18	10.28
Standard Deviation								8.36	5.98	5.57	5.99
CV								13.28	8.01	8.57	10.58
Bartlett's X2								10.724	10.468	15.435	6.583
P(Bartlett's X2)								0.218	0.234	0.564	0.474
Replicate F								0.544	0.046	3.247	4.160
Replicate Prob(F)								0.5895	0.9554	0.0499	0.0620
Treatment F								29.254	69.369	66.471	47.016
Treatment Prob(F)								0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE TANK-MIX MORNINGGLORY

Trial ID: 112L-10
Location: 301

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code Common Name Scientific Name
1. IPOHE MORNINGGLORY IPOMOEA HEDERACEA

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 9250 GTLL

Planting Date: May/20/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT

Plot Length, Unit: 30 FT

Reps: 3

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM

Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B
Application Date:	Jun/14/2010	Jun/25/2010
Time of Day:	1:30 PM	10:45 AM
Application Method:	SPRAY	SPRAY
Application Timing:	A - EPOST	B - MPOST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	83 F	84 F
% Relative Humidity:	58	46
Wind Velocity, Unit:	1 MPH	3 MPH
Soil Temp., Unit:	84 F	89 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	75	5

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GOSHI	GOSHI

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	IPOHE MRNGGLRY	IPOHE MRNGGLRY
Stage Scale:	2-4"	5-10"

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	TRACTOR	TRACTOR
Operating Pressure:	30	30
Nozzle Type:	TURBO TEE	TURBO TEE
Nozzle Size:	110015	110015
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	AIR	AIR

Trt No	Treatment Application Comment
A	RECEIVED 0.2" RAIN 1.5 HOURS AFTER TREATMENT

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE TANK-MIX MORNINGGLORY

Trial ID: 112L-10
Location: 301

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	MRNGGLRY	MRNGGLRY	MRNGGLRY	MRNGGLRY
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%
Rating Date	Jun/21/2010	Jun/28/2010	Jul/07/2010	Jul/13/2010

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code	Appl Description				
1	UNTREATED							0.0 e	0.0 d	0.0 g	
2	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	50.0 d	46.7 c	43.3 f	
3	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS	85.0 ab	85.0 a	83.3 abc	
4	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	83.3 ab	78.3 ab	81.7 a-d	
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS				
5	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	78.3 ab	76.7 ab	75.0 a-d	
	IGNITE 280	0.39	lb ai/a	21.3	oz/a	A	2-4" WEEDS				
6	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	66.7 c	73.3 ab	71.7 a-d	
	IGNITE 280	0.26	lb ai/a	14.2	oz/a	A	2-4" WEEDS				
7	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	65.0 c	68.3 b	68.3 b-e	
	IGNITE 280	0.13	lb ai/a	7.1	oz/a	A	2-4" WEEDS				
8	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS	83.3 ab	88.3 a	90.0 a	
	ROUNDUP POWERMAX	0.5625	lb ae/a	16	oz/a	A	2-4" WEEDS				
9	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS	86.7 a	90.0 a	88.3 ab	
	ROUNDUP POWERMAX	0.375	lb ae/a	10.7	oz/a	A	2-4" WEEDS				
10	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS	75.0 b	75.0 ab	73.3 a-d	
	ROUNDUP POWERMAX	0.1875	lb ae/a	5.33	oz/a	A	2-4" WEEDS				
11	UNTREATED								0.0 d	0.0 g	0.0 c
12	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		40.0 c	50.0 ef	55.0 b
13	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS		86.7 a	68.3 b-e	71.7 a
14	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		90.0 a	73.3 a-d	65.0 ab
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS				
15	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		86.7 a	65.0 cde	63.3 ab
	IGNITE 280	0.39	lb ai/a	21.3	oz/a	B	5-10" WEEDS				
16	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		80.0 ab	66.7 cde	66.7 ab
	IGNITE 280	0.26	lb ai/a	14.2	oz/a	B	5-10" WEEDS				
17	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		68.3 b	60.0 de	65.0 ab
	IGNITE 280	0.13	lb ai/a	7.1	oz/a	B	5-10" WEEDS				
18	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS		86.7 a	65.0 cde	71.7 a
	ROUNDUP POWERMAX	0.5625	lb ae/a	16	oz/a	B	5-10" WEEDS				
19	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS		90.0 a	73.3 a-d	75.0 a
	ROUNDUP POWERMAX	0.375	lb ae/a	10.7	oz/a	B	5-10" WEEDS				
20	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS		88.3 a	61.7 cde	73.3 a
	ROUNDUP POWERMAX	0.1875	lb ae/a	5.33	oz/a	B	5-10" WEEDS				
LSD (P=.05)								7.53	10.43	12.62	8.59
Standard Deviation								4.39	6.32	7.65	5.01
CV								6.52	9.04	12.16	8.26
Bartlett's X2								3.015	13.43	14.466	7.892
P(Bartlett's X2)								0.807	0.493	0.564	0.444
Replicate F								7.442	2.076	2.356	3.620
Replicate Prob(F)								0.0044	0.1394	0.1085	0.0477
Treatment F								107.615	57.056	30.362	58.465
Treatment Prob(F)								0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE PROPORTIONS PIGWEED

Trial ID: 113L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA PALMER AMARANTH	AMARANTHUS PALMERI

Crop 1: GOSHI COTTON, SHORT STAPLE
Planting Date: May/20/2010

Variety: FM 9250 GTLL

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B
Application Date:	Jun/14/2010	Jul/01/2010
Time of Day:	10:00 AM	10:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	A - EPOST	B - MPOST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	73 F	73 F
% Relative Humidity:	65	68
Wind Velocity, Unit:	4 MPH	7 MPH
Soil Temp., Unit:	78 F	72 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	95	95

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GOSHI	GOSHI

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	AMAPA	AMAPA
Stage Scale:	2-4"	5-10"

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	TRACTOR	TRACTOR
Operating Pressure:	30	30
Nozzle Type:	TURBO TEE	TURBO TEE
Nozzle Size:	110015	110015
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	AIR	AIR

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE PROPORTIONS PIGWEED

Trial ID: 113L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code		AMAPA		AMAPA		AMAPA		AMAPA		AMAPA	
Rating Data Type		CONTROL		CONTROL		CONTROL		CONTROL		CONTROL	
Rating Unit		%		%		%		%		%	
Rating Date		Jun/22/2010		Jun/28/2010		Jul/07/2010		Jul/13/2010		Jul/22/2010	
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code	Appl Description				
1	UNTREATED							0.0 c	0.0 c	0.0 e	
2	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	99.7 a	99.7 a	99.7 a	
	IGNITE 280	0	lb ai/a	0	oz/a	A	2-4" WEEDS				
3	ROUNDUP POWERMAX	0.5625	lb ae/a	16	oz/a	A	2-4" WEEDS	83.3 b	90.0 b	90.0 b	
	IGNITE 280	0.13	lb ai/a	7.1	oz/a	A	2-4" WEEDS				
4	ROUNDUP POWERMAX	0.375	lb ae/a	10.7	oz/a	A	2-4" WEEDS	78.3 b	95.3 a	94.7 ab	
	IGNITE 280	0.26	lb ai/a	14.2	oz/a	A	2-4" WEEDS				
5	ROUNDUP POWERMAX	0.1875	lb ae/a	5.33	oz/a	A	2-4" WEEDS	75.0 b	96.3 a	90.0 b	
	IGNITE 280	0.39	lb ai/a	21.3	oz/a	A	2-4" WEEDS				
6	ROUNDUP POWERMAX	0	lb ae/a	0	oz/a	A	2-4" WEEDS	73.3 b	96.0 a	96.0 ab	
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS				
7	UNTREATED								0.0 e	0.0 c	0.0 e
8	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS	99.7 a	99.7 a	99.7 a	
	IGNITE 280	0	lb ai/a	0	oz/a	B	5-10" WEEDS				
9	ROUNDUP POWERMAX	0.5625	lb ae/a	16	oz/a	B	5-10" WEEDS		68.3 c	63.3 b	65.0 b
	IGNITE 280	0.13	lb ai/a	7.1	oz/a	B	5-10" WEEDS				
10	ROUNDUP POWERMAX	0.375	lb ae/a	10.7	oz/a	B	5-10" WEEDS		63.3 c	63.3 b	60.0 bc
	IGNITE 280	0.26	lb ai/a	14.2	oz/a	B	5-10" WEEDS				
11	ROUNDUP POWERMAX	0.1875	lb ae/a	5.33	oz/a	B	5-10" WEEDS		51.7 d	55.0 b	50.0 d
	IGNITE 280	0.39	lb ai/a	21.3	oz/a	B	5-10" WEEDS				
12	ROUNDUP POWERMAX	0	lb ae/a	0	oz/a	B	5-10" WEEDS		65.0 c	55.0 b	55.0 cd
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS				
LSD (P=.05)								8.01	4.17	6.37	7.94
Standard Deviation								4.40	2.29	3.76	4.37
CV								6.45	2.88	5.51	7.94
Bartlett's X2								7.016	6.269	15.304	7.892
P(Bartlett's X2)								0.135	0.099	0.054	0.019*
Replicate F								0.175	3.562	1.240	0.265
Replicate Prob(F)								0.8421	0.0679	0.3088	0.7722
Treatment F								187.086	872.617	270.413	154.141
Treatment Prob(F)								0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE PROPORTIONS MORNINGGLORY

Trial ID: 114L-10
Location: 301

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code Common Name Scientific Name
1. IPOHE MORNINGGLORY IPOMOEA HEDERACEA

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 9250 GTLL

Planting Date: May/20/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B
Application Date:	Jun/14/2010	Jun/25/2010
Time of Day:	11:15 AM	10:30AM
Application Method:	SPRAY	SPRAY
Application Timing:	A - EPOST	B - MPOST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	80 F	84 F
% Relative Humidity:	53	44
Wind Velocity, Unit:	2 MPH	7 MPH
Soil Temp., Unit:	82 F	89 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	50	5

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GOSHI	GOSHI

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	IPOHE MRNGGLRY	IPOHE MRNGGLRY
Stage Scale:	2-4"	5-10"

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	TRACTOR	TRACTOR
Operating Pressure:	30	30
Nozzle Type:	TURBO TEE	TURBO TEE
Nozzle Size:	110015	110015
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	AIR	AIR

Trt No Treatment Application Comment

Trt No	Treatment Application Comment
A	RECEIVED 0.2" RAIN 3.5 HOURS AFTER TREATMENT

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE PROPORTIONS MORNINGGLORY

Trial ID: 114L-10
Location: 301

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	MRNGGLRY	MRNGGLRY	MRNGGLRY	MRNGGLRY
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%
Rating Date	Jun/21/2010	Jun/28/2010	Jul/07/2010	Jul/13/2010

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code	Appl Description				
1	UNTREATED							0.0 f	0.0 g	0.0 e	
2	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	2-4" WEEDS	50.0 e	53.3 e	60.0 d	
	IGNITE 280	0	lb ai/a	0	oz/a	A	2-4" WEEDS				
3	ROUNDUP POWERMAX	0.5625	lb ae/a	16	oz/a	A	2-4" WEEDS	73.3 d	78.3 cd	78.3 c	
	IGNITE 280	0.13	lb ai/a	7.1	oz/a	A	2-4" WEEDS				
4	ROUNDUP POWERMAX	0.375	lb ae/a	10.7	oz/a	A	2-4" WEEDS	85.0 c	85.0 bc	88.3 abc	
	IGNITE 280	0.26	lb ai/a	14.2	oz/a	A	2-4" WEEDS				
5	ROUNDUP POWERMAX	0.1875	lb ae/a	5.33	oz/a	A	2-4" WEEDS	91.7 b	91.7 ab	91.7 abc	
	IGNITE 280	0.39	lb ai/a	21.3	oz/a	A	2-4" WEEDS				
6	ROUNDUP POWERMAX	0	lb ae/a	0	oz/a	A	2-4" WEEDS	98.0 a	98.3 a	98.7 a	
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	2-4" WEEDS				
7	UNTREATED								0.0 g	0.0 e	0.0 c
8	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	5-10" WEEDS		40.0 f	53.3 d	63.3 b
	IGNITE 280	0	lb ai/a	0	oz/a	B	5-10" WEEDS				
9	ROUNDUP POWERMAX	0.5625	lb ae/a	16	oz/a	B	5-10" WEEDS		75.0 d	80.0 c	75.0 ab
	IGNITE 280	0.13	lb ai/a	7.1	oz/a	B	5-10" WEEDS				
10	ROUNDUP POWERMAX	0.375	lb ae/a	10.7	oz/a	B	5-10" WEEDS		78.3 cd	78.3 c	73.3 ab
	IGNITE 280	0.26	lb ai/a	14.2	oz/a	B	5-10" WEEDS				
11	ROUNDUP POWERMAX	0.1875	lb ae/a	5.33	oz/a	B	5-10" WEEDS		86.7 bc	81.7 bc	76.7 ab
	IGNITE 280	0.39	lb ai/a	21.3	oz/a	B	5-10" WEEDS				
12	ROUNDUP POWERMAX	0	lb ae/a	0	oz/a	B	5-10" WEEDS		93.3 ab	93.3 ab	93.3 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	5-10" WEEDS				
LSD (P=.05)								4.98	6.58	9.27	15.55
Standard Deviation								2.74	3.88	5.48	8.55
CV								4.13	5.98	8.18	13.44
Bartlett's X2								0.874	8.685	11.458	4.877
P(Bartlett's X2)								0.35	0.276	0.177	0.30
Replicate F								0.556	2.275	0.960	2.985
Replicate Prob(F)								0.5905	0.1264	0.3985	0.0963
Treatment F								536.711	237.851	114.716	43.730
Treatment Prob(F)								0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE SYSTEMS PIGWEED

Trial ID: 115L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA PALMER AMARANTH	AMARANTHUS PALMERI

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 9250 GTLL

Planting Date: May/20/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

MOISTURE CONDITIONS

Date	Amount	Unit	Type
1. Jun/25/2010	3	IN	FURROW

APPLICATION DESCRIPTION

	A	B	C
Application Date:	Jun/15/2010	Jul/15/2010	
Time of Day:	9:00AM	3:00 PM	
Application Method:	SPRAY	SPRAY	
Application Timing:	EPOST	MPOST	
Applic. Placement:	BROADCAST	BROADCAST	
Air Temp., Unit:	73 F	88 F	
% Relative Humidity:	70	56	
Wind Velocity, Unit:	1 MPH	3 MPH	
Soil Temp., Unit:	78 F	84 F	
Soil Moisture:	ADEQUATE	ADEQUATE	
% Cloud Cover:	95	95	

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GOSHI	GOSHI	GOSHI

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	AMAPA	AMAPA	AMAPA
Stage Scale:	2-4"	1-2"	

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	TRACTOR	BACKPACK	
Operating Pressure:	30	25	
Nozzle Type:	TURBO TEE	TURBO TEE	
Nozzle Size:	110015	110015	
Ground Speed, Unit:	3 MPH	3 MPH	
Carrier:	WATER	WATER	
Spray Volume, Unit:	10 GPA	10 GPA	
Propellant:	AIR	CO2	

Treatment Application Comment

LPOST TIMING NOT APPLIED DUE TO CANOPY CLOSURE

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE SYSTEMS PIGWEED

Trial ID: 115L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

						AMAPA	AMAPA	AMAPA	AMAPA	AMAPA
Weed Code										
Crop Code										
Part Rated										
Rating Data Type						CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit						%	%	%	%	%
Rating Date						Jun/22/2010	Jun/28/2010	Jul/07/2010	Jul/22/2010	Aug/02/2010
Trt No.	Treatment Name	Rate	Product	Product	Appl					
		Rate Unit	Rate	Rate Unit	Code Description					
1	UNTREATED					0.0 c	0.0 c	0.0 c	0.0 c	0.0 b
2	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	A	EPOST	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	B	MPOST					
	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	C	LPOST					
3	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	A	EPOST	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	B	MPOST					
	IGNITE 280	0.52 lb ai/a	28.4 oz/a	C	LPOST					
4	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	A	EPOST	100.0 a	100.0 a	100.0 a	98.7 a	100.0 a
	IGNITE 280	0.52 lb ai/a	28.4 oz/a	B	MPOST					
	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	C	LPOST					
5	IGNITE 280	0.52 lb ai/a	28.4 oz/a	A	EPOST	91.7 b	95.7 b	93.3 b	100.0 a	100.0 a
	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	B	MPOST					
	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	C	LPOST					
6	IGNITE 280	0.52 lb ai/a	28.4 oz/a	A	EPOST	90.0 b	96.0 b	96.0 b	96.3 b	97.7 a
	IGNITE 280	0.52 lb ai/a	28.4 oz/a	B	MPOST					
	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	C	LPOST					
7	IGNITE 280	0.52 lb ai/a	28.4 oz/a	A	EPOST	93.3 b	95.7 b	95.7 b	100.0 a	100.0 a
	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	B	MPOST					
	IGNITE 280	0.52 lb ai/a	28.4 oz/a	C	LPOST					
8	ROUNDUP POWERMAX	0.75 lb ae/a	21.3 oz/a	A	EPOST	100.0 a	100.0 a	100.0 a	99.7 a	100.0 a
	IGNITE 280	0.52 lb ai/a	28.4 oz/a	B	MPOST					
	IGNITE 280	0.52 lb ai/a	28.4 oz/a	C	LPOST					
9	IGNITE 280	0.52 lb ai/a	28.4 oz/a	A	EPOST	91.7 b	96.7 b	96.7 ab	97.7 ab	98.3 a
	IGNITE 280	0.52 lb ai/a	28.4 oz/a	B	MPOST					
	IGNITE 280	0.52 lb ai/a	28.4 oz/a	C	LPOST					
LSD (P=.05)						4.41	2.17	2.55	1.51	1.53
Standard Deviation						2.55	1.25	1.47	0.87	0.88
CV						2.99	1.44	1.69	0.99	1.0
Bartlett's X2						1.419	2.276	1.882	6.471	3.232
P(Bartlett's X2)						0.701	0.517	0.597	0.091	0.072
Replicate F						3.571	0.920	1.713	0.341	0.571
Replicate Prob(F)						0.0522	0.4185	0.2118	0.7158	0.5758
Treatment F						480.679	2047.593	1480.283	4313.135	4245.965
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	AMAPA
Crop Code	COTTON
Part Rated	LINT
Rating Data Type	CONTROL YIELD
Rating Unit	% LBS/ACRE
Rating Date	Aug/09/2010 Oct/19/2010

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code	Appl Description		
1	UNTREATED							0.0 b	229.7 b
2	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	EPOST	100.0 a	531.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	LPOST		
3	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	EPOST	100.0 a	553.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	LPOST		
4	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	EPOST	100.0 a	471.3 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	LPOST		
5	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	EPOST	100.0 a	543.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	LPOST		
6	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	EPOST	97.7 a	478.7 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	LPOST		
7	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	EPOST	100.0 a	518.7 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	LPOST		
8	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	A	EPOST	100.0 a	523.3 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	LPOST		
9	IGNITE 280	0.52	lb ai/a	28.4	oz/a	A	EPOST	97.3 a	540.7 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	LPOST		
LSD (P=.05)								1.99	128.53
Standard Deviation								1.15	74.25
CV								1.3	15.23
Bartlett's X2								0.07	16.851
P(Bartlett's X2)								0.792	0.032*
Replicate F								0.084	3.413
Replicate Prob(F)								0.9196	0.0583
Treatment F								2497.516	5.520
Treatment Prob(F)								0.0001	0.0018

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE SYSTEMS MORNINGGLORY

Trial ID: 116L-10
Location: 301

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code Common Name Scientific Name
1. IPOHE MORNINGGLORY IPOMOEA HEDERACEA

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 9250 GTLL

Planting Date: May/20/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT

Plot Length, Unit: 30 FT

Reps: 3

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	May/25/2010	Jun/14/2010	Jul/15/2010	
Time of Day:	3:00 PM	10:30 AM	2:00 PM	
Application Method:	SPRAY	SPRAY	SPRAY	
Application Timing:	PRE	EPOST	MPOST	
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	
Air Temp., Unit:	85 F	79 F	89 F	
% Relative Humidity:	30	54	55	
Wind Velocity, Unit:	7 MPH	3 MPH	3 MPH	
Soil Temp., Unit:	71 F	82 F	85 F	
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE	
% Cloud Cover:	10	50	95	

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	GOSHI	GOSHI	GOSHI	GOSHI

WEED STAGE AT EACH APPLICATION

	A	B	C	D
Weed 1 Code, Stage:	IPOHE	MRNGGLRY	IPOHE	MRNGGLRY
Stage Scale:	PRE	1-3"	2-4"	IPOHE

APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	TRACTOR	TRACTOR	BACKPACK	
Operating Pressure:	30	30	25	
Nozzle Type:	TURBO TEE	TURBO TEE	TURBO TEE	
Nozzle Size:	110015	110015	110015	
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	
Carrier:	WATER	WATER	WATER	
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA	
Propellant:	AIR	AIR	CO2	

Trt No	Treatment Application Comment
B	RECEIVED 0.2" RAIN 4.5 HOURS AFTER TREATMENT
D	LPOST TIMING NOT APPLIED DUE TO CANOPY CLOSURE

Texas Agricultural Experiment Station

GLYTOL ROUNDUP/IGNITE SYSTEMS MORNINGGLORY

Trial ID: 116L-10
Location: 301

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code
Crop Code
Part Rated
Rating Data Type
Rating Unit
Rating Date

MRNGGLRY MRNGGLRY MRNGGLRY MRNGGLRY MRNGGLRY

	CONTROL %	CONTROL %	CONTROL %	CONTROL %	CONTROL %
	Jun/15/2010	Jun/21/2010	Jun/28/2010	Jul/22/2010	Aug/02/2010

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code	Appl Description					
1	UNTREATED							0.0 c	0.0 d	0.0 e	0.0 c	0.0 d
2	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	46.7 a	70.0 b	90.0 a	76.7 b	76.7 abc
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST					
3	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	43.3 a	65.0 bc	80.0 ab	75.0 b	75.0 abc
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST					
4	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	26.7 b	68.3 bc	87.0 a	99.3 a	100.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST					
5	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	40.0 a	95.0 a	97.3 a	73.3 b	75.7 abc
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST					
6	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	40.0 a	93.3 a	96.7 a	100.0 a	100.0 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST					
7	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	50.0 a	93.3 a	96.7 a	78.3 b	81.7 ab
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST					
8	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	36.7 a	63.3 bc	71.7 bc	98.7 a	99.3 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST					
9	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	43.3 a	95.0 a	96.3 a	99.7 a	100.0 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST					
10	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST	0.0 c	58.3 bc	65.0 cd	71.7 b	71.7 bc
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST					
11	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST	0.0 c	58.3 bc	58.3 cd	68.3 b	66.7 bc
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST					
12	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST	0.0 c	58.3 bc	55.0 d	98.7 a	99.3 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST					
13	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST	0.0 c	90.0 a	90.0 a	58.3 b	58.3 c
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST					
14	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST	0.0 c	91.7 a	88.3 a	99.3 a	100.0 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST					
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST					
15	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST	0.0 c	88.3 a	86.7 a	68.3 b	70.0 bc
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST					
16	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST	0.0 c	56.7 c	68.3 bcd	99.0 a	99.0 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST					
17	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST	0.0 c	90.0 a	90.0 a	96.3 a	96.3 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST					
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST					
LSD (P=.05)								10.01	7.99	10.48	13.09	14.60
Standard Deviation								6.00	4.79	6.29	7.85	8.76
CV								31.24	6.59	8.11	9.8	10.87
Bartlett's X2								3.38	5.539	19.97	43.579	32.681
P(Bartlett's X2)								0.848	0.961	0.131	0.001*	0.001*

Texas Agricultural Experiment Station

Weed Code							MRNGGLRY	MRNGGLRY	MRNGGLRY	MRNGGLRY	MRNGGLRY
Crop Code											
Part Rated											
Rating Data Type							CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit							%	%	%	%	%
Rating Date							Jun/15/2010	Jun/21/2010	Jun/28/2010	Jul/22/2010	Aug/02/2010
Trt No.	Treatment Name	Rate	Product	Product	Appl	Appl					
		Rate Unit	Rate	Rate Unit	Code	Description					
Replicate F							5.279	1.794	6.686	4.998	4.610
Replicate Prob(F)							0.0104	0.1826	0.0037	0.0129	0.0174
Treatment F							38.571	76.673	44.593	30.908	25.056
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code Crop Code Part Rated Rating Data Type Rating Unit Rating Date	MRNGGLRY COTTON LINT YIELD % LBS/ACRE Aug/09/2010 Oct/19/2010
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Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code	Appl Description		
1	UNTREATED							0.0 c	487.0 b
2	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	78.3 b	540.7 ab
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST		
3	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	79.3 b	701.3 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST		
4	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	100.0 a	639.3 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST		
5	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	80.0 ab	698.7 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST		
6	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	100.0 a	718.3 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST		
7	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	83.3 ab	641.7 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST		
8	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	99.7 a	688.7 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST		
9	CAPAROL	0.75	lb ai/a	24	oz/a	A	PRE	100.0 a	659.0 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST		
10	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST	75.0 b	703.3 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST		
11	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST	68.3 b	681.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST		
12	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST	99.7 a	686.3 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST		
13	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST	65.0 b	651.7 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST		
14	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST	100.0 a	624.7 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST		
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	D	LPOST		
15	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST	73.3 b	664.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	C	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST		
16	ROUNDUP POWERMAX	0.75	lb ae/a	21.3	oz/a	B	EPOST	99.7 a	651.7 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST		
17	IGNITE 280	0.52	lb ai/a	28.4	oz/a	B	EPOST	98.3 a	624.7 a
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	C	MPOST		
	IGNITE 280	0.52	lb ai/a	28.4	oz/a	D	LPOST		
LSD (P=.05)								12.09	102.98
Standard Deviation								7.25	61.76
CV								8.8	9.49
Bartlett's X2								33.602	22.142
P(Bartlett's X2)								0.001*	0.139
Replicate F								5.485	1.853
Replicate Prob(F)								0.0089	0.1733
Treatment F								35.137	2.780
Treatment Prob(F)								0.0001	0.0067

Texas Agricultural Experiment Station

Weed Code	MRNGGLRY	
Crop Code		COTTON
Part Rated		LINT
Rating Data Type	CONTROL	YIELD
Rating Unit	%	LBS/ACRE
Rating Date	Aug/09/2010	Oct/19/2010

Trt	Treatment	Rate	Product	Product	Appl	Appl
No.	Name	Rate	Unit	Rate	Rate	Description

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

IGNITE AND ROUNDUP WEED CONTROL IN COTTON I

Trial ID: 119L-10
Location: GLOVER

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LUBBOCK
State/Prov.: TX
Country: USA
Initiation Date: May/20/2010
Conducted Under GLP (Y/N): N
Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
PALMER AMARANTH
DEVIL'S CLAW

COTTON
Planting Date: May/20/2010
Row Spacing: 40 IN
Soil Temperature: 77 F
Variety: GLYTOL/LIBERTYLINK
Planting Method: 4 ROW
Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT
Plot Length, Unit: 30 FT
Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B	C
Application Date:	May/20/2010	Jun/14/2010	Jul/13/2010
Time of Day:	5:15 PM	11:15 AM	12:00 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	A - PRE	B - EP	C - LP
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	83 F	79 F	91 F
% Relative Humidity:	28	61.4	70
Wind Velocity, Unit:	5 MPH	2.6 MPH	1 MPH
Soil Temp., Unit:	77 F	81.5 F	88 F
Soil Moisture:	ADEQUATE	ADEQUATE	WET
% Cloud Cover:	5	75	0

CROP STAGE AT EACH APPLICATION

	A	B	C
	COTTON	COTTON	COTTON
Stage Scale:	PRE	4 LEAF	16 LEAF
Height, Unit:	N/A	6 IN	20 IN

WEED STAGE AT EACH APPLICATION

	A	B	C
	PALMER AM	PALMER AM	PALMER AM
Stage Scale:	1"-7"	2"-30"	
	DEVIL'S C	DEVIL'S C	
Stage Scale:	2"-3"	3"-26"	

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	JD 4 ROW	BACKPACK	BACKPACK
Operating Pressure:	25 PSI	28 PSI	24 PSI
Nozzle Type:	TURBOTEE	TURBOTEE	TURBOTEE
Nozzle Size:	110015	11002	11002
Nozzle Spacing, Unit:	20 IN	19 IN	19 IN
Boom Height, Unit:	20 IN	24 IN	40 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	15 GPA	15 GPA
Propellant:	AIR	CO2	CO2

Treatment Application Comment

BLANKET PROWL H2O APPLIED TO ENTIRE TEST AREA PPI
BLANKET ROUNDUP POWERMAX APPLIED @ 32 OZ/A AFTER PRE'S 5/20

Texas Agricultural Experiment Station

IGNITE AND ROUNDUP WEED CONTROL IN COTTON I

Trial ID: 119L-10
Location: GLOVER

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

					PIGWEEED	DEVILSCL	COTTON		PIGWEEED	DEVILSCL	COTTON	
Weed Code					CONTROL	CONTROL;	PHYTO		CONTROL	CONTROL	INJURY	
Crop Code					PERCENT	PERCENT	PERCENT		PERCENT	PERCENT	PERCENT	
Part Rated					Jun/14/2010	Jun/14/2010	Jun/21/2010		Jun/21/2010	Jun/21/2010	Jun/28/2010	
Rating Data Type					25 DA-A	25 DA-A						
Rating Unit												
Rating Date												
Trt-Eval Interval												
Trt	Treatment	Rate	Product	Product	Appl							
No.	Name	Rate	Unit	Rate	Unit	Code						
1	UNTREATED						0.0 b	0.0 a	0.0 a	0.0 d	0.0 c	0.0 a
2	IGNITE 280	0.4 lb ai/a	22 oz/a	B			0.0 b	0.0 a	0.0 a	71.7 c	90.0 b	0.0 a
	IGNITE 280	0.4 lb ai/a	22 oz/a	C								
3	IGNITE 280	0.53 lb ai/a	29 oz/a	B			0.0 b	0.0 a	0.0 a	85.0 b	93.3 ab	0.0 a
	IGNITE 280	0.53 lb ai/a	29 oz/a	C								
4	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B			0.0 b	0.0 a	0.0 a	100.0 a	96.7 ab	0.0 a
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C								
5	CAPAROL	0.75 lb ai/a	24 oz/a	A			60.0 a	0.0 a	0.0 a	76.7 c	93.3 ab	0.0 a
	IGNITE 280	0.4 lb ai/a	22 oz/a	B								
	IGNITE 280	0.4 lb ai/a	22 oz/a	C								
6	CAPAROL	0.75 lb ai/a	24 oz/a	A			71.7 a	0.0 a	0.0 a	90.0 b	98.3 a	0.0 a
	IGNITE 280	0.53 lb ai/a	29 oz/a	B								
	IGNITE 280	0.53 lb ai/a	29 oz/a	C								
7	CAPAROL	0.75 lb ai/a	24 oz/a	A			60.0 a	0.0 a	0.0 a	100.0 a	99.0 a	0.0 a
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B								
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C								
8	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B			0.0 b	0.0 a	0.0 a	100.0 a	96.0 ab	0.0 a
	IGNITE 280	0.4 lb ai/a	22 oz/a	C								
9	IGNITE 280	0.4 lb ai/a	22 oz/a	B			0.0 b	0.0 a	0.0 a	71.7 c	90.0 b	0.0 a
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C								
LSD (P=.05)							14.87	0.00	0.00	6.03	4.54	0.00
Standard Deviation							8.59	0.00	0.00	3.49	2.62	0.00
CV							40.35	0.0	0.0	4.51	3.12	0.0
Bartlett's X2							1.361	0.0	0.0	2.525	3.007	0.0
P(Bartlett's X2)							0.506	.	.	0.471	0.808	.
Replicate F							0.238	0.000	0.000	0.229	4.976	0.000
Replicate Prob(F)							0.7908	1.0000	1.0000	0.7982	0.0209	1.0000
Treatment F							41.918	0.000	0.000	240.857	437.796	0.000
Treatment Prob(F)							0.0001	1.0000	1.0000	0.0001	0.0001	1.0000

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code						PIGWEEED	DEVILSCL	COTTON		PIGWEEED	DEVILSCL	COTTON	
Crop Code						CONTROL		INJURY		CONTROL		INJURY	
Part Rated						PERCENT		PERCENT		PERCENT		PERCENT	
Rating Data Type						Jun/28/2010		Jun/28/2010		Jul/12/2010		Jul/12/2010	
Rating Unit						Jun/28/2010		Jun/28/2010		Jul/12/2010		Jul/12/2010	
Rating Date						Jun/28/2010		Jun/28/2010		Jul/12/2010		Jul/12/2010	
Trt-Eval Interval						Jun/28/2010		Jun/28/2010		Jul/12/2010		Jul/12/2010	
Trt	Treatment	Rate	Product	Product	Appl								
No.	Name	Rate	Unit	Rate	Unit	Code							
1	UNTREATED						0.0 e	0.0 b	0.0 a	0.0 d	0.0 c	0.0 a	
2	IGNITE 280	0.4 lb ai/a	22 oz/a	B			75.0 d	85.0 a	0.0 a	50.0 c	71.7 b	0.0 a	
	IGNITE 280	0.4 lb ai/a	22 oz/a	C									
3	IGNITE 280	0.53 lb ai/a	29 oz/a	B			85.0 a-d	98.3 a	0.0 a	63.3 bc	91.7 ab	0.0 a	
	IGNITE 280	0.53 lb ai/a	29 oz/a	C									
4	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B			100.0 a	100.0 a	0.0 a	92.7 a	96.7 a	0.0 a	
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C									
5	CAPAROL	0.75 lb ai/a	24 oz/a	A			83.3 bcd	86.7 a	0.0 a	75.0 ab	85.0 ab	0.0 a	
	IGNITE 280	0.4 lb ai/a	22 oz/a	B									
	IGNITE 280	0.4 lb ai/a	22 oz/a	C									
6	CAPAROL	0.75 lb ai/a	24 oz/a	A			96.7 ab	98.3 a	0.0 a	86.0 a	95.0 ab	0.0 a	
	IGNITE 280	0.53 lb ai/a	29 oz/a	B									
	IGNITE 280	0.53 lb ai/a	29 oz/a	C									
7	CAPAROL	0.75 lb ai/a	24 oz/a	A			100.0 a	99.3 a	0.0 a	93.3 a	100.0 a	0.0 a	
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B									
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C									
8	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B			93.3 abc	96.0 a	0.0 a	88.3 a	95.0 ab	0.0 a	
	IGNITE 280	0.4 lb ai/a	22 oz/a	C									
9	IGNITE 280	0.4 lb ai/a	22 oz/a	B			80.0 cd	96.7 a	0.0 a	63.3 bc	95.0 ab	0.0 a	
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C									
LSD (P=.05)							10.83	10.10	0.00	15.81	15.47	0.00	
Standard Deviation							6.25	5.84	0.00	9.13	8.94	0.00	
CV							7.89	6.91	0.0	13.43	11.02	0.0	
Bartlett's X2							2.331	9.643	0.0	13.08	8.359	0.0	
P(Bartlett's X2)							0.802	0.14	.	0.07	0.213	.	
Replicate F							0.308	0.445	0.000	0.603	0.452	0.000	
Replicate Prob(F)							0.7394	0.6487	1.0000	0.5589	0.6441	1.0000	
Treatment F							73.923	91.023	0.000	31.595	37.435	0.000	
Treatment Prob(F)							0.0001	0.0001	1.0000	0.0001	0.0001	1.0000	

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code		PIGWEED		DEVILSCL		COTTON		PIGWEED		DEVILSCL		COTTON	
Crop Code													
Part Rated													
Rating Data Type													
Rating Unit													
Rating Date													
Trt-Eval Interval													
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code	CONTROL PERCENT	CONTROL PERCENT	INJURY PERCENT	CONTROL PERCENT	CONTROL PERCENT	YIELD LB/ACRE	LINT
							Jul/27/2010	Jul/27/2010	Aug/09/2010	Aug/09/2010	Aug/09/2010	Oct/18/2010	
1	UNTREATED						0.0 c	0.0 b	0.0 a	0.0 b	0.0 b	281.3 a	
2	IGNITE 280	0.4	lb ai/a	22	oz/a	B	78.3 b	99.3 a	0.0 a	79.7 a	100.0 a	419.7 a	
	IGNITE 280	0.4	lb ai/a	22	oz/a	C							
3	IGNITE 280	0.53	lb ai/a	29	oz/a	B	96.3 a	100.0 a	0.0 a	91.7 a	100.0 a	373.0 a	
	IGNITE 280	0.53	lb ai/a	29	oz/a	C							
4	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	358.3 a	
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	C							
5	CAPAROL	0.75	lb ai/a	24	oz/a	A	90.7 a	100.0 a	0.0 a	93.3 a	100.0 a	459.0 a	
	IGNITE 280	0.4	lb ai/a	22	oz/a	B							
	IGNITE 280	0.4	lb ai/a	22	oz/a	C							
6	CAPAROL	0.75	lb ai/a	24	oz/a	A	98.0 a	100.0 a	0.0 a	95.7 a	100.0 a	451.7 a	
	IGNITE 280	0.53	lb ai/a	29	oz/a	B							
	IGNITE 280	0.53	lb ai/a	29	oz/a	C							
7	CAPAROL	0.75	lb ai/a	24	oz/a	A	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	469.0 a	
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B							
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	C							
8	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B	99.3 a	99.3 a	0.0 a	97.3 a	100.0 a	459.3 a	
	IGNITE 280	0.4	lb ai/a	22	oz/a	C							
9	IGNITE 280	0.4	lb ai/a	22	oz/a	B	100.0 a	100.0 a	0.0 a	100.0 a	100.0 a	429.7 a	
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	C							
LSD (P=.05)							9.94	0.97	0.00	13.49	0.00	120.56	
Standard Deviation							5.74	0.56	0.00	7.80	0.00	69.65	
CV							6.78	0.63	0.0	9.26	0.0	16.94	
Bartlett's X2							15.75	0.0	0.0	8.038	0.0	9.87	
P(Bartlett's X2)							0.003*	.	.	0.09	.	0.274	
Replicate F							1.080	0.471	0.000	0.962	0.000	4.148	
Replicate Prob(F)							0.3632	0.6330	1.0000	0.4031	1.0000	0.0354	
Treatment F							96.445	10553.766	0.000	51.229	0.000	2.405	
Treatment Prob(F)							0.0001	0.0001	1.0000	0.0001	1.0000	0.0643	

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

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Texas Agricultural Experiment Station

IGNITE AND ROUNDUP WEED CONTROL IN COTTON II

Trial ID: 120L-10
Location: F301 ON STATION

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LUBBOCK
State/Prov.: TX

Initiation Date: May/20/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
PALMER AMARANTH
DEVIL'S CLAW
MORNINGGLORY

COTTON Variety: GLYTOL/LIBERTYLINK
Planting Date: May/20/2010 Planting Method: 4 ROW
Row Spacing: 40 IN
Soil Temperature: 83 F Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B	C
Application Date:	May/20/2010	Jun/14/2010	Jul/13/2010
Time of Day:	5:50 PM	10:30 AM	11:00 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	A - PRE	B - EP	C - LP
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	82 F	77 F	84.2 F
% Relative Humidity:	28	62	79.8
Wind Velocity, Unit:	8 MPH	3.9 MPH	3.8 MPH
Soil Temp., Unit:	83 F	82 F	78.2 F
Soil Moisture:	ADEQUATE	ADEQUATE	WET
% Cloud Cover:	0	80	0

CROP STAGE AT EACH APPLICATION

	A	B	C
	COTTON	COTTON	COTTON
Stage Scale:	PRE	4 LEAF	12 LEAF
Height, Unit:	N/A	6 IN	14 IN

WEED STAGE AT EACH APPLICATION

	A	B	C
	PALMER AM	PALMER AM	
Stage Scale:	1"-6"	2"-30"	
	DEVIL'S C	DEVIL'S C	
Stage Scale:	2"-4"	3"-15"	
	MORNINGGL	MORNINGGL	
Stage Scale:	1"-4"	1"-6"	

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	JD 4 ROW	BACKPACK	BACKPACK
Operating Pressure:	25 PSI	28 PSI	24 PSI
Nozzle Type:	TURBOTEE	TURBOTEE	TURBOTEE
Nozzle Size:	110015	11002	11002
Nozzle Spacing, Unit:	20 IN	19 IN	19 IN
Boom Height, Unit:	20 IN	24 IN	40 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	15 GPA	15 GPA
Propellant:	AIR	CO2	CO2

Texas Agricultural Experiment Station

Treatment Application Comment

BLANKET PROWL H2O APPLIED OVER ENTIRE TRIAL AREA PPI
BLANKET ROUNDUP POWERMAX APPLIED @ 32 OZ/A AFTER PRE'S 5/20/2010

Texas Agricultural Experiment Station

IGNITE AND ROUNDUP WEED CONTROL IN COTTON II

Trial ID: 120L-10
Location: F301 ON STATION

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code	PIGWEEED	DEVILSCL	MORNINGG	COTTON	PIGWEEED	DEVILSCL
Crop Code						
Part Rated						
Rating Data Type	CONTROL	CONTROL	CONTROL	PHYTO	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	Jun/14/2010	Jun/14/2010	Jun/14/2010	Jun/21/2010	Jun/21/2010	Jun/21/2010
Trt-Eval Interval	25 DA-A	25 DA-A	25 DA-A			

Trt	Treatment	Rate	Product	Product	Appl						
No.	Name	Rate	Unit	Rate	Unit	Code					
1	UNTREATED						0.0 b	0.0 b	0.0 a	0.0 a	0.0 d
2	IGNITE 280	0.4 lb ai/a		22 oz/a		B	0.0 b	0.0 b	0.0 a	0.0 a	43.3 c
	IGNITE 280	0.4 lb ai/a		22 oz/a		C					70.0 b
3	IGNITE 280	0.53 lb ai/a		29 oz/a		B	0.0 b	0.0 b	0.0 a	0.0 a	66.7 b
	IGNITE 280	0.53 lb ai/a		29 oz/a		C					80.0 ab
4	ROUNDUP POWERMAX	0.77 lb ae/a		22 oz/a		B	0.0 b	0.0 b	0.0 a	0.0 a	94.0 a
	ROUNDUP POWERMAX	0.77 lb ae/a		22 oz/a		C					68.3 b
5	CAPAROL	0.75 lb ai/a		24 oz/a		A	95.0 a	83.3 a	0.0 a	0.0 a	96.0 a
	IGNITE 280	0.4 lb ai/a		22 oz/a		B					81.7 ab
	IGNITE 280	0.4 lb ai/a		22 oz/a		C					
6	CAPAROL	0.75 lb ai/a		24 oz/a		A	94.0 a	85.0 a	0.0 a	0.0 a	97.3 a
	IGNITE 280	0.53 lb ai/a		29 oz/a		B					93.3 a
	IGNITE 280	0.53 lb ai/a		29 oz/a		C					
7	CAPAROL	0.75 lb ai/a		24 oz/a		A	93.3 a	83.3 a	0.0 a	0.0 a	100.0 a
	ROUNDUP POWERMAX	0.77 lb ae/a		22 oz/a		B					97.3 a
	ROUNDUP POWERMAX	0.77 lb ae/a		22 oz/a		C					
8	ROUNDUP POWERMAX	0.77 lb ae/a		22 oz/a		B	0.0 b	0.0 b	0.0 a	0.0 a	100.0 a
	IGNITE 280	0.4 lb ai/a		22 oz/a		C					71.7 b
9	IGNITE 280	0.4 lb ai/a		22 oz/a		B	0.0 b	0.0 b	0.0 a	0.0 a	45.0 c
	ROUNDUP POWERMAX	0.77 lb ae/a		22 oz/a		C					66.7 b
LSD (P=.05)							2.70	3.33	0.00	0.00	7.05
Standard Deviation							1.56	1.92	0.00	0.00	4.08
CV							4.98	6.88	0.0	0.0	5.71
Bartlett's X2							0.095	0.827	0.0	0.0	7.793
P(Bartlett's X2)							0.757	0.661	.	.	0.168
Replicate F							0.744	3.250	0.000	0.000	4.887
Replicate Prob(F)							0.4910	0.0654	1.0000	1.0000	0.0221
Treatment F							2722.831	1425.250	0.000	0.000	226.480
Treatment Prob(F)							0.0001	0.0001	1.0000	1.0000	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code						MORNINGG	PIGWEEED	DEVILSCL	MORNINGG	
Crop Code							COTTON			COTTON
Part Rated										
Rating Data Type						CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit						PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date						Jun/21/2010	Jun/28/2010	Jun/28/2010	Jun/28/2010	Jun/28/2010
Trt-Eval Interval										Jul/12/2010
Trt No.	Treatment Name	Rate	Product	Product	Appl					
		Rate	Unit	Rate	Unit	Code				
1	UNTREATED					0.0 e	0.0 a	0.0 c	0.0 d	0.0 e
2	IGNITE 280	0.4 lb ai/a	22 oz/a	B		70.0 d	0.0 a	68.3 b	75.0 c	73.3 cd
	IGNITE 280	0.4 lb ai/a	22 oz/a	C						
3	IGNITE 280	0.53 lb ai/a	29 oz/a	B		80.0 bc	0.0 a	78.3 b	86.7 abc	86.7 b
	IGNITE 280	0.53 lb ai/a	29 oz/a	C						
4	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B		75.0 cd	0.0 a	99.0 a	97.3 a	78.3 c
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C						
5	CAPAROL	0.75 lb ai/a	24 oz/a	A		95.7 a	0.0 a	95.0 a	88.3 abc	96.7 a
	IGNITE 280	0.4 lb ai/a	22 oz/a	B						
	IGNITE 280	0.4 lb ai/a	22 oz/a	C						
6	CAPAROL	0.75 lb ai/a	24 oz/a	A		94.0 a	0.0 a	97.7 a	95.0 ab	97.3 a
	IGNITE 280	0.53 lb ai/a	29 oz/a	B						
	IGNITE 280	0.53 lb ai/a	29 oz/a	C						
7	CAPAROL	0.75 lb ai/a	24 oz/a	A		85.0 b	0.0 a	100.0 a	99.0 a	90.0 b
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B						
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C						
8	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B		71.7 cd	0.0 a	96.0 a	96.7 a	70.0 d
	IGNITE 280	0.4 lb ai/a	22 oz/a	C						
9	IGNITE 280	0.4 lb ai/a	22 oz/a	B		75.0 cd	0.0 a	75.0 b	80.0 bc	85.0 b
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C						
LSD (P=.05)						6.40	0.00	9.05	11.17	5.95
Standard Deviation						3.70	0.00	5.23	6.45	3.44
CV						5.15	0.0	6.64	8.09	4.57
Bartlett's X2						3.742	0.0	6.52	8.798	6.295
P(Bartlett's X2)						0.712	.	0.367	0.267	0.391
Replicate F						2.809	0.000	1.285	0.633	0.764
Replicate Prob(F)						0.0901	1.0000	0.3038	0.5440	0.4821
Treatment F						177.945	0.000	111.107	69.393	224.854
Treatment Prob(F)						0.0001	1.0000	0.0001	0.0001	0.0001

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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	PIGWEEED	DEVILSCL	MORNINGG		PIGWEEED	DEVILSCL
Crop Code					COTTON	
Part Rated						
Rating Data Type	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	Jul/12/2010	Jul/12/2010	Jul/12/2010	Jul/27/2010	Jul/27/2010	Jul/27/2010
Trt-Eval Interval						

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code				
1	UNTREATED						0.0 c	0.0 c	0.0 d	0.0 a
2	IGNITE 280	0.4	lb ai/a	22	oz/a	B	35.0 b	71.7 b	60.0 bc	0.0 a
	IGNITE 280	0.4	lb ai/a	22	oz/a	C				97.7 a
3	IGNITE 280	0.53	lb ai/a	29	oz/a	B	60.0 ab	83.3 ab	68.3 abc	0.0 a
	IGNITE 280	0.53	lb ai/a	29	oz/a	C				98.3 a
4	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B	80.0 a	91.7 ab	65.0 abc	0.0 a
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	C				100.0 a
5	CAPAROL	0.75	lb ai/a	24	oz/a	A	85.0 a	86.7 ab	86.0 ab	0.0 a
	IGNITE 280	0.4	lb ai/a	22	oz/a	B				98.3 a
	IGNITE 280	0.4	lb ai/a	22	oz/a	C				100.0 a
6	CAPAROL	0.75	lb ai/a	24	oz/a	A	86.7 a	88.3 ab	89.0 a	0.0 a
	IGNITE 280	0.53	lb ai/a	29	oz/a	B				99.3 a
	IGNITE 280	0.53	lb ai/a	29	oz/a	C				100.0 a
7	CAPAROL	0.75	lb ai/a	24	oz/a	A	91.7 a	98.3 a	80.0 abc	0.0 a
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B				100.0 a
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	C				100.0 a
8	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B	87.3 a	96.7 a	56.7 c	0.0 a
	IGNITE 280	0.4	lb ai/a	22	oz/a	C				99.3 a
9	IGNITE 280	0.4	lb ai/a	22	oz/a	B	58.3 ab	75.0 b	75.0 abc	0.0 a
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	C				99.3 a
										100.0 a
	LSD (P=.05)						22.71	13.90	17.27	0.00
	Standard Deviation						13.12	8.03	9.98	0.00
	CV						20.22	10.45	15.48	0.0
	Bartlett's X2						14.416	7.553	8.482	0.0
	P(Bartlett's X2)						0.044*	0.374	0.205	.
										0.323
										.
	Replicate F						0.667	2.600	0.363	0.000
	Replicate Prob(F)						0.5269	0.1053	0.7014	1.0000
	Treatment F						16.342	42.348	21.354	0.000
	Treatment Prob(F)						0.0001	0.0001	0.0001	1.0000
										1097.314
										22463.502
										0.0001
										0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

						MORNINGG	COTTON	MORNINGG	PIGWEEED	DEVILS C	COTTON
Weed Code											LINT
Crop Code											YIELD
Part Rated											LB/ACRE
Rating Data Type						CONTROL	INJURY	CONTROL	CONTROL	CONTROL	
Rating Unit						PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
Rating Date						Jul/27/2010	Aug/09/2010	Aug/09/2010	Aug/09/2010	Aug/09/2010	Oct/18/2010
Trt-Eval Interval											
Trt	Treatment	Rate	Product	Product	Appl						
No.	Name	Rate	Unit	Rate	Unit	Code					
1	UNTREATED						0.0 c	0.0 a	0.0 c	0.0 b	61.7 b
2	IGNITE 280	0.4 lb ai/a	22 oz/a	B			97.3 a	0.0 a	97.3 a	91.7 a	449.3 a
	IGNITE 280	0.4 lb ai/a	22 oz/a	C							
3	IGNITE 280	0.53 lb ai/a	29 oz/a	B			98.7 a	0.0 a	97.7 a	99.0 a	481.3 a
	IGNITE 280	0.53 lb ai/a	29 oz/a	C							
4	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B			83.3 b	0.0 a	75.0 b	100.0 a	501.0 a
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C							
5	CAPAROL	0.75 lb ai/a	24 oz/a	A			99.7 a	0.0 a	99.3 a	97.7 a	516.0 a
	IGNITE 280	0.4 lb ai/a	22 oz/a	B							
	IGNITE 280	0.4 lb ai/a	22 oz/a	C							
6	CAPAROL	0.75 lb ai/a	24 oz/a	A			98.0 a	0.0 a	99.0 a	99.3 a	493.7 a
	IGNITE 280	0.53 lb ai/a	29 oz/a	B							
	IGNITE 280	0.53 lb ai/a	29 oz/a	C							
7	CAPAROL	0.75 lb ai/a	24 oz/a	A			83.3 b	0.0 a	82.7 ab	100.0 a	429.3 a
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B							
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C							
8	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B			85.7 ab	0.0 a	80.0 ab	99.3 a	365.3 a
	IGNITE 280	0.4 lb ai/a	22 oz/a	C							
9	IGNITE 280	0.4 lb ai/a	22 oz/a	B			95.7 ab	0.0 a	92.7 ab	99.0 a	493.7 a
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	C							
LSD (P=.05)							9.56	0.00	13.08	6.15	144.82
Standard Deviation							5.52	0.00	7.56	3.55	83.67
CV							6.7	0.0	9.4	4.07	19.86
Bartlett's X2							28.36	0.0	17.657	16.456	5.561
P(Bartlett's X2)							0.001*	.	0.014*	0.006*	0.696
Replicate F							0.038	0.000	0.261	1.611	9.428
Replicate Prob(F)							0.9632	1.0000	0.7732	0.2305	0.0020
Treatment F							98.376	0.000	52.142	256.449	8.717
Treatment Prob(F)							0.0001	1.0000	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

EVALUATION OF NEW ROUNDUP FORMULATIONS FOR EFFICACY ON KEY WEED SPECIES

Trial ID: 122L-10
Location: GLOVER

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LUBBOCK
State/Prov.: TX

Initiation Date: Jun/07/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
PALMER AMARANTH

NON-CROP

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: SPLIT-BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

Application Date: Jun/07/2010
Time of Day: 2:30 PM
Application Method: SPRAY
Application Timing: A;B POST
Applic. Placement: BROADCAST
Air Temp., Unit: 93 F
% Relative Humidity: 44
Wind Velocity, Unit: 12 MPH
Soil Temp., Unit: 83 F
Soil Moisture: ADEQUATE
% Cloud Cover: 100

CROP STAGE AT EACH APPLICATION

A B
>

WEED STAGE AT EACH APPLICATION

A B
PALMER AM
Stage Scale: 6"-7"

APPLICATION EQUIPMENT

A B
Appl. Equipment: BACKPACK
Operating Pressure: 28 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 24 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

EVALUATION OF NEW ROUNDUP FORMULATIONS FOR EFFICACY ON KEY WEED SPECIES

Trial ID: 122L-10
Location: GLOVER

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code	PIGWEED	PIGWEED	PIGWEED
Rating Data Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Date	Jun/14/2010	Jun/21/2010	Jun/28/2010
Trt-Eval Interval	7 DA-A	14 DA-A	21 DA-A

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code			
1	UNTREATED						0.0 d	0.0 c	0.0 c
2	ROUNDUP WEATHERMAX	0.5	lb ae/a	14.2	oz/a	A	74.3 c	76.7 b	80.7 b
3	MON 76398	0.5	lb ae/a	14.2	oz/a	A	76.7 c	77.3 b	79.7 b
4	MON 76337	0.5	lb ae/a	14.2	oz/a	A	71.7 c	76.7 b	81.7 b
5	MON 76435	0.5	lb ae/a	14.2	oz/a	A	71.0 c	72.3 b	79.0 b
6	MON 79790	0.5	lb ae/a	14.2	oz/a	A	73.3 c	71.7 b	76.7 b
7	MON 76441	0.5	lb ae/a	14.2	oz/a	A	75.0 c	73.3 b	75.0 b
8	MON 76417	0.5	lb ae/a	14.2	oz/a	A	83.3 b	81.0 b	82.0 b
9	MON 76439	0.5	lb ae/a	14.2	oz/a	A	78.3 bc	79.3 b	79.0 b
10	ROUNDUP WEATHERMAX	0.75	lb ae/a	21.3	oz/a	B	98.0 a	98.0 a	96.3 a
11	MON 76398	0.75	lb ae/a	21.3	oz/a	B	97.0 a	96.3 a	94.7 a
12	MON 76337	0.75	lb ae/a	21.3	oz/a	B	98.3 a	97.7 a	95.3 a
13	MON 76435	0.75	lb ae/a	21.3	oz/a	B	99.0 a	98.3 a	96.0 a
14	MON 79790	0.75	lb ae/a	21.3	oz/a	B	99.3 a	99.3 a	98.0 a
15	MON 76441	0.75	lb ae/a	21.3	oz/a	B	96.0 a	95.3 a	95.0 a
16	MON 76417	0.75	lb ae/a	21.3	oz/a	B	98.7 a	98.7 a	97.3 a
17	MON 76439	0.75	lb ae/a	21.3	oz/a	B	97.7 a	90.7 a	94.7 a
18	UNTREATED						0.0 d	0.0 c	0.0 c
LSD (P=.05)							5.04	7.57	7.04
Standard Deviation							3.02	4.54	4.22
CV							3.92	5.91	5.42
Bartlett's X2							13.614	36.953	13.349
P(Bartlett's X2)							0.555	0.001*	0.499
Replicate F							2.738	0.109	0.284
Replicate Prob(F)							0.0789	0.8973	0.7548
Treatment F							299.880	129.536	146.547
Treatment Prob(F)							0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

EVALUATION OF GENERIC GLYPHOSATE FORMULATIONS IN RR FLEX COTTON

Trial ID: 123L-10
Location: NEW DEAL DRIP

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: NEW DEAL
State/Prov.: TX

Initiation Date: May/21/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

COTTON Variety: DP0912 B2 FLEX
Planting Date: May/21/2010 Planting Method: 4 ROW
Rate: 52000 PLANT/ACRE
Row Spacing: 40 IN Spacing Within Row: 4 SD/FT
Soil Temperature: 68.9 F Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 40 FT Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

APPLICATION DESCRIPTION

	A	B	C
Application Date:	Jun/14/2010	Jun/24/2010	Jul/15/2010
Time of Day:	7:30 AM	8:45 AM	12:15 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	A 3-4LF	B 6-8LF	C 12-14LF
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	73 F	77.1 F	81.7 F
% Relative Humidity:	74	65	73
Wind Velocity, Unit:	5 MPH	9.7 MPH	4 MPH
Soil Temp., Unit:	80 F	79.8 F	77 F
Soil Moisture:	ADEQUATE	ADEQUATE	WET
% Cloud Cover:	40	25	100

CROP STAGE AT EACH APPLICATION

	A	B	C
	COTTON	COTTON	COTTON
Stage Scale:	4 LEAF	7 LEAF	12 LEAF
Height, Unit:	9 IN	23 IN	

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	28 PSI	24 PSI	28 PSI
Nozzle Type:	TURBOTEE	TURBOTEE	TURBOTEE
Nozzle Size:	11002	11002	11002
Nozzle Spacing, Unit:	19 IN	19 IN	19 IN
Boom Height, Unit:	22 IN	28 IN	40 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA
Propellant:	C02	C02	C02

Treatment Application Comment

5/1 - TREFLAN APPLIED @ 1 1/2 PT/A, INCORP 2X WITH ROLLING CULT.
5/21 - PLANTED W/ 5 LBS. TEMIK APPLIED

Texas Agricultural Experiment Station

EVALUATION OF GENERIC GLYPHOSATE FORMULATIONS IN RR FLEX COTTON

Trial ID: 123L-10
Location: NEW DEAL DRIP

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code
Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

COTTON NECROSIS PERCENT	COTTON CHLOROSIS PERCENT	COTTON STUNT PERCENT	COTTON NECROSIS PERCENT	COTTON CHLOROSIS PERCENT	COTTON STUNT PERCENT
Jun/17/2010	Jun/17/2010	Jun/17/2010	Jun/21/2010	Jun/21/2010	Jun/21/2010
3 DA-A	3 DA-A	3 DA-A	7 DA-A	7 DA-A	7 DA-A

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code						
1	UNTREATED						0.0 c	0.0 a	0.0 c	0.0 b	0.0 a	0.0 b
2	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	A	0.0 c	0.0 a	0.0 c	0.0 b	0.0 a	0.0 b
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A						
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	B						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B						
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	C						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C						
3	ALLECTO 41S	1.12	lb ae/a	48	oz/a	A	4.5 c	0.0 a	0.0 c	3.0 b	0.0 a	0.0 b
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A						
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	B						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B						
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	C						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C						
4	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	A	14.3 b	0.0 a	2.0 c	7.0 b	0.0 a	3.8 b
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A						
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	B						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B						
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	C						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C						
5	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	A	1.5 c	0.0 a	0.0 c	0.0 b	0.0 a	0.0 b
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A						
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	B						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B						
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	C						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C						
6	ALLECTO 41S	2.25	lb ae/a	96	oz/a	A	17.5 b	0.0 a	4.5 b	7.8 b	0.0 a	16.3 ab
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A						
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	B						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B						
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	C						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C						
7	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	A	36.8 a	0.0 a	21.6 a	30.0 a	0.0 a	28.8 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A						
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	B						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B						
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	C						
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C						
LSD (P=.05)							6.67	0.00	1.93	16.36	0.00	12.54
Standard Deviation							4.47	0.00	1.29	11.01	0.00	8.44
CV							41.96	0.0	32.27	161.42	0.0	121.19
Bartlett's X2							24.149	0.0	2.648	47.838	0.0	11.812
P(Bartlett's X2)							0.001*	.	0.266	0.001*	.	0.003*
Replicate F							0.547	0.000	1.839	1.024	0.000	0.581
Replicate Prob(F)							0.6567	1.0000	0.1783	0.4054	1.0000	0.6352
Treatment F							36.488	0.000	150.087	3.807	0.000	7.162
Treatment Prob(F)							0.0001	1.0000	0.0001	0.0126	1.0000	0.0005

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code
Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

COTTON NECROSIS PERCENT Jun/28/2010	COTTON CHLOROSIS PERCENT Jun/28/2010	COTTON STUNT PERCENT Jun/28/2010	COTTON NECROSIS PERCENT Jul/01/2010	COTTON CHLOROSIS PERCENT Jul/01/2010	COTTON STUNT PERCENT Jul/01/2010
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Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code					
1	UNTREATED						0.0 c	0.0 a	0.0 c	0.0 d	0.0 a
2	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	A	0.0 c	0.0 a	2.5 c	0.0 d	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					2.5 c
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
3	ALLECTO 41S	1.12	lb ae/a	48	oz/a	A	9.3 bc	0.0 a	3.8 c	6.0 c	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					3.8 c
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
4	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	A	15.5 b	0.0 a	13.8 bc	15.0 b	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					15.0 bc
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
5	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	A	0.0 c	0.0 a	1.3 c	0.0 d	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					1.3 c
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
6	ALLECTO 41S	2.25	lb ae/a	96	oz/a	A	18.8 b	0.0 a	21.3 b	14.3 b	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					18.8 b
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
7	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	A	37.5 a	0.0 a	42.5 a	20.0 a	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					37.5 a
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
LSD (P=.05)							8.32	0.00	10.93	1.01	0.00
Standard Deviation							5.60	0.00	7.36	0.68	0.00
CV							48.39	0.0	60.61	8.63	0.0
Bartlett's X2							12.467	0.0	24.397	0.198	0.0
P(Bartlett's X2)							0.006*	.	0.001*	0.656	.
Replicate F							1.905	0.000	1.846	1.718	0.000
Replicate Prob(F)							0.1651	1.0000	0.1750	0.1991	1.0000
Treatment F							24.375	0.000	17.681	614.539	0.000
Treatment Prob(F)							0.0001	1.0000	0.0001	0.0001	1.0000

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code
Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

COTTON NECROSIS PERCENT Jul/19/2010	COTTON CHLOROSIS PERCENT Jul/19/2010	COTTON STUNT PERCENT Jul/19/2010	COTTON NECROSIS PERCENT Jul/22/2010	COTTON CHLOROSIS PERCENT Jul/22/2010	COTTON STUNT PERCENT Jul/22/2010
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Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code					
1	UNTREATED						0.0 d	0.0 a	0.0 d	0.0 d	0.0 a
2	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	A	0.0 d	0.0 a	7.0 cd	0.0 d	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					0.0 d
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
3	ALLECTO 41S	1.12	lb ae/a	48	oz/a	A	19.5 c	0.0 a	13.8 bc	17.5 c	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					16.3 c
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
4	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	A	22.5 b	0.0 a	20.8 b	22.5 b	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					26.3 b
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
5	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	A	0.0 d	0.0 a	1.3 d	0.0 d	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					0.0 d
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
6	ALLECTO 41S	2.25	lb ae/a	96	oz/a	A	23.8 b	0.0 a	22.5 b	23.8 b	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					32.5 b
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
7	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	A	33.8 a	0.0 a	36.3 a	28.8 a	0.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					48.8 a
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
LSD (P=.05)							2.67	0.00	9.45	3.21	0.00
Standard Deviation							1.79	0.00	6.36	2.16	0.00
CV							12.62	0.0	43.89	16.34	0.0
Bartlett's X2							2.84	0.0	14.039	0.117	0.0
P(Bartlett's X2)							0.417	.	0.015*	0.99	.
Replicate F							0.784	0.000	1.621	0.255	0.000
Replicate Prob(F)							0.5182	1.0000	0.2195	0.8565	1.0000
Treatment F							243.466	0.000	16.770	140.234	0.000
Treatment Prob(F)							0.0001	1.0000	0.0001	0.0001	1.0000

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code Crop Code Rating Data Type Rating Unit Rating Date Trt-Eval Interval						PLANT #1 COTTON PLANT HT INCHES Oct/06/2010	PLANT #1 COTTON 1ST FRUIT BRANCH # Oct/06/2010	PLANT #1 COTTON NODE # UMHBOLL Oct/06/2010	PLANT #1 COTTON NODES TOTAL # Oct/06/2010	PLANT #2 COTTON PLANT HT INCHES Oct/06/2010	PLANT #2 COTTON 1ST FRUIT BRANCH # Oct/06/2010
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code					
1	UNTREATED						28.0 a	5.8 a	12.0 b	16.3 b	29.3 a
2	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	A	29.8 a	6.3 a	13.5 b	17.5 b	29.8 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					6.5 a
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
3	ALLECTO 41S	1.12	lb ae/a	48	oz/a	A	29.3 a	5.8 a	12.3 b	17.3 b	30.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					6.0 a
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
4	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	A	30.3 a	4.5 a	14.5 ab	19.3 ab	32.8 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					5.5 a
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
5	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	A	30.8 a	5.8 a	12.8 b	16.5 b	28.5 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					6.0 a
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
6	ALLECTO 41S	2.25	lb ae/a	96	oz/a	A	33.3 a	6.8 a	16.8 a	20.5 a	30.5 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					5.8 a
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
7	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	A	32.8 a	3.3 a	14.3 ab	17.8 b	33.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					6.0 a
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
LSD (P=.05)							3.39	2.85	2.23	2.00	3.93
Standard Deviation							2.28	1.92	1.50	1.35	2.65
CV							7.46	35.29	10.93	7.53	8.67
Bartlett's X2							3.686	12.513	10.483	15.7	4.917
P(Bartlett's X2)							0.719	0.051	0.106	0.015*	0.554
Replicate F							0.311	0.675	1.569	1.737	0.290
Replicate Prob(F)							0.8170	0.5788	0.2316	0.1953	0.8317
Treatment F							2.703	1.515	4.802	5.105	1.682
Treatment Prob(F)							0.0474	0.2295	0.0043	0.0032	0.1829

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code						PLANT #2	PLANT #2	PLANT #3	PLANT #3	PLANT #3	PLANT #3
Crop Code						COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Rating Data Type						NODE #	NODES	PLANT HT	1ST FRUIT	NODE #	NODES
Rating Unit						UMHBOLL	TOTAL #	INCHES	BRANCH #	UMHBOLL	TOTAL #
Rating Date						Oct/06/2010	Oct/06/2010	Oct/06/2010	Oct/06/2010	Oct/06/2010	Oct/06/2010
Trt-Eval Interval											
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code					
1	UNTREATED						13.3 ab	16.3 b	30.0 a	6.5 a	12.8 ab
2	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	A	13.5 ab	17.5 ab	28.8 a	6.0 a	12.0 b
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					16.3 ab
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
3	ALLECTO 41S	1.12	lb ae/a	48	oz/a	A	14.3 ab	18.3 ab	30.3 a	6.0 a	13.5 ab
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					19.0 ab
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
4	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	A	16.5 a	19.8 ab	32.3 a	5.8 a	15.0 ab
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					18.8 ab
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
5	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	A	12.3 b	16.5 b	27.8 a	6.5 a	11.8 b
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					15.5 b
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
6	ALLECTO 41S	2.25	lb ae/a	96	oz/a	A	14.5 ab	19.5 ab	31.8 a	8.3 a	16.3 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					19.8 a
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
7	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	A	16.5 a	20.5 a	30.3 a	5.3 a	15.0 ab
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					18.5 ab
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
LSD (P=.05)							2.66	2.44	3.59	3.36	2.78
Standard Deviation							1.79	1.65	2.42	2.26	1.87
CV							12.43	8.98	8.02	35.74	13.62
Bartlett's X2							9.263	4.442	8.385	7.384	8.774
P(Bartlett's X2)							0.159	0.617	0.211	0.194	0.187
Replicate F							1.321	0.435	0.995	0.418	0.580
Replicate Prob(F)							0.2984	0.7303	0.4175	0.7425	0.6355
Treatment F							3.253	4.056	1.683	0.714	3.326
Treatment Prob(F)							0.0241	0.0096	0.1827	0.6433	0.0221

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code Crop Code Rating Data Type Rating Unit Rating Date Trt-Eval Interval						PLANT #4 COTTON PLANT HT INCHES Oct/06/2010	PLANT #4 COTTON 1ST FRUIT BRANCH # Oct/06/2010	PLANT #4 COTTON NODE # UMHBOLL Oct/06/2010	PLANT #4 COTTON NODES TOTAL # Oct/06/2010	PLANT #5 COTTON PLANT HT INCHES Oct/06/2010	PLANT #5 COTTON 1ST FRUIT BRANCH # Oct/06/2010
Trt No.	Treatment Name	Rate Rate	Unit	Product Rate	Product Rate	Unit	Unit	Unit	Unit	Unit	Unit
1	UNTREATED										
2	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	A	28.3 a	5.8 a	13.0 c	16.8 b	29.5 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A	29.3 a	6.5 a	12.8 c	16.5 b	29.8 a
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
3	ALLECTO 41S	1.12	lb ae/a	48	oz/a	A	31.3 a	6.3 a	15.0 abc	18.5 ab	29.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
4	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	A	31.0 a	5.8 a	16.3 ab	19.8 a	31.3 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
5	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	A	30.0 a	6.0 a	13.5 bc	17.5 ab	28.5 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
6	ALLECTO 41S	2.25	lb ae/a	96	oz/a	A	32.8 a	6.3 a	16.8 a	20.3 a	33.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
7	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	A	30.5 a	5.8 a	14.0 abc	18.5 ab	33.8 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A					
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	B					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B					
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	C					
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C					
LSD (P=.05)							2.98	2.65	2.18	1.96	3.40
Standard Deviation							2.01	1.78	1.47	1.32	2.29
CV							6.6	29.54	10.16	7.22	7.45
Bartlett's X2							3.9	12.809	6.877	10.737	5.396
P(Bartlett's X2)							0.69	0.025*	0.332	0.097	0.494
Replicate F							1.110	0.581	0.061	0.185	1.536
Replicate Prob(F)							0.3709	0.6353	0.9798	0.9053	0.2394
Treatment F							2.102	0.116	4.610	4.699	3.182
Treatment Prob(F)							0.1037	0.9932	0.0053	0.0048	0.0262

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code
Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

PLANT #5	PLANT #5	
COTTON	COTTON	COTTON
NODE #	NODES	LINT YIELD
UMHBOLL	TOTAL #	LB/ACRE
Oct/06/2010	Oct/06/2010	Nov/10/2010

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code			
1	UNTREATED						12.8 cd	16.3 b	997.8 a
2	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	A	12.3 d	16.8 b	931.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A			
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	B			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B			
	ROUNDUP POWERMAX	1.12	lb ae/a	32	oz/a	C			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C			
3	ALLECTO 41S	1.12	lb ae/a	48	oz/a	A	13.8 bcd	17.8 b	903.3 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A			
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	B			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B			
	ALLECTO 41S	1.12	lb ae/a	48	oz/a	C			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C			
4	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	A	16.3 ab	19.5 a	905.3 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A			
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	B			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B			
	GENESIS EXTRA	1.12	lb ae/a	48	oz/a	C			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C			
5	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	A	13.3 cd	16.8 b	863.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A			
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	B			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B			
	ROUNDUP POWERMAX	2.25	lb ae/a	64	oz/a	C			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C			
6	ALLECTO 41S	2.25	lb ae/a	96	oz/a	A	15.5 abc	20.5 a	867.0 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A			
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	B			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B			
	ALLECTO 41S	2.25	lb ae/a	96	oz/a	C			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C			
7	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	A	16.8 a	20.8 a	814.5 a
	AMMONIUM SULFATE	2	% w/w	2	%w/w	A			
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	B			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	B			
	GENESIS EXTRA	2.25	lb ae/a	96	oz/a	C			
	AMMONIUM SULFATE	2	% w/w	2	%w/w	C			
LSD (P=.05)							2.14	1.66	105.75
Standard Deviation							1.44	1.12	70.55
CV							10.03	6.1	7.86
Bartlett's X2							3.69	1.907	5.7
P(Bartlett's X2)							0.719	0.928	0.458
Replicate F							0.665	0.867	2.014
Replicate Prob(F)							0.5841	0.4764	0.1525
Treatment F							6.178	11.514	2.716
Treatment Prob(F)							0.0012	0.0001	0.0515

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

PALMER AMARANTH - STAPLE/LL

Trial ID: 124L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA PALMER AMARANTH	AMARANTHUS PALMERI

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 9058 F

Planting Date: May/13/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B	C
Application Date:	May/13/2010	Jun/01/2010	Jun/15/2010
Time of Day:	5:00 PM	2:30PM	11:00AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	A-PRE	B-EPOST	C-MPOST
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	75 F	98 F	86 F
% Relative Humidity:	39	26	51
Wind Velocity, Unit:	9 MPH	2 MPH	3 MPH
Soil Temp., Unit:	69 F	90 F	88 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE
% Cloud Cover:	0	20	60

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GOSHI COTTON	GOSHI COTTON	GOSHI COTTON
Stage Scale:	PRE	3-4 LEAF	4-6 LEAF

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	AMAPA	AMAPA	AMAPA
Stage Scale:	PRE	1-2"	4-6"

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	BACKPACK	TRACTOR	BACKPACK
Operating Pressure:	30	30	30
Nozzle Type:	TURBO TEE	TURBO TEE	TURBO TEE
Nozzle Size:	110015	110015	110015
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10	10	10
Propellant:	CO2	AIR	CO2

Texas Agricultural Experiment Station

PALMER AMARANTH - STAPLE/LL

Trial ID: 124L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	AMAPA	AMAPA	AMAPA	AMAPA	AMAPA	AMAPA
Crop Code	COTTON					
Part Rated						
Rating Data Type	CONTROL	INJURY	CONTROL	PLANTS PER	CONTROL	CONTROL
Rating Unit	%	%	%	SQ.METER	%	%
Rating Date	Jun/08/2010	Jun/08/2010	Jun/15/2010	Jun/15/2010	Jun/21/2010	Jun/28/2010
						Jul/13/2010

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Description						
1	UNTREATED					0.0 c	0.0 a	0.0 e	35.3 a	0.0 c	0.0 c
2	STAPLE LX	2 oz/a	A	PRE		98.0 ab	0.0 a	91.0 ab	5.3 cd	99.3 a	98.7 a
	DIREX	16 oz/a	A	PRE							95.0 a
	IGNITE 280	29 oz/a	C	MPOST							
	STAPLE LX	1.7 oz/a	C	MPOST							
3	STAPLE LX	2 oz/a	A	PRE		99.7 a	0.0 a	99.3 a	0.3 d	100.0 a	100.0 a
	REFLEX	16 oz/a	A	PRE							99.7 a
	IGNITE 280	29 oz/a	C	MPOST							
	STAPLE LX	1.7 oz/a	C	MPOST							
4	IGNITE 280	29 oz/a	B	EPOST		98.3 ab	0.0 a	85.0 abc	16.0 bc	95.7 a	93.3 a
	STAPLE LX	2 oz/a	B	EPOST							87.7 b
	IGNITE 280	29 oz/a	C	MPOST							
	STAPLE LX	2 oz/a	C	MPOST							
5	IGNITE 280	29 oz/a	B	EPOST		97.3 b	0.0 a	61.7 d	23.7 b	65.0 b	53.3 b
	STAPLE LX	2.7 oz/a	B	EPOST							30.0 d
6	IGNITE 280	29 oz/a	B	EPOST		99.0 ab	0.0 a	75.0 bcd	14.0 bc	98.3 a	89.7 a
	STAPLE LX	2.7 oz/a	B	EPOST							85.0 b
	IGNITE 280	29 oz/a	C	MPOST							
	STAPLE LX	2.7 oz/a	C	MPOST							
7	IGNITE 280	43 oz/a	B	EPOST		99.0 ab	0.0 a	70.0 cd	20.3 b	65.0 b	53.3 b
	STAPLE LX	2 oz/a	B	EPOST							23.3 e
8	IGNITE 280	29 oz/a	B	EPOST		98.7 ab	0.0 a	65.0 d	21.0 b	93.3 a	89.0 a
	IGNITE 280	29 oz/a	C	MPOST							73.3 c
LSD (P=.05)						1.38	0.00	13.36	10.09	4.98	7.76
Standard Deviation						0.79	0.00	7.63	5.76	2.84	4.43
CV						0.91	0.0	11.16	33.88	3.69	6.14
Bartlett's X2						1.882	0.0	10.568	22.699	14.077	4.147
P(Bartlett's X2)						0.865	.	0.103	0.002*	0.015*	0.529
Replicate F						0.000	0.000	0.522	1.010	3.564	0.212
Replicate Prob(F)						1.0000	1.0000	0.6044	0.3893	0.0561	0.8114
Treatment F						5888.270	0.000	48.060	10.745	441.182	183.971
Treatment Prob(F)						0.0001	1.0000	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	AMAPA	
Crop Code		COTTON
Part Rated		LINT
Rating Data Type	CONTROL	YIELD
Rating Unit	%	LBS/AC
Rating Date	Aug/02/2010	Nov/05/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description		
1	UNTREATED					0.0 e	56.7 b
2	STAPLE LX	2 oz/a	A	PRE		88.3 b	476.7 a
	DIREX	16 oz/a	A	PRE			
	IGNITE 280	29 oz/a	C	MPOST			
	STAPLE LX	1.7 oz/a	C	MPOST			
3	STAPLE LX	2 oz/a	A	PRE		99.3 a	565.0 a
	REFLEX	16 oz/a	A	PRE			
	IGNITE 280	29 oz/a	C	MPOST			
	STAPLE LX	1.7 oz/a	C	MPOST			
4	IGNITE 280	29 oz/a	B	EPOST		75.0 c	424.7 a
	STAPLE LX	2 oz/a	B	EPOST			
	IGNITE 280	29 oz/a	C	MPOST			
	STAPLE LX	2 oz/a	C	MPOST			
5	IGNITE 280	29 oz/a	B	EPOST		23.3 d	155.3 b
	STAPLE LX	2.7 oz/a	B	EPOST			
6	IGNITE 280	29 oz/a	B	EPOST		78.3 bc	424.7 a
	STAPLE LX	2.7 oz/a	B	EPOST			
	IGNITE 280	29 oz/a	C	MPOST			
	STAPLE LX	2.7 oz/a	C	MPOST			
7	IGNITE 280	43 oz/a	B	EPOST		31.7 d	185.0 b
	STAPLE LX	2 oz/a	B	EPOST			
8	IGNITE 280	29 oz/a	B	EPOST		80.0 bc	399.7 a
	IGNITE 280	29 oz/a	C	MPOST			
LSD (P=.05)						8.91	127.70
Standard Deviation						5.09	72.91
CV						8.55	21.7
Bartlett's X2						8.119	5.437
P(Bartlett's X2)						0.23	0.607
Replicate F						1.101	1.961
Replicate Prob(F)						0.3596	0.1775
Treatment F						149.965	18.177
Treatment Prob(F)						0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

REFLEX/ENVOKE - COTTON

Trial ID: 126L-10
Location: 301

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA PALMER AMARANTH	AMARANTHUS PALMERI
2.	IPOHE MORNINGGLORY	IPOMOEA HEDERACEA

Crop 1: GOSHI COTTON, SHORT STAPLE
Planting Date: May/27/2010

Variety: ST 4554 B2RF

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	May/28/2010	Jun/15/2010	Jun/30/2010	Jul/20/2010
Time of Day:	9:00AM	9:30 AM	2:00 PM	8:55 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	A-PRE	B-EPOST	C-PDIR	D-LPOST
Applic. Placement:	BROADCAST	BROADCAST	PDIR	BROADCAST
Air Temp., Unit:	74 F	70 F	84 F	78 F
% Relative Humidity:	40	84	52	50
Wind Velocity, Unit:	2 MPH	6 MPH	3 MPH	6 MPH
Soil Temp., Unit:	70 F	76 F	78 F	78 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE	ADEQUATE
% Cloud Cover:	0	98	60	0

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	GOSHI COTTON	GOSHI COTTON	GOSHI COTTON	GOSHI COTTON
Stage Scale:	PRE	2-4 LEAF	6-8 LEAF	12-14LEAF

WEED STAGE AT EACH APPLICATION

	A	B	C	D
Weed 1 Code, Stage:	AMAPA AMAPA	AMAPA AMAPA	AMAPA AMAPA	AMAPA AMAPA
Stage Scale:	PRE	2-4"	10-12"	16-18"
Weed 2 Code, Stage:	IPOHE MRNGGLRY	IPOHE MRNGGLRY	IPOHE MRNGGLRY	IPOHE MORNGRLRY
Stage Scale:	PRE	1-2"	6-8"	8-9"

APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	TRACTOR	BACKPACK	REDBALL	BACKPACK
Operating Pressure:	30	30	30	30
Nozzle Type:	TURBO TEE	TURBO TEE	FLAT FAN	TURBO TEE
Nozzle Size:	110015	110015	8002	110015
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA	10 GPA
Propellant:	AIR	CO2	CO2	CO2

Texas Agricultural Experiment Station

REFLEX/ENVOKE - COTTON

Trial ID: 126L-10
Location: 301

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code					MRNGGLRY		MRNGGLRY		MRNGGLRY	MRNGGLRY
Crop Code					COTTON		COTTON			
Part Rated					INJURY		INJURY		CONTROL	PLANTS
Rating Data Type					%		%		CONTROL	NUMBER
Rating Unit					Jun/14/2010		Jun/14/2010		Jun/29/2010	#/METER
Rating Date					Jun/14/2010		Jun/21/2010		Jun/21/2010	Jul/29/2010
Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description					
1	UNTREATED					0.0 a	0.0 c	0.0 b	0.0 d	7.0 a
2	REFLEX	1 pt/a		A	PRE	0.0 a	94.3 a	0.0 b	88.3 b	3.3 b
	SEQUENCE	2.5 pt/a		D	LPOST					
3	PREFIX	2 pt/a		A	PRE	0.0 a	94.7 a	0.0 b	89.3 b	2.0 bc
	TOUCHDOWN TOTAL	24 oz/a		D	LPOST					
	AMS	17 lb ai/100 gal		D	LPOST					
4	CAPAROL	1.6 pt/a		A	PRE	0.0 a	90.0 ab	0.0 b	78.3 c	3.3 b
	AMS	17 lb ai/100 gal		C	POST DIRECT					
	REFLEX	1 pt/a		C	POST DIRECT					
	TOUCHDOWN TOTAL	24 oz/a		C	POST DIRECT					
5	CAPAROL	1.6 pt/a		A	PRE	0.0 a	85.0 b	0.0 b	80.0 c	3.3 b
	AMS	17 lb ai/100 gal		C	POST DIRECT					
	PREFIX	2 pt/a		C	POST DIRECT					
	TOUCHDOWN TOTAL	24 oz/a		C	POST DIRECT					
6	CAPAROL	1.6 pt/a		A	PRE	0.0 a	86.7 b	3.7 a	88.3 b	2.7 b
	ENVOKE	0.1 oz/a		B	EPOST					
	NIS	0.25 % v/v		B	EPOST					
7	CAPAROL	1.6 pt/a		A	PRE	0.0 a	86.7 b	4.3 a	97.7 a	0.3 c
	AMS	17 lb ai/100 gal		B	EPOST					
	ENVOKE	0.1 oz/a		B	EPOST					
	TOUCHDOWN TOTAL	24 oz/a		B	EPOST					
LSD (P=.05)						0.00	4.38	1.05	6.56	1.71
Standard Deviation						0.00	2.46	0.59	3.69	0.96
CV						0.0	3.2	51.71	4.95	30.53
Bartlett's X2						0.0	0.484	0.0	4.634	3.555
P(Bartlett's X2)						.	0.922	.	0.462	0.737
Replicate F						0.000	0.504	1.636	0.073	0.155
Replicate Prob(F)						1.0000	0.6164	0.2353	0.9296	0.8580
Treatment F						0.000	575.520	33.045	247.394	13.259
Treatment Prob(F)						1.0000	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code Crop Code Part Rated Rating Data Type Rating Unit Rating Date				MRNGGLRY	MRNGGLRY	COTTON		MRNGGLRY	MRNGGLRY	AMAPA
				CONTROL	PLANTS NUMBER	INJURY	CONTROL	CONTROL	CONTROL	
				%	#/METER	%	%	%	%	%
				Jul/08/2010	Jul/08/2010	Jul/08/2010	Jul/20/2010	Aug/02/2010	Aug/02/2010	Aug/02/2010
Trt No.	Treatment Name	Rate	Appl	Appl						
		Rate Unit	Code	Description						
1	UNTREATED				0.0 c	9.3 a	0.0 b	0.0 d	0.0 c	0.0 d
2	REFLEX	1 pt/a	A	PRE	78.3 b	5.3 b	0.0 b	63.3 c	81.7 b	100.0 a
	SEQUENCE	2.5 pt/a	D	LPOST						
3	PREFIX	2 pt/a	A	PRE	78.3 b	5.0 b	0.0 b	70.0 bc	83.3 b	100.0 a
	TOUCHDOWN TOTAL	24 oz/a	D	LPOST						
	AMS	17 lb ai/100 gal	D	LPOST						
4	CAPAROL	1.6 pt/a	A	PRE	99.3 a	0.3 c	13.3 a	94.3 a	93.3 ab	86.7 b
	AMS	17 lb ai/100 gal	C	POST DIRECT						
	REFLEX	1 pt/a	C	POST DIRECT						
	TOUCHDOWN TOTAL	24 oz/a	C	POST DIRECT						
5	CAPAROL	1.6 pt/a	A	PRE	100.0 a	0.0 c	13.3 a	97.7 a	96.7 a	96.0 a
	AMS	17 lb ai/100 gal	C	POST DIRECT						
	PREFIX	2 pt/a	C	POST DIRECT						
	TOUCHDOWN TOTAL	24 oz/a	C	POST DIRECT						
6	CAPAROL	1.6 pt/a	A	PRE	83.3 b	4.7 b	0.0 b	76.7 b	83.3 b	81.7 c
	ENVOKE	0.1 oz/a	B	EPOST						
	NIS	0.25 % v/v	B	EPOST						
7	CAPAROL	1.6 pt/a	A	PRE	98.3 a	1.3 c	0.0 b	96.0 a	98.0 a	99.3 a
	AMS	17 lb ai/100 gal	B	EPOST						
	ENVOKE	0.1 oz/a	B	EPOST						
	TOUCHDOWN TOTAL	24 oz/a	B	EPOST						
LSD (P=.05)					5.98	2.37	2.51	10.51	9.32	4.47
Standard Deviation					3.36	1.33	1.41	5.90	5.24	2.52
CV					4.38	35.9	36.98	8.3	6.84	3.12
Bartlett's X2					7.785	3.013	0.0	9.528	9.197	5.061
P(Bartlett's X2)					0.10	0.556	.	0.049*	0.101	0.167
Replicate F					0.966	0.563	2.400	0.750	3.756	1.272
Replicate Prob(F)					0.4085	0.5841	0.1328	0.4933	0.0541	0.3154
Treatment F					330.066	19.027	64.000	100.578	129.837	622.497
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

GLYPHOSATE/AMS ADJUVANTS

Trial ID: 130L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA PALMER AMARANTH	AMARANTHUS PALMERI

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 9058 F

Planting Date: May/20/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT

Plot Length, Unit: 30 FT

Reps: 3

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Jun/07/2010
Time of Day: 10:30 AM
Application Method: SPRAY
Application Timing: A
Applic. Placement: BROADCAST
Air Temp., Unit: 87 F
% Relative Humidity: 54
Wind Velocity, Unit: 7 MPH
Soil Temp., Unit: 82 F
Soil Moisture: ADEQUATE
% Cloud Cover: 100

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: AMAPA
Stage Scale: 6-8 IN

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 30
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: AIR

Texas Agricultural Experiment Station

GLYPHOSATE/AMS ADJUVANTS

Trial ID: 130L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	AMAPA	AMAPA	AMAPA
Rating Data Type	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%
Rating Date	Jun/14/2010	Jun/21/2010	Jun/28/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description			
1	UNTREATED					0.0 e	0.0 e	0.0 e
2	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	40.0 d	56.7 d	56.7 d
3	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	60.0 c	78.3 bc	75.0 c
	N PAK AMS LIQUID	2.5	% v/v	A	6-8" PIGWEED			
4	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	68.3 bc	88.3 ab	87.3 abc
	N PAK AMS LIQUID	5	% v/v	A	6-8" PIGWEED			
5	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	85.0 a	96.3 a	96.0 a
	CLASS ACT NG	2.5	% v/v	A	6-8" PIGWEED			
6	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	75.0 b	90.0 ab	91.7 ab
	AG 1003	2	% v/v	A	6-8" PIGWEED			
7	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	76.7 b	90.0 ab	91.3 ab
	AG 1004	2	% v/v	A	6-8" PIGWEED			
8	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	75.0 b	91.7 ab	91.7 ab
	AG 1009	2	% v/v	A	6-8" PIGWEED			
9	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	60.0 c	81.7 abc	83.3 abc
	CLASS ACT NG	1.25	% v/v	A	6-8" PIGWEED			
10	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	66.7 bc	81.7 abc	83.3 abc
	AG 1003	1	% v/v	A	6-8" PIGWEED			
11	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	63.3 c	80.0 bc	81.7 bc
	AG 1004	1	% v/v	A	6-8" PIGWEED			
12	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	66.7 bc	81.7 abc	80.0 bc
	AG 1009	1	% v/v	A	6-8" PIGWEED			
13	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	58.3 c	73.3 c	75.0 c
	AG 03019	0.5	% v/v	A	6-8" PIGWEED			
LSD (P=.05)						6.78	9.61	8.44
Standard Deviation						4.02	5.70	5.01
CV						6.58	7.49	6.56
Bartlett's X2						6.444	10.554	5.077
P(Bartlett's X2)						0.489	0.481	0.886
Replicate F						0.356	0.098	0.175
Replicate Prob(F)						0.7038	0.9071	0.8408
Treatment F						85.069	57.545	75.278
Treatment Prob(F)						0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

GLYPHOSATE/MICRO NUTRIENT/ADJUVANTS

Trial ID: 131L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA PALMER AMARANTH	AMARANTHUS PALMERI

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 9058 F

Planting Date: May/20/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Jun/07/2010
Time of Day: 1:30PM
Application Method: SPRAY
Application Timing: A-POST
Applic. Placement: BROADCAST
Air Temp., Unit: 97 F
% Relative Humidity: 45
Wind Velocity, Unit: 10 MPH
Soil Temp., Unit: 90 F
Soil Moisture: ADEQUATE
% Cloud Cover: 90

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: AMAPA
Stage Scale: 6-8 IN

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 30 PSI
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

GLYPHOSATE/MICRO NUTRIENT/ADJUVANTS

Trial ID: 131L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	AMAPA	AMAPA	AMAPA
Rating Data Type	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%
Rating Date	Jun/14/2010	Jun/21/2010	Jun/28/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description			
1	UNTREATED					0.0 f	0.0 f	0.0 f
2	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	43.3 de	43.3 de	53.3 de
3	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	80.0 ab	80.0 ab	91.7 a
	CLASS ACT NG	1.25	% v/v	A	6-8" PIGWEED			
4	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	78.3 ab	78.3 ab	94.0 a
	CLASS ACT NG	2.5	% v/v	A	6-8" PIGWEED			
5	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	33.3 e	33.3 e	40.0 e
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
6	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	66.7 abc	66.7 abc	73.3 a-d
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	CLASS ACT NG	1.25	% v/v	A	6-8" PIGWEED			
7	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	83.3 a	83.3 a	94.3 a
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	CLASS ACT NG	2.5	% v/v	A	6-8" PIGWEED			
8	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	61.7 bcd	61.7 bcd	70.0 bcd
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	AG 1003	1	% v/v	A	6-8" PIGWEED			
9	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	65.0 abc	65.0 abc	76.7 abc
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	AG 1003	1.5	% v/v	A	6-8" PIGWEED			
10	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	76.7 ab	76.7 ab	90.0 ab
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	AG 1003	2	% v/v	A	6-8" PIGWEED			
11	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	50.0 cd	50.0 cd	65.0 cd
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	AG 1004	1	% v/v	A	6-8" PIGWEED			
12	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	60.0 bcd	60.0 bcd	68.3 cd
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	AG 1004	1.5	% v/v	A	6-8" PIGWEED			
13	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	65.0 abc	65.0 abc	78.3 abc
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	AG 1004	2	% v/v	A	6-8" PIGWEED			
14	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	53.3 cd	53.3 cd	63.3 cd
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	AG 1009	1	% v/v	A	6-8" PIGWEED			
15	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	53.3 cd	53.3 cd	65.0 cd
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	AG 1009	1.5	% v/v	A	6-8" PIGWEED			
16	TOUCHDOWN HI TECH	0.38	lb ae/a	A	6-8" PIGWEED	66.7 abc	66.7 abc	78.3 abc
	MAX IN COTTON	1.5	pt/a	A	6-8" PIGWEED			
	AG 1009	2	% v/v	A	6-8" PIGWEED			
LSD (P=.05)						13.05	13.05	13.64
Standard Deviation						7.83	7.83	8.18
CV						13.37	13.37	11.88
Bartlett's X2						20.286	20.286	19.064
P(Bartlett's X2)						0.062	0.062	0.087
Replicate F						3.095	3.095	3.665
Replicate Prob(F)						0.0600	0.0600	0.0377
Treatment F						21.041	21.041	25.065
Treatment Prob(F)						0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

VOLUNTEER COTTON CONTROL USING PEANUT HERBICIDES

Trial ID: 135L-10
Location: GLOVER

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LUBBOCK
State/Prov.: TX

Initiation Date: May/13/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
PALMER AMARANTH
DEVIL'S CLAW
"VOL. COTTON"

COTTON Variety: FIBERMAX FM9063 B2 FLEX
Planting Date: May/13/2010 Planting Method: 4 ROW
Rate: 52000 PLANT/ACRE
Row Spacing: 40 IN Spacing Within Row: 4 SD/FT
Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A
Application Date: Jun/14/2010
Time of Day: 10:45 AM
Application Method: SPRAY
Application Timing: A - POST
Applic. Placement: BROADCAST
Air Temp., Unit: 80 F
% Relative Humidity: 53
Wind Velocity, Unit: 4 MPH
Soil Temp., Unit: 82 F
Soil Moisture: ADEQUATE
% Cloud Cover: 80

CROP STAGE AT EACH APPLICATION

A
COTTON
Stage Scale: 6 LEAF

WEED STAGE AT EACH APPLICATION

A
PALMER AM
Stage Scale: 1"-2"
DEVIL'S C
Stage Scale: 1"-3"
VOL. COTT
Stage Scale: 6 LEAF

APPLICATION EQUIPMENT

A
Appl. Equipment: BACKPACK
Operating Pressure: 28 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 24 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

VOLUNTEER COTTON CONTROL USING PEANUT HERBICIDES

Trial ID: 135L-10
Location: GLOVER

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

					PIGWEEED		PIGWEEED		DEVILS C	PIGWEEED	
Weed Code					COTTON		COTTON			COTTON	
Crop Code					CONTROL		CONTROL			CONTROL	
Rating Data Type					PERCENT		PERCENT			PERCENT	
Rating Unit					PERCENT		PERCENT			PERCENT	
Rating Date					Jun/21/2010		Jun/28/2010		Jun/28/2010	Jul/07/2010	
Trt-Eval Interval					7 DA-A		14 DA-A		14 DA-A	23 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit						
1	UNTREATED					0.0 f	0.0 f	0.0 f	0.0 d	0.0 c	0.0 j
2	REFLEX	0.375	lb ai/a	1.5	pt/a	76.7 b	91.7 ab	53.3 cde	71.7 bc	86.7 ab	46.7 f
	NIS	0.25	% v/v	3.2	oz/a						
3	CLASSIC	0.0105	lb ai/a	0.67	oz/a	53.3 d	73.3 cd	35.0 e	53.3 c	91.7 ab	21.7 h
	NIS	0.25	% v/v	3.2	oz/a						
4	PURSUIT	0.0313	lb ai/a	2	oz/a	41.7 e	66.7 d	46.7 de	50.0 c	100.0 a	31.7 g
	NIS	0.25	% v/v	3.2	oz/a						
5	PURSUIT	0.0625	lb ai/a	4	oz/a	56.7 cd	76.7 cd	70.0 bcd	56.7 c	100.0 a	63.3 e
	NIS	0.25	% v/v	3.2	oz/a						
6	CADRE	0.0313	lb ai/a	2	oz/a	45.0 e	76.7 cd	75.0 abc	70.0 bc	100.0 a	73.3 d
	NIS	0.25	% v/v	3.2	oz/a						
7	CADRE	0.0625	lb ai/a	4	oz/a	55.0 cd	83.3 bc	81.7 ab	70.0 bc	100.0 a	81.7 c
	NIS	0.25	% v/v	3.2	oz/a						
8	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a	78.3 b	96.7 a	66.7 bcd	83.3 ab	66.7 b	70.0 d
	NIS	0.25	% v/v	3.2	oz/a						
9	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a	99.7 a	98.7 a	99.3 a	96.3 a	86.7 ab	98.0 a
	NIS	0.25	% v/v	3.2	oz/a						
10	ULTRABLAZER	0.375	lb ai/a	24	oz/a	83.3 b	98.7 a	53.3 cde	97.7 a	100.0 a	48.3 f
	COC	1	% v/v	12.8	oz/a						
11	BASAGRAN	1	lb ai/a	32	oz/a	36.7 e	10.0 e	31.7 e	0.0 d	86.7 ab	15.0 i
	COC	1	% v/v	12.8	oz/a						
12	COBRA	0.195	lb ai/a	12.5	oz/a	83.3 b	98.7 a	76.7 abc	100.0 a	100.0 a	61.7 e
	COC	1	% v/v	12.8	oz/a						
13	2.4-DB	0.2	lb ai/a	12.8	oz/a	63.3 c	68.3 d	85.0 ab	75.0 abc	78.3 ab	86.7 bc
	COC	1	% v/v	12.8	oz/a						
14	AIM	0.0156	lb ai/a	1	oz/a	98.7 a	92.0 ab	86.7 ab	86.7 ab	100.0 a	92.3 ab
	NIS	0.25	% v/v	3.2	oz/a						
15	AIM	0.0313	lb ai/a	2	oz/a	100.0 a	99.3 a	99.3 a	95.0 ab	100.0 a	99.0 a
	NIS	0.25	% v/v	3.2	oz/a						
LSD (P=.05)						6.96	9.74	16.90	16.38	16.93	6.58
Standard Deviation						4.16	5.82	10.11	9.79	10.12	3.93
CV						6.42	7.72	15.79	14.61	11.71	6.63
Bartlett's X2						21.045	43.722	37.087	18.985	1.685	8.567
P(Bartlett's X2)						0.05*	0.001*	0.001*	0.061	0.891	0.739
Replicate F						10.594	2.872	1.834	0.077	0.152	0.501
Replicate Prob(F)						0.0004	0.0734	0.1784	0.9264	0.8598	0.6111
Treatment F						134.036	84.368	22.236	31.255	19.716	189.579
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code
Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

COTTON
CONTROL
PERCENT
Aug/09/2010
56 DA-A

Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	
1	UNTREATED					0.0 h
2	REFLEX	0.375	lb ai/a	1.5	pt/a	16.7 f
	NIS	0.25	% v/v	3.2	oz/a	
3	CLASSIC	0.0105	lb ai/a	0.67	oz/a	11.7 fg
	NIS	0.25	% v/v	3.2	oz/a	
4	PURSUIT	0.0313	lb ai/a	2	oz/a	8.3 fg
	NIS	0.25	% v/v	3.2	oz/a	
5	PURSUIT	0.0625	lb ai/a	4	oz/a	16.7 f
	NIS	0.25	% v/v	3.2	oz/a	
6	CADRE	0.0313	lb ai/a	2	oz/a	48.3 e
	NIS	0.25	% v/v	3.2	oz/a	
7	CADRE	0.0625	lb ai/a	4	oz/a	75.0 c
	NIS	0.25	% v/v	3.2	oz/a	
8	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a	63.3 d
	NIS	0.25	% v/v	3.2	oz/a	
9	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a	99.3 a
	NIS	0.25	% v/v	3.2	oz/a	
10	ULTRABLAZER	0.375	lb ai/a	24	oz/a	10.0 fg
	COC	1	% v/v	12.8	oz/a	
11	BASAGRAN	1	lb ai/a	32	oz/a	5.0 gh
	COC	1	% v/v	12.8	oz/a	
12	COBRA	0.195	lb ai/a	12.5	oz/a	8.3 fg
	COC	1	% v/v	12.8	oz/a	
13	2.4-DB	0.2	lb ai/a	12.8	oz/a	83.3 b
	COC	1	% v/v	12.8	oz/a	
14	AIM	0.0156	lb ai/a	1	oz/a	76.7 c
	NIS	0.25	% v/v	3.2	oz/a	
15	AIM	0.0313	lb ai/a	2	oz/a	96.3 a
	NIS	0.25	% v/v	3.2	oz/a	
LSD (P=.05)						5.93
Standard Deviation						3.55
CV						8.6
Bartlett's X2						11.696
P(Bartlett's X2)						0.306
Replicate F						0.275
Replicate Prob(F)						0.7613
Treatment F						329.509
Treatment Prob(F)						0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

LOROX - SORGHUM

Trial ID: 136L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: SORGB SORGHUM
Planting Date: May/20/2010

Variety: DKS 44-20

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: May/20/2010
Time of Day: 11:30AM
Application Method: TRACTOR
Application Timing: A-PRE
Applic. Placement: BROADCAST
Air Temp., Unit: 78 F
% Relative Humidity: 43
Wind Velocity, Unit: 2 MPH
Soil Temp., Unit: 68 F
Soil Moisture: ADEQUATE
% Cloud Cover: 0

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: SORGB
Stage Scale: PRE

APPLICATION EQUIPMENT

A

Appl. Equipment: TRACTOR
Operating Pressure: 30
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

LOROX - SORGHUM

Trial ID: 136L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code		AMAPA		AMAPA	AMAPA	AMAPA
Crop Code		SORG		SORG		
Rating Data Type		INJURY	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit		%	%	%	%	%
Rating Date		Jun/07/2010	Jun/07/2010	Jun/21/2010	Jun/21/2010	Jul/07/2010
						Jul/27/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description					
1	UNTREATED					0.0 a	0.0 b	0.0 a	0.0 d	0.0 c
2	LOROX	1 lb ai/a	A	PRE		0.0 a	95.3 a	0.0 a	78.3 c	75.0 b
3	LOROX	1.5 lb ai/a	A	PRE		0.0 a	98.7 a	0.0 a	86.7 b	88.3 ab
4	LOROX	1 lb ai/a	A	PRE		0.0 a	99.7 a	0.0 a	99.0 a	96.3 a
	MILO-PRO	0.75 lb ai/a	A	PRE						
5	LOROX	1 lb ai/a	A	PRE		0.0 a	99.3 a	0.0 a	98.7 a	93.0 a
	MILO-PRO	1.25 lb ai/a	A	PRE						
6	MILO-PRO	0.75 lb ai/a	A	PRE		0.0 a	94.0 a	0.0 a	90.7 b	76.7 b
7	MILO-PRO	1.25 lb ai/a	A	PRE		0.0 a	97.7 a	0.0 a	97.3 a	86.7 ab
LSD (P=.05)						0.00	4.19	0.00	6.06	10.15
Standard Deviation						0.00	2.36	0.00	3.41	5.71
CV						0.0	2.82	0.0	4.33	7.74
Bartlett's X2						0.0	12.326	0.0	9.619	10.299
P(Bartlett's X2)						.	0.031*	.	0.087	0.067
Replicate F						0.000	0.780	0.000	0.694	2.427
Replicate Prob(F)						1.0000	0.4803	1.0000	0.5188	0.1303
Treatment F						0.000	734.877	0.000	325.706	103.042
Treatment Prob(F)						1.0000	0.0001	1.0000	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

GLYTOL/LL VOLUNTEER CONTROL

Trial ID: 138L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	VOLCOT VOLUNTEER COTTON	GOSSYPIMUM HIRSUTUM

COTTON

Variety: FM 9250 GTLL

Planting Date: May/19/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 45 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B
Application Date:	Jun/22/2010	Jul/15/2010
Time of Day:	10:00 AM	2:52 PM
Application Method:	SPRAY	SPRAY
Application Timing:	A - EPOST	B - MPOST
Applic. Placement:	PDIR	PDIR
Air Temp., Unit:	80 F	84 F
% Relative Humidity:	57	72
Wind Velocity, Unit:	9 MPH	3 MPH
Soil Temp., Unit:	82 F	80 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	5	95

CROP STAGE AT EACH APPLICATION

	A	B
COTTON	COTTON	COTTON
Stage Scale:	2-4 LEAF	6-7 LEAF

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	VOLCO VOLCOT	VOLCO VOLCOT
Stage Scale:	4-6 NODE	10-12NODE

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	REDBALL	REDBALL
Operating Pressure:	30	30
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8002	8002
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	C02	C02

Texas Agricultural Experiment Station

GLYTOL/LL VOLUNTEER CONTROL

Trial ID: 138L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	COTTON		VOLCOT		COTTON		VOLCOT		COTTON		VOLCOT	
Crop Code												
Part Rated												
Rating Data Type	INJURY		CONTROL		INJURY		CONTROL		INJURY		CONTROL	
Rating Unit	%		%		%		%		%		%	
Rating Date	Jun/29/2010		Jun/29/2010		Jul/06/2010		Jul/06/2010		Jul/23/2010		Jul/23/2010	

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Description							
1	UNTREATED					0.0 b	0.0 c	0.0 b	0.0 e			
2	AIM	1 oz/a	A		4-6 LF COTTON	0.0 b	66.7 b	1.0 b	63.3 c			
	COC	1 % v/v	A		4-6 LF COTTON							
3	ET	1.5 oz/a	A		4-6 LF COTTON	1.7 b	63.3 b	1.0 b	58.3 c			
	COC	1 % v/v	A		4-6 LF COTTON							
4	SHARPEN	1 oz/a	A		4-6 LF COTTON	2.7 b	95.0 a	3.0 ab	98.7 a			
	MSO	1 % v/v	A		4-6 LF COTTON							
5	GRAMOXONE INTEON	32 oz/a	A		4-6 LF COTTON	6.7 a	90.0 a	4.3 a	99.3 a			
	NIS	0.25 % v/v	A		4-6 LF COTTON							
6	BUCTRIL	0.5 pt/a	A		4-6 LF COTTON	0.0 b	55.0 b	1.7 ab	46.7 d			
7	LAYBY PRO	1 qt/a	A		4-6 LF COTTON	1.7 b	68.3 b	0.0 b	53.3 cd			
	NIS	0.25 % v/v	A		4-6 LF COTTON							
8	VALOR	2 oz/a	A		4-6 LF COTTON	0.0 b	48.3 b	0.0 b	56.7 cd			
	DIURON	1 pt/a	A		4-6 LF COTTON							
	NIS	0.25 % v/v	A		4-6 LF COTTON							
9	VALOR	1 oz/a	A		4-6 LF COTTON	0.0 b	60.0 b	3.0 ab	73.3 b			
	RESOURCE	4 oz/a	A		4-6 LF COTTON							
	NIS	0.25 % v/v	A		4-6 LF COTTON							
10	CULTIVATION		A		4-6 LF COTTON	0.0 b	100.0 a	0.0 b	100.0 a			
11	UNTREATED		B		10-12 LF COTTON					0.0 a	0.0 d	
12	AIM	1 oz/a	B		10-12 LF COTTON					0.0 a	76.7 bc	
	COC	1 % v/v	B		10-12 LF COTTON							
13	ET	1.5 oz/a	B		10-12 LF COTTON					0.0 a	80.0 b	
	COC	1 % v/v	B		10-12 LF COTTON							
14	SHARPEN	1 oz/a	B		10-12 LF COTTON					0.7 a	98.3 a	
	MSO	1 % v/v	B		10-12 LF COTTON							
15	GRAMOXONE INTEON	32 oz/a	B		10-12 LF COTTON					0.7 a	81.7 b	
	NIS	0.25 % v/v	B		10-12 LF COTTON							
16	BUCTRIL	0.5 pt/a	B		10-12 LF COTTON					0.0 a	61.7 c	
17	LAYBY PRO	1 qt/a	B		10-12 LF COTTON					0.0 a	70.0 bc	
	NIS	0.25 % v/v	B		10-12 LF COTTON							
18	VALOR	2 oz/a	B		10-12 LF COTTON					0.0 a	68.3 bc	
	DIURON	1 pt/a	B		10-12 LF COTTON							
	NIS	0.25 % v/v	B		10-12 LF COTTON							
19	VALOR	1 oz/a	B		10-12 LF COTTON					1.7 a	70.0 bc	
	RESOURCE	4 oz/a	B		10-12 LF COTTON							
	NIS	0.25 % v/v	B		10-12 LF COTTON							
20	CULTIVATION		B		10-12 LF COTTON					0.0 a	100.0 a	
LSD (P=.05)						2.98	14.88	2.07	8.58	1.27	11.52	
Standard Deviation						1.74	8.68	1.21	5.00	0.74	6.72	
CV						137.25	13.42	86.4	7.7	245.95	9.5	
Bartlett's X2						0.052	5.828	1.66	11.194	0.215	5.598	
P(Bartlett's X2)						0.997	0.323	0.646	0.13	0.898	0.587	
Replicate F						1.368	1.074	1.709	0.057	0.184	0.240	
Replicate Prob(F)						0.2799	0.3626	0.2092	0.9445	0.8337	0.7889	
Treatment F						4.529	32.738	5.003	112.158	1.694	51.384	
Treatment Prob(F)						0.0031	0.0001	0.0018	0.0001	0.1631	0.0001	

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Weed Code		VOLCOT	
Crop Code	COTTON		COTTON
Part Rated			LINT
Rating Data Type	INJURY	CONTROL	YIELD
Rating Unit	%	%	LBS/ACRE
Rating Date	Jul/29/2010	Jul/29/2010	Oct/19/2010

Means followed by same letter do not significantly differ ($P=.05$, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

PALMER AMARANTH CONTROL IN PEANUT WITH COBRA

Trial ID: 139L-10
Location: GLOVER

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LUBBOCK
State/Prov.: TX

Initiation Date: Jun/24/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
VOLUNTEER COTTON
PALMER AMARANTH

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Jun/24/2010
Time of Day: 3:15 PM
Application Method: SPRAY
Application Timing: A - POST
Applic. Placement: BROADCAST
Air Temp., Unit: 93 F
% Relative Humidity: 32
Wind Velocity, Unit: 6 MPH
Soil Temp., Unit: 89 F
Soil Moisture: DRY
% Cloud Cover: 45

WEED STAGE AT EACH APPLICATION

A

Stage Scale: VOL. COTT
8 LF; 9"
PALMER AM
Stage Scale: 2"-8"

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 28 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 26 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

PALMER AMARANTH CONTROL IN PEANUT WITH COBRA

Trial ID: 139L-10
Location: GLOVER

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code			PALMERAM
Crop Code		COTTON	COTTON
Rating Data Type		PHYTO	CONT.
Rating Unit		PERCENT	PERCENT
Rating Date		Jun/28/2010	Jul/08/2010
Trt-Eval Interval		4 DA-A	4 DA-A

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code			
1	UNTREATED							0.0 b	0.0 c
2	COBRA	0.2 lb ai/a		12.8 oz/a	A			30.0 a	15.0 a
3	COBRA	0.2 lb ai/a		12.8 oz/a	A			43.3 a	16.7 a
	COC	1 % v/v		12.8 oz/a	A				78.3 a
4	COBRA	0.2 lb ai/a		12.8 oz/a	A			40.0 a	16.7 a
	DUAL MAGNUM	1.27 lb ai/a		21.3 oz/a	A				76.7 a
5	COBRA	0.2 lb ai/a		12.8 oz/a	A			33.3 a	14.0 a
	NIS	0.25 % v/v		3.2 oz/a	A				64.3 b
6	COC	1 % v/v		12.8 oz/a	A			3.3 b	4.7 b
7	DUAL MAGNUM	1.27 lb ai/a		21.3 oz/a	A			4.7 b	2.3 bc
8	NIS	0.25 % v/v		3.2 oz/a	A			0.0 b	0.0 c
LSD (P=.05)								10.43	3.05
Standard Deviation								5.95	1.74
CV								30.79	20.06
Bartlett's X2								5.948	4.038
P(Bartlett's X2)								0.311	0.401
Replicate F								3.762	1.709
Replicate Prob(F)								0.0493	0.2168
Treatment F								30.619	57.102
Treatment Prob(F)								0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

SHARPEN-PD

Trial ID: 140L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	SOLEL SILVERLEAF NIGHTSHADE	SOLANUM ELAEAGNIFOLIUM

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 9058 F

Planting Date: May/19/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT

Plot Length, Unit: 40 FT

Reps: 3

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B
Application Date:	Jun/30/2010	Jul/15/2010
Time of Day:	2:37 PM	3:15 PM
Application Method:	SPRAY	SPRAY
Application Timing:	A - EPOST	B - MPOST
Applic. Placement:	PDIR	PDIR
Air Temp., Unit:	84 F	84 F
% Relative Humidity:	54	72
Wind Velocity, Unit:	9 MPH	3 MPH
Soil Temp., Unit:	82 F	80 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	85	95

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GOSHI COTTON	GOSHI COTTON
Stage Scale:	4-5 LF	10-12 LF

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	SOLEL SLN	SOLEL SLN
Stage Scale:	6-8 IN	10-12 IN

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	REDBALL	REDBALL
Operating Pressure:	30	30
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8002	8002
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	C02	C02

Texas Agricultural Experiment Station

SHARPEN - PD

Trial ID: 140L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code					SLN		SLN
Crop Code							
Rating Data Type					COTTON	COTTON	COTTON
Rating Unit					INJURY	INJURY	INJURY
Rating Date					%	%	%
					CONTROL	CONTROL	CONTROL
					%	%	%
					Jul/07/2010	Jul/14/2010	Jul/23/2010
					Jul/23/2010	Jul/30/2010	Jul/30/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description						
1	UNTREATED			A	POST DIRECT	0.0 b	0.0 b				
2	ROUNDUP POWERMAX	0.75	lb ae/a	A	POST DIRECT	0.0 b	0.0 b				
3	SHARPEN	1	oz/a	A	POST DIRECT	3.3 b	1.7 b				
	ROUNDUP POWERMAX	0.75	lb ae/a	A	POST DIRECT						
	MSO	1	% v/v	A	POST DIRECT						
	AMS	17	lb/100 gal	A	POST DIRECT						
4	SHARPEN	2	oz/a	A	POST DIRECT	2.7 b	3.3 b				
	ROUNDUP POWERMAX	0.75	lb ae/a	A	POST DIRECT						
	MSO	1	% v/v	A	POST DIRECT						
	AMS	17	lb/100 gal	A	POST DIRECT						
5	VALOR	2	oz/a	A	POST DIRECT	4.3 b	1.7 b				
	ROUNDUP POWERMAX	0.75	lb ae/a	A	POST DIRECT						
	MSO	1	% v/v	A	POST DIRECT						
	AMS	17	lb/100 gal	A	POST DIRECT						
6	UNTREATED			A	SLOPPY PD	0.0 b	0.0 b				
7	ROUNDUP POWERMAX	0.75	lb ae/a	A	SLOPPY PD	0.0 b	0.0 b				
8	SHARPEN	1	oz/a	A	SLOPPY PD	13.3 ab	11.7 ab				
	ROUNDUP POWERMAX	0.75	lb ae/a	A	SLOPPY PD						
	MSO	1	% v/v	A	SLOPPY PD						
	AMS	17	lb/100 gal	A	SLOPPY PD						
9	SHARPEN	2	oz/a	A	SLOPPY PD	18.3 a	15.0 a				
	ROUNDUP POWERMAX	0.75	lb ae/a	A	SLOPPY PD						
	MSO	1	% v/v	A	SLOPPY PD						
	AMS	17	lb/100 gal	A	SLOPPY PD						
10	VALOR	2	oz/a	A	SLOPPY PD	6.7 b	6.7 ab				
	ROUNDUP POWERMAX	0.75	lb ae/a	A	SLOPPY PD						
	MSO	1	% v/v	A	SLOPPY PD						
	AMS	17	lb/100 gal	A	SLOPPY PD						
11	UNTREATED			B	POST DIRECT			0.0 c	0.0 c	0.0 b	0.0 c
12	ROUNDUP POWERMAX	0.75	lb ae/a	B	POST DIRECT			0.0 c	53.3 b	0.0 b	63.3 b
13	SHARPEN	1	oz/a	B	POST DIRECT			0.0 c	90.0 a	0.0 b	97.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	B	POST DIRECT						
	MSO	1	% v/v	B	POST DIRECT						
	AMS	17	lb/100 gal	B	POST DIRECT						
14	SHARPEN	2	oz/a	B	POST DIRECT			3.0 ab	94.3 a	1.7 ab	98.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	B	POST DIRECT						
	MSO	1	% v/v	B	POST DIRECT						
	AMS	17	lb/100 gal	B	POST DIRECT						
15	VALOR	2	oz/a	B	POST DIRECT			0.0 c	88.3 a	0.0 b	88.3 a
	ROUNDUP POWERMAX	0.75	lb ae/a	B	POST DIRECT						
	MSO	1	% v/v	B	POST DIRECT						
	AMS	17	lb/100 gal	B	SLOPPY PD						
16	UNTREATED			B	SLOPPY PD			0.0 c	0.0 c	0.0 b	0.0 c
17	ROUNDUP POWERMAX	0.75	lb ae/a	B	SLOPPY PD			0.0 c	60.0 b	0.0 b	65.0 b
18	SHARPEN	1	oz/a	B	SLOPPY PD			2.0 bc	93.3 a	2.0 ab	97.7 a
	ROUNDUP POWERMAX	0.75	lb ae/a	B	SLOPPY PD						
	MSO	1	% v/v	B	SLOPPY PD						
	AMS	17	lb/100 gal	B	SLOPPY PD						
19	SHARPEN	2	oz/a	B	SLOPPY PD			4.3 a	96.0 a	2.3 a	98.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	B	SLOPPY PD						
	MSO	1	% v/v	B	SLOPPY PD						
	AMS	17	lb/100 gal	B	SLOPPY PD						
20	VALOR	2	oz/a	B	SLOPPY PD			1.0 c	85.0 a	0.0 b	90.7 a
	ROUNDUP POWERMAX	0.75	lb ae/a	B	SLOPPY PD						
	MSO	1	% v/v	B	SLOPPY PD						
	AMS	17	lb/100 gal	B	SLOPPY PD						
LSD (P=.05)						8.22	7.33	1.37	8.65	1.35	7.84
Standard Deviation						4.79	4.27	0.80	5.04	0.79	4.57
CV						98.51	106.77	77.02	7.63	131.08	6.55
Bartlett's X2						8.067	5.876	0.385	8.561	2.075	12.796
P(Bartlett's X2)						0.153	0.318	0.825	0.286	0.354	0.046*

Texas Agricultural Experiment Station

Weed Code				SLN		SLN
Crop Code						
Rating Data Type	COTTON	COTTON	COTTON		COTTON	
Rating Unit	INJURY	INJURY	INJURY	CONTROL	INJURY	CONTROL
Rating Date	%	%	%	%	%	%
	Jul/07/2010	Jul/14/2010	Jul/23/2010	Jul/23/2010	Jul/30/2010	Jul/30/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description						
Replicate F		1.485		0.137		2.579		7.502		0.162	6.053
Replicate Prob(F)		0.2530		0.8728		0.1036		0.0043		0.8519	0.0098
Treatment F		5.199		4.792		11.632		167.828		4.647	218.610
Treatment Prob(F)		0.0015		0.0023		0.0001		0.0001		0.0027	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

VOLUNTEER COTTON - PT I

Trial ID: 141L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: Wayne Keeling
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	GOSHI VOLUNTEER COTTON	GOSSYPIMUM HIRSUTUM

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 40 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Jun/30/2010
Time of Day: 10:43 AM
Application Method: SPRAY
Application Timing: A-POST
Applic. Placement: BROADCAST
Air Temp., Unit: 73 F
% Relative Humidity: 63
Wind Velocity, Unit: 9 MPH
Soil Temp., Unit: 76 F
Soil Moisture: ADEQUATE
% Cloud Cover: 95

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: GOSHI VOLCOT
Stage Scale: 2-4 LEAF

APPLICATION EQUIPMENT

A

Appl. Equipment: TRACTOR
Operating Pressure: 30
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: AIR

Texas Agricultural Experiment Station

VOLUNTEER COTTON - PT I

Trial ID: 141L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	VOLCOT	VOLCOT	VOLCOT
Rating Data Type	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%
Rating Date	Jul/07/2010	Jul/14/2010	Jul/26/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code			
1	RESOURCE	4.0	oz ai/a	A	100.0	a	
	COC	1.0	qt/a	A			
2	RESOURCE	6.0	oz ai/a	A	100.0	a	
	COC	1.0	qt/a	A			
3	RESOURCE	4.0	oz ai/a	A	100.0	a	
	VALOR	1.0	oz/a	A			
	COC	1.0	qt/a	A			
4	RESOURCE	4.0	oz ai/a	A	99.7	a	
	VALOR	1.0	oz/a	A			
	NIS	0.25	% v/v	A			
5	RESOURCE	4.0	oz ai/a	A	100.0	a	
	VALOR	0.5	oz/a	A			
	COC	1.0	qt/a	A			
6	VALOR	2.0	oz/a	A	88.3	b	
	DIURON	1.0	pt/a	A			
	NIS	0.25	% v/v	A			
7	VALOR	1.0	oz/a	A	99.3	a	
	RESOURCE	4.0	oz ai/a	A			
	NIS	0.25	% v/v	A			
8	VALOR	1.0	oz/a	A	99.3	a	
	COC	1.0	qt/a	A			
	RESOURCE	4.0	oz ai/a	A			
LSD (P=.05)					2.07	5.06	4.28
Standard Deviation					1.18	2.89	2.44
CV					1.2	3.02	2.59
Bartlett's X2					6.652	13.698	5.999
P(Bartlett's X2)					0.084	0.033*	0.112
Replicate F					0.387	3.840	2.324
Replicate Prob(F)					0.6860	0.0468	0.1344
Treatment F					35.200	14.074	81.133
Treatment Prob(F)					0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

VOLUNTEER COTTON - PT II

Trial ID: 143L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: Wayne Keeling
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	GOSHI VOLUNTEER COTTON	GOSSYPIMUM HIRSUTUM

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 40 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Jul/20/2010
Time of Day: 9:55 AM
Application Method: SPRAY
Application Timing: A
Applic. Placement: BROADCAST
Air Temp., Unit: 79 F
% Relative Humidity: 67
Wind Velocity, Unit: 7 MPH
Soil Temp., Unit: 78 F
Soil Moisture: ADEQUATE
% Cloud Cover: 0

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: GOSHI VOLCOT
Stage Scale: 4-6 LEAF

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 30
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

VOLUNTEER COTTON - PT II

Trial ID: 143L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	VOLCOT	VOLCOT
Rating Data Type	CONTROL	CONTROL
Rating Unit	%	%
Rating Date	Jul/26/2010	Aug/03/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code		
1	RESOURCE	4.0	oz ai/a	A	76.7 b	73.3 b
	COC	1.0	qt/a	A		
2	RESOURCE	6.0	oz ai/a	A	83.3 ab	78.3 ab
	COC	1.0	qt/a	A		
3	RESOURCE	4.0	oz ai/a	A	83.3 ab	76.7 ab
	VALOR	1.0	oz/a	A		
	COC	1.0	qt/a	A		
4	RESOURCE	4.0	oz ai/a	A	81.7 b	78.3 ab
	VALOR	1.0	oz/a	A		
	NIS	0.25	% v/v	A		
5	RESOURCE	4.0	oz ai/a	A	91.7 a	85.0 a
	VALOR	0.5	oz/a	A		
	COC	1.0	qt/a	A		
6	VALOR	2.0	oz/a	A	36.7 c	28.3 d
	DIURON	1.0	pt/a	A		
	NIS	0.25	% v/v	A		
7	NIS	0.25	% v/v	A	73.3 b	65.0 c
	VALOR	1.0	oz/a	A		
	RESOURCE	4.0	oz ai/a	A		
LSD (P=.05)					7.26	6.39
Standard Deviation					4.08	3.59
CV					5.43	5.18
Bartlett's X2					4.22	2.023
P(Bartlett's X2)					0.647	0.846
Replicate F					2.000	1.108
Replicate Prob(F)					0.1780	0.3619
Treatment F					58.071	84.400
Treatment Prob(F)					0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

SHARPEN ADJUVANTS - II

Trial ID: 144L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA PALMER AMARANTH	AMARANTHUS PALMERI

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Jul/20/2010
Time of Day: 2:00 PM
Application Method: SPRAY
Application Timing: BURNDOWN
Applic. Placement: BROADCAST
Air Temp., Unit: 88 F
% Relative Humidity: 51
Wind Velocity, Unit: 1 MPH
Soil Temp., Unit: 84 F
Soil Moisture: ADEQUATE
% Cloud Cover: 20

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: AMAPA AMAPA
Stage Scale: 2-4 LEAF

APPLICATION EQUIPMENT

A

Appl. Equipment: TRACTOR
Operating Pressure: 30
Nozzle Type: TURBO TEE
Nozzle Size: 11002
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: AIR

Texas Agricultural Experiment Station

SHARPEN ADJUVANTS - II

Trial ID: 144L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	AMAPA	AMAPA	AMAPA
Rating Data Type	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%
Rating Date	Jul/26/2010	Jul/29/2010	Aug/04/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code			
1	ROUNDUP ORIGINAL NIS	0.5	lb ai/a	A	96.0	a	
	AMS	0.25	% v/v	A			94.3 a
		8.5	lb/100 gal	A			
2	SHARPEN	0.5	oz/a	A	90.0	ab	
	ROUNDUP ORIGINAL NIS	0.5	lb ai/a	A			85.0 ab
	AMS	0.25	% v/v	A			
		8.5	lb/100 gal	A			
3	SHARPEN	0.5	oz/a	A	95.0	ab	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			90.0 ab
	SUPER SPREAD MSO	1	% v/v	A			
	AMS	8.5	lb/100 gal	A			
4	UNTREATED				0.0	d	
5	SHARPEN	0.5	oz/a	A	88.3	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			85.0 ab
	DYNE-AMIC	0.5	% v/v	A			
	AMS	8.5	lb/100 gal	A			
6	SHARPEN	0.5	oz/a	A	85.0	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			81.7 ab
	DYNE-AMIC	0.75	% v/v	A			
	AMS	8.5	lb/100 gal	A			
7	SHARPEN	0.5	oz/a	A	86.7	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			81.7 ab
	DYNE-A-PAC	1	% v/v	A			
8	SHARPEN	0.5	oz/a	A	73.3	c	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			70.0 b
	DYNE-AMIC	0.75	% v/v	A			
	QUEST	2	pt/100 gal	A			
9	SHARPEN	0.5	oz/a	A	86.7	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			83.3 ab
	DESTINY HC	0.5	% v/v	A			
	AMS	8.5	lb/100 gal	A			
10	SHARPEN	0.5	oz/a	A	87.7	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			77.3 ab
	DESTINY HC	0.75	% v/v	A			
	AMS	8.5	lb/100 gal	A			
11	SHARPEN	0.5	oz/a	A	88.3	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			83.3 ab
	DESTINY HC	0.75	% v/v	A			
	CLASS ACT	2.5	gal/100 gal	A			
12	SHARPEN	0.5	oz/a	A	86.7	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			83.3 ab
	MSO CONC W/ LECI-TECH	1	% v/v	A			
	AMS	8.5	lb/100 gal	A			
13	SHARPEN	0.5	oz/a	A	80.0	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			72.7 ab
	MSO CONC W/ LECI-TECH	1	% v/v	A			
	CHOICE WEATHERMASTER	2	qt/100 gal	A			
14	SHARPEN	0.5	oz/a	A	78.3	bc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			75.0 ab
	MSO CONC W/ LECI-TECH	1	% v/v	A			
	SURFATE	1	% v/v	A			
15	SHARPEN	0.5	oz/a	A	86.7	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			83.3 ab
	PHASE	0.5	% v/v	A			
	AMS	8.5	lb/100 gal	A			
16	SHARPEN	0.5	oz/a	A	80.0	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			76.7 ab
	PHASE	0.75	% v/v	A			
	AMS	8.5	lb/100 gal	A			
17	SHARPEN	0.5	oz/a	A	88.3	abc	
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			83.3 ab
	PHASE	0.75	% v/v	A			
	CHOICE WEATHERMASTER	2	qt/100 gal	A			

Texas Agricultural Experiment Station

Weed Code	AMAPA	AMAPA	AMAPA
Rating Data Type	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%
Rating Date	Jul/26/2010	Jul/29/2010	Aug/04/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code			
18	SHARPEN	0.5	oz/a	A	88.3	abc	91.0 ab
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			85.7 ab
	NOBLE	1	% v/v	A			
	AMS	8.5	lb/100 gal	A			
19	SHARPEN	0.5	oz/a	A	91.0	ab	92.7 ab
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			87.3 ab
	ADURO	1	% v/v	A			
	NOBLE	1	% v/v	A			
20	SHARPEN	0.5	oz/a	A	90.0	ab	90.7 ab
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			88.0 ab
	SUCCEED	1	% v/v	A			
	AMS	8.5	lb/100 gal	A			
21	SHARPEN	0.5	oz/a	A	86.7	abc	88.0 ab
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			82.7 ab
	AIRFORCE	0.75	% v/v	A			
	AMS	8.5	lb/100 gal	A			
22	SHARPEN	0.5	oz/a	A	92.3	ab	91.0 ab
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			84.0 ab
	SUCCEED	1	% v/v	A			
	SPRINT	3	qt/100 gal	A			
23	SHARPEN	0.5	oz/a	A	95.0	ab	95.0 a
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			95.7 a
	SUCCEED	1	% v/v	A			
	SPEEDWAY	2	qt/100 gal	A			
24	SHARPEN	0.5	oz/a	A	94.0	ab	94.0 a
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			90.0 ab
	SUNDANCE II	1	% v/v	A			
	AMS	8.5	lb/100 gal	A			
25	SHARPEN	0.5	oz/a	A	86.7	abc	81.7 ab
	ROUNDUP ORIGINAL	0.5	lb ai/a	A			78.3 ab
	SUNDANCE	1	% v/v	A			
	ARRAY	9	lb/100 gal	A			
LSD (P=.05)					9.12		10.82
Standard Deviation					5.52		6.56
CV					6.57		7.8
Bartlett's X2					16.298		13.398
P(Bartlett's X2)					0.801		0.894
Replicate F					2.731		4.381
Replicate Prob(F)					0.0753		0.0179
Treatment F					32.946		23.414
Treatment Prob(F)					0.0001		0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

NICHINO I

Trial ID: 145L-10
Location: 207

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: GOSHI COTTON, SHORT STAPLE
Planting Date: May/21/2010

Variety: FM 9063 B2F

SITE AND DESIGN

Plot Width, Unit: 6.666 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Sep/27/2010
Time of Day: 2:30PM
Application Method: SPRAY
Application Timing: PREHAR
Applic. Placement: BROADCAST
Air Temp., Unit: 81 F
% Relative Humidity: 30
Wind Velocity, Unit: 4 MPH
Soil Temp., Unit: 70 F
Soil Moisture: DRY
% Cloud Cover: 10

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI COTTON
Stage Scale: 56%OPBOLL

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 28 PSI
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 20 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

NICHINO I

Trial ID: 145L-10
Location: 207

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code			COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Part Rated								
Rating Data Type			DEFOLIATION	DESICCATION	GREENLEAVES	DEFOLIATION	DESICCATION	GREENLEAVES
Rating Unit			%	%	%	%	%	%
Rating Date			Oct/01/2010	Oct/01/2010	Oct/01/2010	Oct/04/2010	Oct/04/2010	Oct/04/2010
Trt No.	Treatment Name	Rate Unit						
1	UNTREATED		20.0 b	3.3 b	76.7 a	30.0 c	6.7 c	63.3 a
2	NAI-1296	1.0 fl oz/a	33.3 a	28.3 a	38.3 b	58.3 ab	15.0 abc	26.7 bc
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
3	NAI-1296	1.5 fl oz/a	36.7 a	30.0 a	33.3 b	63.3 ab	20.0 ab	16.7 c
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
4	NAI-1296	2 fl oz/a	31.7 a	36.7 a	31.7 b	58.3 ab	23.3 a	18.3 c
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
5	NAI-1297	0.5 fl oz/a	30.0 a	30.0 a	40.0 b	61.7 ab	20.0 ab	18.3 c
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
6	NAI-1297	0.75 fl oz/a	30.0 a	31.7 a	38.3 b	65.0 a	15.0 abc	21.7 bc
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
7	NAI-1297	1 fl oz/a	30.0 a	31.7 a	38.3 b	58.3 ab	20.0 ab	21.7 bc
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
8	NAI-1295 EW	1 fl oz/a	31.7 a	31.7 a	35.0 b	63.3 ab	16.7 abc	20.0 bc
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
9	NAI-1295 EW	1.5 fl oz/a	30.0 a	33.3 a	35.0 b	61.7 ab	16.7 abc	21.7 bc
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
10	NAI-1295 EW	2 fl oz/a	35.0 a	30.0 a	35.0 b	65.0 a	15.0 abc	20.0 bc
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
11	ET	1 fl oz/a	30.0 a	30.0 a	40.0 b	50.0 b	20.0 ab	30.0 b
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
12	ET	1.5 fl oz/a	35.0 a	31.7 a	33.3 b	63.3 ab	18.3 ab	18.3 c
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
13	ET	2 fl oz/a	31.7 a	31.7 a	36.7 b	61.7 ab	18.3 ab	20.0 bc
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
14	DEF	16 fl oz/a	33.3 a	31.7 a	35.0 b	70.0 a	10.0 bc	18.3 c
	ETHEPHON	32 fl oz/a						
15	AIM	1 fl oz/a	31.7 a	31.7 a	36.7 b	56.7 ab	18.3 ab	25.0 bc
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
16	NAI-1299	4.8 fl oz/a	31.7 a	31.7 a	36.7 b	61.7 ab	18.3 ab	20.0 bc
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
17	NAI-1298	1.3 fl oz/a	30.0 a	36.7 a	33.3 b	63.3 ab	16.7 abc	20.0 bc
	ETHEPHON	32 fl oz/a						
	COC	1 % v/v						
LSD (P=.05)			5.92	7.01	6.69	8.22	6.64	5.97
Standard Deviation			3.55	4.20	4.01	4.93	3.98	3.58
CV			11.35	13.97	10.44	8.29	23.49	15.23
Bartlett's X2			3.781	11.988	4.886	13.091	7.085	6.621
P(Bartlett's X2)			0.976	0.529	0.993	0.441	0.898	0.677
Replicate F			1.207	0.028	0.579	1.471	1.328	2.177
Replicate Prob(F)			0.3124	0.9727	0.5662	0.2448	0.2792	0.1299
Treatment F			3.022	8.867	19.200	9.411	2.969	27.255
Treatment Prob(F)			0.0038	0.0001	0.0001	0.0001	0.0043	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Crop Code	COTTON	COTTON	COTTON	COTTON	COTTON
Part Rated				LINT	LINT
Rating Data Type	DEFOLIATION	DESICCATION	GREENLEAVES	YIELD	TURNOUT
Rating Unit	%	%	%	LBS/AC	%
Rating Date	Oct/11/2010	Oct/11/2010	Oct/11/2010	Nov/05/2010	Nov/05/2010

Trt No.	Treatment Name	Rate	Unit			
1	UNTREATED			40.0 b	8.3 a	41.7 a
2	NAI-1296	1.0 fl oz/a		73.3 a	10.0 a	16.7 b
	ETHEPHON	32 fl oz/a				580.0 a
	COC	1 % v/v				576.3 a
3	NAI-1296	1.5 fl oz/a		83.3 a	6.7 a	10.0 b
	ETHEPHON	32 fl oz/a				657.7 a
	COC	1 % v/v				0.32723 a
4	NAI-1296	2 fl oz/a		80.0 a	8.3 a	11.7 b
	ETHEPHON	32 fl oz/a				472.0 a
	COC	1 % v/v				0.33750 a
5	NAI-1297	0.5 fl oz/a		81.7 a	8.3 a	10.0 b
	ETHEPHON	32 fl oz/a				596.0 a
	COC	1 % v/v				0.32110 a
6	NAI-1297	0.75 fl oz/a		81.7 a	6.7 a	11.7 b
	ETHEPHON	32 fl oz/a				570.7 a
	COC	1 % v/v				0.32860 a
7	NAI-1297	1 fl oz/a		80.0 a	6.7 a	13.3 b
	ETHEPHON	32 fl oz/a				520.7 a
	COC	1 % v/v				0.32853 a
8	NAI-1295 EW	1 fl oz/a		73.3 a	10.0 a	16.7 b
	ETHEPHON	32 fl oz/a				626.7 a
	COC	1 % v/v				0.32407 a
9	NAI-1295 EW	1.5 fl oz/a		78.3 a	10.0 a	11.7 b
	ETHEPHON	32 fl oz/a				493.3 a
	COC	1 % v/v				0.33843 a
10	NAI-1295 EW	2 fl oz/a		76.7 a	10.0 a	13.3 b
	ETHEPHON	32 fl oz/a				607.0 a
	COC	1 % v/v				0.32883 a
11	ET	1 fl oz/a		78.3 a	8.3 a	11.7 b
	ETHEPHON	32 fl oz/a				549.3 a
	COC	1 % v/v				0.33293 a
12	ET	1.5 fl oz/a		76.7 a	11.7 a	13.3 b
	ETHEPHON	32 fl oz/a				441.3 a
	COC	1 % v/v				0.33113 a
13	ET	2 fl oz/a		76.7 a	10.0 a	11.7 b
	ETHEPHON	32 fl oz/a				342.7 a
	COC	1 % v/v				0.33093 a
14	DEF	16 fl oz/a		80.0 a	5.0 a	16.7 b
	ETHEPHON	32 fl oz/a				552.0 a
	COC	1 % v/v				0.34040 a
15	AIM	1 fl oz/a		73.3 a	10.0 a	16.7 b
	ETHEPHON	32 fl oz/a				528.3 a
	COC	1 % v/v				0.33340 a
16	NAI-1299	4.8 fl oz/a		73.3 a	10.0 a	16.7 b
	ETHEPHON	32 fl oz/a				565.0 a
	COC	1 % v/v				0.32937 a
17	NAI-1298	1.3 fl oz/a		75.0 a	6.7 a	16.7 b
	ETHEPHON	32 fl oz/a				578.3 a
	COC	1 % v/v				0.33853 a
LSD (P=.05)				5.60	3.97	10.54
Standard Deviation				3.36	2.38	6.32
CV				4.45	27.59	41.34
Bartlett's X2				4.068	1.321	33.833
P(Bartlett's X2)				0.999	0.998	0.004*
						0.494
						0.068
Replicate F				3.957	1.643	2.759
Replicate Prob(F)				0.0291	0.2092	0.0785
Treatment F				24.902	1.697	3.940
Treatment Prob(F)				0.0001	0.0991	0.0005
						0.2750
						0.2362

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

NICHINO III

Trial ID: 146L-10
Location: 304

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 9058 F

Planting Date: May/24/2010

SITE AND DESIGN

Plot Width, Unit: 6.666 FT

Plot Length, Unit: 30 FT

Reps: 3

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: ACUFF

Soil Name: LOAM

APPLICATION DESCRIPTION

A

Application Date: Oct/05/2010

Time of Day: 4:00PM

Application Method: SPRAY

Application Timing: PREHAR

Applic. Placement: BROADCAST

Air Temp., Unit: 78 F

% Relative Humidity: 30

Wind Velocity, Unit: 9 MPH

Soil Temp., Unit: 71 F

Soil Moisture: DRY

% Cloud Cover: 0

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI COTTON

Stage Scale: 73%PBOLL

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK

Operating Pressure: 25 PSI

Nozzle Type: TURBO TEE

Nozzle Size: 110015

Nozzle Spacing, Unit: 20 IN

Ground Speed, Unit: 3 MPH

Carrier: WATER

Spray Volume, Unit: 10 GPA

Propellant: CO2

Texas Agricultural Experiment Station

NICHINO III

Trial ID: 146L-10
Location: 304

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code			COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Part Rated								
Rating Data Type			DEFOLIATION	DESICCATION	GREENLEAVES	DEFOLIATION	DESICCATION	GREENLEAVES
Rating Unit			%	%	%	%	%	%
Rating Date			Oct/08/2010	Oct/08/2010	Oct/08/2010	Oct/11/2010	Oct/11/2010	Oct/11/2010
Trt No.	Treatment Name	Rate Unit						
1	UNTREATED		23.3 b	11.7 c	65.0 a	23.3 c	13.3 a	63.3 a
2	NAI-1296	1.0 fl oz/a	31.7 ab	25.0 ab	43.3 b	51.7 b	20.0 a	28.3 b
	ETHEPHON	32 fl oz/a						92.0 a
	COC	1 % v/v						
3	NAI-1296	1.5 fl oz/a	26.7 ab	25.0 ab	46.7 b	58.3 ab	18.3 a	23.3 b
	ETHEPHON	32 fl oz/a						82.0 a
	COC	1 % v/v						
4	NAI-1296	2 fl oz/a	28.3 ab	33.3 ab	36.7 b	61.7 ab	18.3 a	20.0 b
	ETHEPHON	32 fl oz/a						82.7 a
	COC	1 % v/v						
5	NAI-1297	0.5 fl oz/a	28.3 ab	25.0 ab	43.3 b	51.7 b	20.0 a	28.3 b
	ETHEPHON	32 fl oz/a						93.3 a
	COC	1 % v/v						
6	NAI-1297	0.75 fl oz/a	26.7 ab	30.0 ab	43.3 b	55.0 b	18.3 a	26.7 b
	ETHEPHON	32 fl oz/a						88.0 a
	COC	1 % v/v						
7	NAI-1297	1 fl oz/a	31.7 ab	35.0 a	33.3 b	60.0 ab	20.0 a	20.0 b
	ETHEPHON	32 fl oz/a						95.0 a
	COC	1 % v/v						
8	NAI-1295 EW	1 fl oz/a	30.0 ab	23.3 ab	46.7 b	60.0 ab	20.0 a	20.0 b
	ETHEPHON	32 fl oz/a						91.0 a
	COC	1 % v/v						
9	NAI-1295 EW	1.5 fl oz/a	30.0 ab	31.7 ab	38.3 b	66.7 ab	15.0 a	18.3 b
	ETHEPHON	32 fl oz/a						91.3 a
	COC	1 % v/v						
10	NAI-1295 EW	2 fl oz/a	30.0 ab	30.0 ab	40.0 b	58.3 ab	18.3 a	23.3 b
	ETHEPHON	32 fl oz/a						89.3 a
	COC	1 % v/v						
11	ET	1 fl oz/a	31.7 ab	21.7 b	46.7 b	55.0 b	20.0 a	28.3 b
	ETHEPHON	32 fl oz/a						95.0 a
	COC	1 % v/v						
12	ET	1.5 fl oz/a	30.0 ab	26.7 ab	43.3 b	58.3 ab	18.3 a	23.3 b
	ETHEPHON	32 fl oz/a						85.3 a
	COC	1 % v/v						
13	ET	2 fl oz/a	31.7 ab	25.0 ab	43.3 b	58.3 ab	18.3 a	23.3 b
	ETHEPHON	32 fl oz/a						89.3 a
	COC	1 % v/v						
14	DEF	16 fl oz/a	36.7 a	21.7 b	41.7 b	71.7 a	10.0 a	18.3 b
	ETHEPHON	32 fl oz/a						90.7 a
15	AIM	1 fl oz/a	33.3 ab	28.3 ab	38.3 b	66.7 ab	13.3 a	20.0 b
	ETHEPHON	32 fl oz/a						87.7 a
	COC	1 % v/v						
16	NAI-1299	4.8 fl oz/a	31.7 ab	28.3 ab	40.0 b	56.7 ab	20.0 a	23.3 b
	ETHEPHON	32 fl oz/a						83.0 a
	COC	1 % v/v						
17	NAI-1298	1.3 fl oz/a	33.3 ab	26.7 ab	40.0 b	61.7 ab	16.7 a	21.7 b
	ETHEPHON	32 fl oz/a						85.0 a
	COC	1 % v/v						
LSD (P=.05)			5.62	7.21	9.37	9.04	6.23	7.16
Standard Deviation			3.37	4.32	5.62	5.42	3.73	4.29
CV			11.13	16.39	13.09	9.45	21.28	16.98
Bartlett's X2			5.453	4.908	10.776	10.826	8.148	5.932
P(Bartlett's X2)			0.964	0.987	0.704	0.625	0.70	0.919
Replicate F			6.728	3.174	0.885	5.556	5.521	3.429
Replicate Prob(F)			0.0036	0.0553	0.4227	0.0085	0.0087	0.0448
Treatment F			2.496	4.639	4.338	10.638	1.877	17.465
Treatment Prob(F)			0.0135	0.0001	0.0002	0.0001	0.0634	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Crop Code		COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Part Rated						LINT	LINT
Rating Data Type		DEFOLIATION	DESICCATION	GREENLEAVES	OPBOLL	YIELD	TURNOUT
Rating Unit		%	%	%	%	LBS/AC	%
Rating Date		Oct/18/2010	Oct/18/2010	Oct/18/2010	Oct/18/2010	Nov/05/2010	Nov/05/2010
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate
		Unit					
1	UNTREATED		38.3 b	11.7 a	50.0 a	94.3 a	788.0 a
2	NAI-1296	1.0 fl oz/a	75.0 a	6.7 a	18.3 b	94.7 a	790.0 a
	ETHEPHON	32 fl oz/a					0.3260 a
	COC	1 % v/v					
3	NAI-1296	1.5 fl oz/a	78.3 a	6.7 a	15.0 b	93.7 a	662.7 a
	ETHEPHON	32 fl oz/a					0.3257 a
	COC	1 % v/v					
4	NAI-1296	2 fl oz/a	80.0 a	6.7 a	13.3 b	96.7 a	709.7 a
	ETHEPHON	32 fl oz/a					0.3327 a
	COC	1 % v/v					
5	NAI-1297	0.5 fl oz/a	71.7 a	8.3 a	20.0 b	92.0 a	882.3 a
	ETHEPHON	32 fl oz/a					0.3267 a
	COC	1 % v/v					
6	NAI-1297	0.75 fl oz/a	76.7 a	6.7 a	16.7 b	94.7 a	790.3 a
	ETHEPHON	32 fl oz/a					0.3277 a
	COC	1 % v/v					
7	NAI-1297	1 fl oz/a	80.0 a	5.0 a	15.0 b	95.3 a	750.3 a
	ETHEPHON	32 fl oz/a					0.3267 a
	COC	1 % v/v					
8	NAI-1295 EW	1 fl oz/a	73.3 a	5.0 a	21.7 b	96.3 a	681.3 a
	ETHEPHON	32 fl oz/a					0.3220 a
	COC	1 % v/v					
9	NAI-1295 EW	1.5 fl oz/a	80.0 a	6.7 a	13.3 b	96.7 a	751.7 a
	ETHEPHON	32 fl oz/a					0.3247 a
	COC	1 % v/v					
10	NAI-1295 EW	2 fl oz/a	75.0 a	5.0 a	20.0 b	94.0 a	760.7 a
	ETHEPHON	32 fl oz/a					0.3377 a
	COC	1 % v/v					
11	ET	1 fl oz/a	73.3 a	6.7 a	20.0 b	96.0 a	688.0 a
	ETHEPHON	32 fl oz/a					0.3240 a
	COC	1 % v/v					
12	ET	1.5 fl oz/a	75.0 a	6.7 a	18.3 b	93.0 a	637.7 a
	ETHEPHON	32 fl oz/a					0.3327 a
	COC	1 % v/v					
13	ET	2 fl oz/a	78.3 a	5.0 a	16.7 b	98.3 a	678.0 a
	ETHEPHON	32 fl oz/a					0.3260 a
	COC	1 % v/v					
14	DEF	16 fl oz/a	80.0 a	5.0 a	15.0 b	96.3 a	765.7 a
	ETHEPHON	32 fl oz/a					0.3237 a
15	AIM	1 fl oz/a	80.0 a	5.0 a	15.0 b	96.3 a	712.0 a
	ETHEPHON	32 fl oz/a					0.3353 a
	COC	1 % v/v					
16	NAI-1299	4.8 fl oz/a	78.3 a	6.7 a	15.0 b	92.3 a	725.0 a
	ETHEPHON	32 fl oz/a					0.3390 a
	COC	1 % v/v					
17	NAI-1298	1.3 fl oz/a	80.0 a	6.7 a	13.3 b	91.0 a	733.7 a
	ETHEPHON	32 fl oz/a					0.3380 a
	COC	1 % v/v					
LSD (P=.05)			7.11	3.76	6.65	7.81	240.32
Standard Deviation			4.27	2.26	3.99	4.68	144.14
CV			5.7	34.85	21.41	4.94	19.59
Bartlett's X2			3.941	0.0	4.697	9.607	18.203
P(Bartlett's X2)			0.998	.	0.981	0.886	0.312
Replicate F			1.401	2.024	3.915	12.614	0.304
Replicate Prob(F)			0.2611	0.1487	0.0301	0.0001	0.7397
Treatment F			15.939	1.614	13.642	0.530	0.515
Treatment Prob(F)			0.0001	0.1215	0.0001	0.9106	0.9200

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

BASF - HARVEST AID - IRRIGATED

Trial ID: 147L-10
Location: 207

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: GOSHI COTTON, SHORT STAPLE
Planting Date: May/21/2010

Variety: FM 9063 B2F

SITE AND DESIGN

Plot Width, Unit: 6.667 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Sep/29/2010
Time of Day: 10:00 AM
Application Method: SPRAY
Application Timing: PREHAR
Applic. Placement: BROADCAST
Air Temp., Unit: 70 F
% Relative Humidity: 57
Wind Velocity, Unit: 3 MPH
Soil Temp., Unit: 67 F
Soil Moisture: DRY
% Cloud Cover: 15

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI COTTON
Stage Scale: 66%PBOLL

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 25 PSI
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 20 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: C02

Texas Agricultural Experiment Station

BASF - HARVEST AID - IRRIGATED

Trial ID: 147L-10
Location: 207

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code			COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	
Rating Data Type			DEFOLIATION	DESICCATION	GREENLEAVES	OPEN BOLL	DEFOLIATION	DESICCATION	
Rating Unit			%	%	%	%	%	%	
Rating Date			Oct/06/2010	Oct/06/2010	Oct/06/2010	Oct/06/2010	Oct/13/2010	Oct/13/2010	
Trt No.	Treatment Name	Rate Unit	Appl Code						
1	UNTREATED			30.0 g	5.0 b	65.0 a	70.7 e	33.3 e	11.7 a
2	BAS 80004H	1.0 fl oz/a	A	46.7 f	13.3 a	40.0 b	87.0 c	66.7 d	13.3 a
	AGRIDEX	1.0 % v/v	A						
3	BAS 80004H	1.5 fl oz/a	A	56.7 e	16.7 a	26.7 c	89.7 abc	73.3 bcd	10.0 a
	AGRIDEX	1.0 % v/v	A						
4	BAS 80004H	2.0 fl oz/a	A	58.3 e	18.3 a	23.3 cd	94.3 abc	76.7 bcd	10.0 a
	AGRIDEX	1.0 % v/v	A						
5	BAS 80004H	1.0 fl oz/a	A	63.3 cde	16.7 a	20.0 cd	80.0 d	88.3 a	6.7 a
	MSO	1.0 pt/a	A						
	AMS	17 lb ai/100 gal	A						
6	BAS 80004H	1.0 fl oz/a	A	61.7 de	16.7 a	23.3 cd	89.0 bc	71.7 cd	10.0 a
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
7	BAS 80004H	1.5 fl oz/a	A	63.3 cde	16.7 a	20.0 cd	94.7 abc	70.0 d	10.0 a
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
8	BAS 80004H	2.0 fl oz/a	A	63.3 cde	15.0 a	21.7 cd	92.3 abc	75.0 bcd	8.3 a
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
9	BAS 80004H	1.0 fl oz/a	A	70.0 bc	16.7 a	13.3 de	96.0 ab	86.7 a	5.0 a
	PREP	21.0 fl oz/a	A						
	MSO	1.0 pt/a	A						
	AMS	17 lb ai/100 gal	A						
10	BAS 80004H	1.0 fl oz/a	A	61.7 de	15.0 a	23.3 cd	94.0 abc	71.7 cd	10.0 a
	ROUNDUP ORIGINAL	32.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
11	BAS 80004H	1.5 fl oz/a	A	66.7 cd	13.3 a	20.0 cd	92.7 abc	71.7 cd	10.0 a
	ROUNDUP ORIGINAL	32.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
12	BAS 80004H	1.0 fl oz/a	A	70.0 bc	11.7 ab	18.3 cd	97.3 a	81.7 abc	10.0 a
	ROUNDUP ORIGINAL	32.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	MSO	1.0 pt/a	A						
	AMS	17 lb ai/100 gal	A						
13	BAS 80004H	0.75 fl oz/a	A	76.7 ab	10.0 ab	13.3 de	94.7 abc	83.3 ab	8.3 a
	DEF DEFOLIANT	16.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
14	BAS 80004H	1.0 fl oz/a	A	75.0 ab	10.0 ab	15.0 de	88.0 bc	83.3 ab	6.7 a
	DEF DEFOLIANT	16.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
15	BAS 80004H	1.0 fl oz/a	A	80.0 a	11.7 ab	8.3 e	94.0 abc	90.0 a	6.3 a
	DEF DEFOLIANT	16.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	MSO	1.0 pt/a	A						
	AMS	17 lb ai/100 gal	A						
LSD (P=.05)				5.12	5.15	5.87	4.76	6.79	4.46
Standard Deviation				3.06	3.08	3.51	2.85	4.06	2.67
CV				4.87	22.35	14.98	3.15	5.43	29.34
Bartlett's X2				4.254	5.697	5.445	24.862	7.844	4.266
P(Bartlett's X2)				0.978	0.84	0.86	0.036*	0.854	0.832
Replicate F				8.246	5.331	2.206	0.036	2.659	0.247
Replicate Prob(F)				0.0015	0.0109	0.1289	0.9650	0.0877	0.7830
Treatment F				49.254	4.075	44.804	18.080	33.639	2.038
Treatment Prob(F)				0.0001	0.0008	0.0001	0.0001	0.0001	0.0529

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Crop Code	COTTON	COTTON
Rating Data Type	GREENLEAVES	OPEN BOLL
Rating Unit	%	%
Rating Date	Oct/13/2010	Oct/13/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code		
1	UNTREATED				55.0 a	89.0 d
2	BAS 80004H	1.0	fl oz/a	A	20.0 b	95.0 bc
	AGRIDEX	1.0	% v/v	A		
3	BAS 80004H	1.5	fl oz/a	A	16.7 b	97.0 ab
	AGRIDEX	1.0	% v/v	A		
4	BAS 80004H	2.0	fl oz/a	A	13.3 bc	98.0 ab
	AGRIDEX	1.0	% v/v	A		
5	BAS 80004H	1.0	fl oz/a	A	5.0 c	93.3 c
	MSO	1.0	pt/a	A		
	AMS	17	lb ai/100 gal	A		
6	BAS 80004H	1.0	fl oz/a	A	18.3 b	99.3 a
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
7	BAS 80004H	1.5	fl oz/a	A	20.0 b	99.7 a
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
8	BAS 80004H	2.0	fl oz/a	A	16.7 b	99.7 a
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
9	BAS 80004H	1.0	fl oz/a	A	8.3 bc	100.0 a
	PREP	21.0	fl oz/a	A		
	MSO	1.0	pt/a	A		
	AMS	17	lb ai/100 gal	A		
10	BAS 80004H	1.0	fl oz/a	A	18.3 b	100.0 a
	ROUNDUP ORIGINAL	32.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
11	BAS 80004H	1.5	fl oz/a	A	18.3 b	98.7 a
	ROUNDUP ORIGINAL	32.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
12	BAS 80004H	1.0	fl oz/a	A	8.3 bc	99.7 a
	ROUNDUP ORIGINAL	32.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	MSO	1.0	pt/a	A		
	AMS	17	lb ai/100 gal	A		
13	BAS 80004H	0.75	fl oz/a	A	10.0 bc	99.7 a
	DEF DEFOLIANT	16.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
14	BAS 80004H	1.0	fl oz/a	A	10.0 bc	97.7 ab
	DEF DEFOLIANT	16.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
15	BAS 80004H	1.0	fl oz/a	A	3.7 c	100.0 a
	DEF DEFOLIANT	16.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	MSO	1.0	pt/a	A		
	AMS	17	lb ai/100 gal	A		
LSD (P=.05)					6.97	2.41
Standard Deviation					4.17	1.44
CV					25.83	1.47
Bartlett's X2					11.264	13.774
P(Bartlett's X2)					0.506	0.184
Replicate F					1.432	0.300
Replicate Prob(F)					0.2558	0.7432
Treatment F					25.168	14.200
Treatment Prob(F)					0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

BASF - HARVEST AID - DRYLAND

Trial ID: 148L-10
Location: 204

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: GOSHI COTTON, SHORT STAPLE
Planting Date: Jun/08/2010

Variety: FM 9058 F

SITE AND DESIGN

Plot Width, Unit: 6.667 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Oct/05/2010
Time of Day: 3:00PM
Application Method: SPRAY
Application Timing: PREHAR
Applic. Placement: BROADCAST
Air Temp., Unit: 77 F
% Relative Humidity: 33
Wind Velocity, Unit: 10 MPH
Soil Temp., Unit: 72 F
Soil Moisture: DRY
% Cloud Cover: 0

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI COTTON
Stage Scale: 60%OPBOLL

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 25 PSI
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 20 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

BASF - HARVEST AID - DRYLAND

Trial ID: 148L-10
Location: 204

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code			COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	
Rating Data Type			DEFOLIATION	DESICCATION	GREENLEAVES	OPEN BOLL	DEFOLIATION	DESICCATION	
Rating Unit			%	%	%	%	%	%	
Rating Date			Oct/12/2010	Oct/12/2010	Oct/12/2010	Oct/12/2010	Oct/19/2010	Oct/19/2010	
Trt No.	Treatment Name	Rate Unit	Appl Code						
1	UNTREATED			8.3 d	11.7 d	83.3 a	71.7 c	21.7 g	11.7 bc
2	BAS 80004H	1.0 fl oz/a	A	26.7 c	21.7 bcd	51.7 b	77.7 b	40.0 f	18.3 ab
	AGRIDEX	1.0 % v/v	A						
3	BAS 80004H	1.5 fl oz/a	A	28.3 c	30.0 abc	41.7 bc	78.0 b	45.0 ef	16.7 abc
	AGRIDEX	1.0 % v/v	A						
4	BAS 80004H	2.0 fl oz/a	A	31.7 bc	25.0 bcd	43.3 bc	76.3 b	45.0 ef	20.0 a
	AGRIDEX	1.0 % v/v	A						
5	BAS 80004H	1.0 fl oz/a	A	31.7 bc	33.3 ab	35.0 bc	77.3 b	60.0 bc	18.3 ab
	MSO	1.0 pt/a	A						
	AMS	17 lb ai/100 gal	A						
6	BAS 80004H	1.0 fl oz/a	A	36.7 abc	20.0 cd	43.3 bc	85.0 a	50.0 de	13.3 abc
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
7	BAS 80004H	1.5 fl oz/a	A	38.3 abc	18.3 cd	43.3 bc	84.0 a	53.3 cde	18.3 ab
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
8	BAS 80004H	2.0 fl oz/a	A	36.7 abc	23.3 bcd	40.0 bc	89.0 a	60.0 bc	13.3 abc
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
9	BAS 80004H	1.0 fl oz/a	A	33.3 abc	30.0 abc	38.3 bc	88.0 a	70.0 ab	13.3 abc
	PREP	21.0 fl oz/a	A						
	MSO	1.0 pt/a	A						
	AMS	17 lb ai/100 gal	A						
10	BAS 80004H	1.0 fl oz/a	A	38.3 abc	16.7 cd	45.0 bc	86.0 a	58.3 cd	15.0 abc
	ROUNDUP ORIGINAL	32.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
11	BAS 80004H	1.5 fl oz/a	A	36.7 abc	18.3 cd	45.0 bc	87.3 a	61.7 abc	13.3 abc
	ROUNDUP ORIGINAL	32.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
12	BAS 80004H	1.0 fl oz/a	A	36.7 abc	23.3 bcd	40.0 bc	87.0 a	63.3 abc	13.3 abc
	ROUNDUP ORIGINAL	32.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	MSO	1.0 pt/a	A						
	AMS	17 lb ai/100 gal	A						
13	BAS 80004H	0.75 fl oz/a	A	48.3 a	18.3 cd	33.3 bc	86.7 a	70.0 ab	10.0 c
	DEF DEFOLIANT	16.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
14	BAS 80004H	1.0 fl oz/a	A	45.0 ab	18.3 cd	36.7 bc	86.3 a	70.0 ab	10.0 c
	DEF DEFOLIANT	16.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	AGRIDEX	1.0 % v/v	A						
15	BAS 80004H	1.0 fl oz/a	A	33.3 abc	38.3 a	28.3 c	85.3 a	71.7 a	10.0 c
	DEF DEFOLIANT	16.0 fl oz/a	A						
	PREP	21.0 fl oz/a	A						
	MSO	1.0 pt/a	A						
	AMS	17 lb ai/100 gal	A						
LSD (P=.05)				9.32	8.11	10.52	3.97	7.00	4.43
Standard Deviation				5.57	4.85	6.29	2.37	4.18	2.65
CV				16.39	20.99	14.56	2.86	7.47	18.49
Bartlett's X2				12.276	9.355	4.805	12.962	7.685	2.92
P(Bartlett's X2)				0.584	0.808	0.988	0.451	0.809	0.983
Replicate F				3.433	2.644	0.098	1.922	4.571	4.983
Replicate Prob(F)				0.0464	0.0887	0.9068	0.1652	0.0191	0.0141
Treatment F				7.923	6.469	11.707	15.151	32.776	4.712
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0002

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Crop Code	COTTON	COTTON
Rating Data Type	GREENLEAVES	OPEN BOLL
Rating Unit	%	%
Rating Date	Oct/19/2010	Oct/19/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code		
1	UNTREATED				63.3 a	85.0 b
2	BAS 80004H	1.0	fl oz/a	A	41.7 b	86.7 b
	AGRIDEX	1.0	% v/v	A		
3	BAS 80004H	1.5	fl oz/a	A	38.3 bc	85.3 b
	AGRIDEX	1.0	% v/v	A		
4	BAS 80004H	2.0	fl oz/a	A	35.0 b-e	86.0 b
	AGRIDEX	1.0	% v/v	A		
5	BAS 80004H	1.0	fl oz/a	A	21.7 ef	88.0 b
	MSO	1.0	pt/a	A		
	AMS	17	lb ai/100 gal	A		
6	BAS 80004H	1.0	fl oz/a	A	36.7 bcd	97.7 a
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
7	BAS 80004H	1.5	fl oz/a	A	28.3 c-f	98.0 a
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
8	BAS 80004H	2.0	fl oz/a	A	26.7 c-f	98.0 a
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
9	BAS 80004H	1.0	fl oz/a	A	16.7 f	98.3 a
	PREP	21.0	fl oz/a	A		
	MSO	1.0	pt/a	A		
	AMS	17	lb ai/100 gal	A		
10	BAS 80004H	1.0	fl oz/a	A	26.7 c-f	97.7 a
	ROUNDUP ORIGINAL	32.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
11	BAS 80004H	1.5	fl oz/a	A	25.0 c-f	98.7 a
	ROUNDUP ORIGINAL	32.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
12	BAS 80004H	1.0	fl oz/a	A	23.3 def	98.0 a
	ROUNDUP ORIGINAL	32.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	MSO	1.0	pt/a	A		
	AMS	17	lb ai/100 gal	A		
13	BAS 80004H	0.75	fl oz/a	A	20.0 f	98.7 a
	DEF DEFOLIANT	16.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
14	BAS 80004H	1.0	fl oz/a	A	20.0 f	96.3 a
	DEF DEFOLIANT	16.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	AGRIDEX	1.0	% v/v	A		
15	BAS 80004H	1.0	fl oz/a	A	18.3 f	98.7 a
	DEF DEFOLIANT	16.0	fl oz/a	A		
	PREP	21.0	fl oz/a	A		
	MSO	1.0	pt/a	A		
	AMS	17	lb ai/100 gal	A		
LSD (P=.05)					8.67	2.68
Standard Deviation					5.18	1.60
CV					17.6	1.7
Bartlett's X2					13.512	17.37
P(Bartlett's X2)					0.409	0.183
Replicate F					1.510	0.416
Replicate Prob(F)					0.2384	0.6640
Treatment F					16.425	39.596
Treatment Prob(F)					0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

NICHINO - DEFOLIATION

Trial ID: 149L-10
Location: 204

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: GOSHI COTTON, SHORT STAPLE
Planting Date: Jun/08/2010

Variety: FM 9058 F

SITE AND DESIGN

Plot Width, Unit: 6.667 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

A

Application Date: Oct/13/2010
Time of Day: 10:00 A.M.
Application Timing: PREHAR
Applic. Placement: BROADCAST
Air Temp., Unit: 62 F
% Relative Humidity: 57
Wind Velocity, Unit: 5 MPH
Soil Temp., Unit: 60 F
Soil Moisture: DRY
% Cloud Cover: 60

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI COTTON
Stage Scale: 65%OPBOLL

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 25
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Carrier: WATER
Propellant: CO2

Texas Agricultural Experiment Station

NICHINO - DEFOLIATION

Trial ID: 149L-10
Location: 204

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Rating Data Type	DEFOLIATION	DESICCATION	GREENLEAVES	DEFOLIATION	DESICCATION	GREENLEAVES
Rating Unit	%	%	%	%	%	%
Rating Date	Oct/20/2010	Oct/20/2010	Oct/20/2010	Oct/27/2010	Oct/27/2010	Oct/27/2010

Trt No.	Treatment Name	Rate	Unit						
1	UNTREATED			25.0	b	10.0	a	65.0	a
2	NAI-1300	0.75	oz/a	61.7	a	11.7	a	26.7	b
	PREP	32	oz/a					70.0	a
	COC	1	% v/v						
3	NAI-1300	1	oz/a	61.7	a	13.3	a	25.0	b
	PREP	32	oz/a					73.3	a
	COC	1	% v/v					10.0	b
4	NAI-1295	1.5	oz/a	60.0	a	13.3	a	26.7	b
	PREP	32	oz/a					66.7	a
	COC	1	% v/v					10.0	b
5	NAI-1295	2	oz/a	68.3	a	10.0	a	21.7	b
	PREP	32	oz/a					73.3	a
	COC	1	% v/v					10.0	b
6	NAI-1296	1.5	oz/a	61.7	a	15.0	a	23.3	b
	PREP	32	oz/a					68.3	a
	COC	1	% v/v					10.0	b
7	NAI-1296	2	oz/a	60.0	a	15.0	a	25.0	b
	PREP	32	oz/a					71.7	a
	COC	1	% v/v					10.0	b
8	ET	1	oz/a	61.7	a	13.3	a	25.0	b
	SHARPEN	0.5	oz/a					71.7	a
	PREP	32	oz/a					10.0	b
	COC	1	% v/v						
9	SHARPEN	1	oz/a	60.0	a	13.3	a	26.7	b
	PREP	32	oz/a					70.0	a
	COC	1	% v/v					10.0	b
10	ET	1.5	oz/a	65.0	a	11.7	a	23.3	b
	PREP	32	oz/a					70.0	a
	COC	1	% v/v					10.0	b
11	ET	2	oz/a	61.7	a	13.3	a	25.0	b
	PREP	32	oz/a					71.7	a
	COC	1	% v/v					10.0	b
LSD (P=.05)				7.90		3.51		6.87	
Standard Deviation				4.64		2.06		4.04	
CV				7.89		16.18		14.17	
Bartlett's X2				5.31		0.0		4.199	
P(Bartlett's X2)				0.807		1.00		0.898	
								7.54	
								2.85	
								1.67	
								15.56	
								6.757	
								0.563	
								0.453	
								0.0001	
								0.0002	
Replicate F				0.458		3.750		2.279	
Replicate Prob(F)				0.6392		0.0414		0.1283	
Treatment F				18.366		2.071		27.470	
Treatment Prob(F)				0.0001		0.0795		0.0001	
								1.042	
								0.3710	
								15.143	
								6.757	
								0.0001	
								0.0002	
								1.117	
								0.3468	
								11.564	
								0.0001	

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

EVALUATION OF NEW ROUNDUP FORMULATIONS FOR EFFICACY ON KEY WEED SPECIES - II

Trial ID: 152L-10
Location: GLOVER

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LUBBOCK
State/Prov.: TX

Initiation Date: Jul/14/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
PALMER AMARANTH
DEVIL'S CLAW

NON-CROP

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: SPLIT-BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

Application Date: Jul/14/2010
Time of Day: 2:00 PM
Application Method: SPRAY
Application Timing: A/B POST
Applic. Placement: BROADCAST
Air Temp., Unit: 84.5 F
% Relative Humidity: 75.7
Wind Velocity, Unit: 8 MPH
Soil Temp., Unit: 86.1 F
Soil Moisture: WET
% Cloud Cover: 5

CROP STAGE AT EACH APPLICATION

A B
>

WEED STAGE AT EACH APPLICATION

A B
PALMER AM
Stage Scale: UP TO 4FT
DEVILSCLA
Stage Scale: UP TO 2FT

APPLICATION EQUIPMENT

A B
Appl. Equipment: BACKPACK
Operating Pressure: 20 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 60 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

EVALUATION OF NEW ROUNDUP FORMULATIONS FOR EFFICACY ON KEY WEED SPECIES - II

Trial ID: 152L-10
Location: GLOVER

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code	PIGWEEED	PIGWEEED	PIGWEEED
Rating Data Type	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Date	Jul/21/2010	Jul/28/2010	Aug/04/2010
Trt-Eval Interval	7 DA-A	13 DA-A	21 DA-A

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code			
1	UNTREATED						0.0 d	0.0 c	0.0 b
2	ROUNDUP WEATHERMAX	0.5 lb ae/a		14.2 oz/a		A	86.7 a	95.7 a	97.0 a
3	MON 76398	0.5 lb ae/a		14.2 oz/a		A	80.0 abc	94.7 ab	95.7 a
4	MON 76337	0.5 lb ae/a		14.2 oz/a		A	68.3 bc	93.3 ab	95.7 a
5	MON 76435	0.5 lb ae/a		14.2 oz/a		A	81.7 abc	96.7 a	97.0 a
6	MON 79790	0.5 lb ae/a		14.2 oz/a		A	75.0 abc	91.0 ab	94.3 a
7	MON 76441	0.5 lb ae/a		14.2 oz/a		A	78.3 abc	93.7 ab	97.7 a
8	MON 76417	0.5 lb ae/a		14.2 oz/a		A	75.0 abc	87.7 ab	94.7 a
9	MON 76439	0.5 lb ae/a		14.2 oz/a		A	66.7 c	85.3 b	92.7 a
10	ROUNDUP WEATHERMAX	0.75 lb ae/a		21.3 oz/a		B	87.7 a	98.3 a	98.7 a
11	MON 76398	0.75 lb ae/a		21.3 oz/a		B	83.3 abc	98.7 a	99.7 a
12	MON 76337	0.75 lb ae/a		21.3 oz/a		B	86.0 ab	98.0 a	98.7 a
13	MON 76435	0.75 lb ae/a		21.3 oz/a		B	90.0 a	99.0 a	100.0 a
14	MON 79790	0.75 lb ae/a		21.3 oz/a		B	85.0 ab	98.0 a	98.7 a
15	MON 76441	0.75 lb ae/a		21.3 oz/a		B	88.0 a	97.0 a	99.7 a
16	MON 76417	0.75 lb ae/a		21.3 oz/a		B	85.3 ab	97.7 a	98.0 a
17	MON 76439	0.75 lb ae/a		21.3 oz/a		B	84.0 ab	97.0 a	98.3 a
18	UNTREATED						0.0 d	0.0 c	0.0 b
LSD (P=.05)							10.56	6.36	4.32
Standard Deviation							6.33	3.81	2.59
CV							8.76	4.51	3.0
Bartlett's X2							11.109	29.077	26.566
P(Bartlett's X2)							0.745	0.01*	0.022*
Replicate F							3.468	0.139	2.072
Replicate Prob(F)							0.0426	0.8709	0.1415
Treatment F							54.928	198.018	444.090
Treatment Prob(F)							0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

SHARPEN - PT

Trial ID: 153L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA PALMER AMARANTH	AMARANTHUS PALMERI

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: ACUFF
Soil Name: LOAM

APPLICATION DESCRIPTION

A
Application Date: Aug/17/2010
Time of Day: 2:00 PM
Application Method: SPRAY
Application Timing: POST
Applic. Placement: BROADCAST
Air Temp., Unit: 97 F
% Relative Humidity: 55
Wind Velocity, Unit: 2 MPH
Soil Temp., Unit: 96 F
Soil Moisture: DRY
% Cloud Cover: 20

WEED STAGE AT EACH APPLICATION

A
Weed 1 Code, Stage: AMAPA
Stage Scale: 2-4"

APPLICATION EQUIPMENT

A
Appl. Equipment: BACKPACK
Operating Pressure: 37
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 20 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 15 GPA
Propellant: CO2

Texas Agricultural Experiment Station

SHARPEN - PT

Trial ID: 153L-10
Location: GLOVER

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	AMAPA	AMAPA
Rating Data Type	CONTROL	CONTROL
Rating Unit	%	%
Rating Date	Aug/24/2010	Aug/30/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description		
1	UNTREATED					0.0 d	0.0 d
2	SHARPEN	1 fl oz/a	A		2-4" WEEDS	98.0 a	99.0 a
	MSO	1 % v/v	A		2-4" WEEDS		
	AMS	17 lb ai/100 gal	A		2-4" WEEDS		
3	CORNERSTONE	0.75 lb ae/a	A		2-4" WEEDS	81.7 c	81.7 c
	MSO	1 % v/v	A		2-4" WEEDS		
	AMS	17 lb ai/100 gal	A		2-4" WEEDS		
4	CORNERSTONE	0.75 lb ae/a	A		2-4" WEEDS	96.7 a	90.7 b
	NIS	0.25 % v/v	A		2-4" WEEDS		
	AMS	17 lb ai/100 gal	A		2-4" WEEDS		
5	SHARPEN	1 fl oz/a	A		2-4" WEEDS	99.3 a	99.7 a
	CORNERSTONE	0.75 lb ae/a	A		2-4" WEEDS		
	MSO	1 % v/v	A		2-4" WEEDS		
	AMS	17 lb ai/100 gal	A		2-4" WEEDS		
6	SHARPEN	1 fl oz/a	A		2-4" WEEDS	93.0 b	91.7 b
	CORNERSTONE	0.75 lb ae/a	A		2-4" WEEDS		
	NIS	0.25 % v/v	A		2-4" WEEDS		
7	SHARPEN	1 fl oz/a	A		2-4" WEEDS	98.3 a	97.7 a
	NIS	0.25 % v/v	A		2-4" WEEDS		
	AMS	17 lb ai/100 gal	A		2-4" WEEDS		
LSD (P=.05)						3.25	2.88
Standard Deviation						1.83	1.62
CV						2.26	2.02
Bartlett's X2						6.667	6.503
P(Bartlett's X2)						0.247	0.26
Replicate F						0.385	1.867
Replicate Prob(F)						0.6887	0.1968
Treatment F						1178.660	1467.946
Treatment Prob(F)						0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Off-Station Trials

Texas Agricultural Experiment Station

BAYER - CORN/COTTON PLANT BACK

Trial ID: 101F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: DR. WAYNE KEELING

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

COTTON

Variety: FM 1740 B2RF

Planting Date: Jun/02/2010

SITE AND DESIGN

Plot Width, Unit: 26.67 FT

Plot Length, Unit: 50 FT Reps: 3

Study Design: RANDOMIZED COMPLETE BLOCK

MAINTENANCE

Field Prep./Maintenance:

GPS:

101 CRNCOT

N 34.18311

W 101.94707

105 CRNCOT

N34.18338

W 101.94687

306 CRNCOT

N 34.18383

W 101.94780

310 CRNCOT

N 34.18399

W 101.94741

SOIL DESCRIPTION

Texture: CLAY LOAM

Soil Name: PULLMAN

APPLICATION DESCRIPTION

A

Application Date: May/07/2009

Time of Day: 11:00 AM

Application Method: SPRAY

Application Timing: EPOST

Applic. Placement: BROADCAST

Air Temp., Unit: 77 F

% Relative Humidity: 67

Wind Velocity, Unit: 10 MPH

Soil Temp., Unit: 66 F

Soil Moisture: ADEQUATE

% Cloud Cover: 10

CROP STAGE AT EACH APPLICATION

A

CORN

Stage Scale: EMERG-V1

APPLICATION EQUIPMENT

A

Appl. Equipment: TRACTOR

Operating Pressure: 33

Nozzle Type: TURBO TEE

Nozzle Size: 110015

Ground Speed, Unit: 3 MPH

Carrier: WATER

Spray Volume, Unit: 10 GPA

Propellant: AIR

Texas Agricultural Experiment Station

BAYER - CORN/COTTON PLANT BACK

Trial ID: 101F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code					CORN	CORN	CORN	COTTON	COTTON	COTTON	COTTON
Part Rated											
Rating Data Type					INJURY	INJURY	INJURY	PLANT/M/ROW	INJURY	INJURY	INJURY
Rating Unit					%	%	%	NUMBER	%	%	%
Rating Date					May/14/2009	May/21/2009	Jun/04/2009	Jun/22/2010	Jun/22/2010	Jun/29/2010	Jul/19/2010
Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Description						
1	UNTREATED					0.0 a	0.0 b	0.0 a	10.0 ab	0.0 a	0.0 a
2	BALANCE FLEXX	2 oz/a	A		EMERG TO V1	0.0 a	0.0 b	0.0 a	10.3 ab	0.0 a	0.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1						
3	BALANCE FLEXX	4 oz/a	A		EMERG TO V1	0.0 a	0.0 b	0.0 a	10.3 ab	0.0 a	0.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1						
4	BALANCE FLEXX	6 oz/a	A		EMERG TO V1	5.0 a	0.0 b	0.0 a	9.0 b	0.0 a	0.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1						
5	BALANCE FLEXX	12 oz/a	A		EMERG TO V1	6.7 a	3.3 a	0.0 a	10.7 a	0.0 a	0.0 a
	ATRAZINE	4 pt/a	A		EMERG TO V1						
6	CORVUS	2.25 oz/a	A		EMERG TO V1	0.0 a	0.0 b	0.0 a	10.7 a	0.0 a	0.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1						
7	CORVUS	3.3 oz/a	A		EMERG TO V1	0.0 a	0.0 b	0.0 a	9.7 ab	0.0 a	0.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1						
8	CORVUS	4.5 oz/a	A		EMERG TO V1	0.0 a	0.0 b	0.0 a	9.7 ab	0.0 a	0.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1						
9	CORVUS	5.6 oz/a	A		EMERG TO V1	1.7 a	0.0 b	0.0 a	10.0 ab	0.0 a	0.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1						
10	CORVUS	11.2 oz/a	A		EMERG TO V1	3.3 a	0.0 b	0.0 a	10.0 ab	0.0 a	0.0 a
	ATRAZINE	4 pt/a	A		EMERG TO V1						
LSD (P=.05)						4.01	1.57	0.00	0.92	0.00	0.00
Standard Deviation						2.34	0.91	0.00	0.53	0.00	0.00
CV						140.24	273.86	0.0	5.32	0.0	0.0
Bartlett's X2						1.327	0.0	0.0	2.312	0.0	0.0
P(Bartlett's X2)						0.515	.	.	0.889	.	.
Replicate F						0.153	1.000	0.000	5.026	0.000	0.000
Replicate Prob(F)						0.8596	0.3874	1.0000	0.0184	1.0000	1.0000
Treatment F						3.390	4.000	0.000	2.714	0.000	0.000
Treatment Prob(F)						0.0132	0.0060	1.0000	0.0341	1.0000	1.0000

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Crop Code	COTTON
Part Rated	LINT
Rating Data Type	YIELD
Rating Unit	LBS/ACRE
Rating Date	Nov/03/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description	
1	UNTREATED					1087.7 a
2	BALANCE FLEXX	2 oz/a	A		EMERG TO V1	1282.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1	
3	BALANCE FLEXX	4 oz/a	A		EMERG TO V1	1274.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1	
4	BALANCE FLEXX	6 oz/a	A		EMERG TO V1	1250.3 a
	ATRAZINE	2 pt/a	A		EMERG TO V1	
5	BALANCE FLEXX	12 oz/a	A		EMERG TO V1	1251.7 a
	ATRAZINE	4 pt/a	A		EMERG TO V1	
6	CORVUS	2.25 oz/a	A		EMERG TO V1	1142.7 a
	ATRAZINE	2 pt/a	A		EMERG TO V1	
7	CORVUS	3.3 oz/a	A		EMERG TO V1	1088.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1	
8	CORVUS	4.5 oz/a	A		EMERG TO V1	1192.0 a
	ATRAZINE	2 pt/a	A		EMERG TO V1	
9	CORVUS	5.6 oz/a	A		EMERG TO V1	1123.3 a
	ATRAZINE	2 pt/a	A		EMERG TO V1	
10	CORVUS	11.2 oz/a	A		EMERG TO V1	1265.0 a
	ATRAZINE	4 pt/a	A		EMERG TO V1	
	LSD (P=.05)					242.43
	Standard Deviation					141.32
	CV					11.82
	Bartlett's X2					6.374
	P(Bartlett's X2)					0.702
	Replicate F					13.205
	Replicate Prob(F)					0.0003
	Treatment F					0.932
	Treatment Prob(F)					0.5218

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

ALFALFA TOLERANCE AND EFFICACY WITH SHARPEN HERBICIDE

Trial ID: 111F-10
Location: AMARILLO

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: AMARILLO
State/Prov.: TX

Initiation Date: Mar/06/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
KOCHIA
MUSTARD

ALFALFA

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

APPLICATION DESCRIPTION

A

Application Date: Mar/06/2010
Time of Day: 10:00 AM
Application Method: SPRAY
Application Timing: A POST
Applic. Placement: BROADCAST
Air Temp., Unit: 65.1 F
% Relative Humidity: 27.5
Wind Velocity, Unit: 5 MPH
Soil Temp., Unit: 46 F
Soil Moisture: GOOD
% Cloud Cover: 20

CROP STAGE AT EACH APPLICATION

A

ALFALFA

Stage Scale: 5% GREEN

WEED STAGE AT EACH APPLICATION

A

KOCHIA

Stage Scale: < 1 INCH
Density, Unit: 1-2 /PLOT

MUSTARD

Stage Scale: < 1 INCH
Density, Unit: 1-2 /PLOT

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 30 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 11003
Nozzle Spacing, Unit: 20 INCH
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 20 GPA
Propellant: CO2

Texas Agricultural Experiment Station

ALFALFA TOLERANCE AND EFFICACY WITH SHARPEN HERBICIDE

Trial ID: 111F-10
Location: AMARILLO

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code		Kochia		Kochia	
Crop Code		Alfalfa		Alfalfa	
Rating Data Type		Injury		Injury	
Rating Unit		# Plants		Dead Crowns	
Rating Date		2 SQ M		#/2M SQ	
Trt-Eval Interval		Percent		#/2M SQ	
		Mar/22/2010		Apr/05/2010	
		16 DA-A		30 DA-A	
Trt	Treatment	Rate	Product	Product	Appl
No.	Name	Rate	Rate	Rate	Code
1	UNTREATED				
2	GRAMOXONE INTEON	0.5 lb ai/a	32 oz/a	A	0.0 d
	MSO	1 % v/v	25.6 oz/a	A	41.7 a
	AMS	17 lb/100 gal		A	0.0 c
3	SHARPEN	0.0445 lb ai/a	2 oz/a	A	1.7 a
	MSO	1 % v/v	25.6 oz/a	A	48.3 a
	AMS	17 lb/100 gal		A	1.3 a
4	SHARPEN	0.067 lb ai/a	3 oz/a	A	0.0 b
	MSO	1 % v/v	25.6 oz/a	A	51.7 b
	AMS	17 lb/100 gal		A	0.0 b
5	SHARPEN	0.089 lb ai/a	4 oz/a	A	13.3 ab
	MSO	1 % v/v	25.6 oz/a	A	0.7 a
	AMS	17 lb/100 gal		A	0.0 b
6	CHATEAU (VALOR SX)	0.128 lb ai/a	4 oz/a	A	18.3 a
	MSO	1 % v/v	25.6 oz/a	A	1.7 a
	AMS	17 lb/100 gal		A	0.0 b
7	VELPAR	1.12 lb ai/a	1.5 lb/a	A	20.0 a
	NIS	0.25 % v/v	6.4 oz/a	A	2.3 a
8	KARMEX (DIREX)	1.2 lb ai/a	38.4 oz/a	A	0.0 b
LSD (P=.05)					1.0 a
Standard Deviation					0.0 b
CV					1.3 c
Bartlett's X2					1.0 a
P(Bartlett's X2)					0.0 b
Replicate F					1.0 a
Replicate Prob(F)					0.0 b
Treatment F					1.3 c
Treatment Prob(F)					1.0 a

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code					KOCCHIA				
Crop Code					ALFALFA				
Rating Data Type					INJURY	PLANT HT.	DEAD CROWNS	INJURY	INJURY
Rating Unit					PERCENT	INCHES	#/2M SQ	#/2M SQ	PERCENT
Rating Date					Apr/19/2010	Apr/19/2010	Apr/19/2010	Apr/19/2010	May/03/2010
Trt-Eval Interval					30 DA-A	44 DA-A	30 DA-A	30 DA-A	58 DA-A
Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code			
1	UNTREATED						0.0 d	6.83 a	0.7 ab
2	GRAMOXONE INTEON	0.5	lb ai/a	32	oz/a	A	0.0 d	7.13 a	0.3 b
	MSO	1	% v/v	25.6	oz/a	A			6.0 b
	AMS	17	lb/100 gal			A			
3	SHARPEN	0.0445	lb ai/a	2	oz/a	A	6.7 bc	7.37 a	0.7 ab
	MSO	1	% v/v	25.6	oz/a	A			0.0 b
	AMS	17	lb/100 gal			A			
4	SHARPEN	0.067	lb ai/a	3	oz/a	A	7.7 ab	7.23 a	1.0 ab
	MSO	1	% v/v	25.6	oz/a	A			0.0 b
	AMS	17	lb/100 gal			A			
5	SHARPEN	0.089	lb ai/a	4	oz/a	A	10.0 a	6.63 a	2.3 a
	MSO	1	% v/v	25.6	oz/a	A			0.0 b
	AMS	17	lb/100 gal			A			
6	CHATEAU (VALOR SX)	0.128	lb ai/a	4	oz/a	A	4.3 c	6.97 a	1.3 ab
	MSO	1	% v/v	25.6	oz/a	A			0.0 b
	AMS	17	lb/100 gal			A			
7	VELPAR	1.12	lb ai/a	1.5	lb/a	A	0.0 d	7.37 a	0.3 b
	NIS	0.25	% v/v	6.4	oz/a	A			0.0 b
8	KARMEX (DIREX)	1.2	lb ai/a	38.4	oz/a	A	0.0 d	6.70 a	1.3 ab
	LSD (P=.05)						2.59	0.803	1.19
	Standard Deviation						1.48	0.458	0.68
	CV						41.3	6.52	67.7
	Bartlett's X2						1.455	12.613	1.943
	P(Bartlett's X2)						0.483	0.082	0.925
	Replicate F						0.304	1.346	0.273
	Replicate Prob(F)						0.7424	0.2919	0.7653
	Treatment F						23.337	1.199	2.909
	Treatment Prob(F)						0.0001	0.3645	0.0423
									0.996
									0.3940
									3.597
									0.0198
									1.0000

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	KOCHIA	KOCHIA	MUSTARD	MUSTARD
Crop Code	ALFALFA			
Rating Data Type	INJURY	CONTROL	PLANTS	CONTROL
Rating Unit	PERCENT	PERCENT	#/PLOT	PERCENT
Rating Date	May/20/2010	May/20/2010	May/20/2010	May/20/2010
Trt-Eval Interval	75 DA-A	75 DA-A	75 DA-A	75 DA-A

Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code				
1	UNTREATED						0.0 a	0.0 c	31.7 a	5.0 a
2	GRAMOXONE INTEON	0.5	lb ai/a	32	oz/a	A	0.0 a	94.3 b	1.7 b	2.7 b
	MSO	1	% v/v	25.6	oz/a	A				
	AMS	17	lb/100 gal			A				
3	SHARPEN	0.0445	lb ai/a	2	oz/a	A	0.0 a	100.0 a	0.0 b	0.0 b
	MSO	1	% v/v	25.6	oz/a	A				
	AMS	17	lb/100 gal			A				
4	SHARPEN	0.067	lb ai/a	3	oz/a	A	0.0 a	100.0 a	0.0 b	0.0 b
	MSO	1	% v/v	25.6	oz/a	A				
	AMS	17	lb/100 gal			A				
5	SHARPEN	0.089	lb ai/a	4	oz/a	A	0.0 a	100.0 a	0.0 b	0.0 b
	MSO	1	% v/v	25.6	oz/a	A				
	AMS	17	lb/100 gal			A				
6	CHATEAU (VALOR SX)	0.128	lb ai/a	4	oz/a	A	0.0 a	100.0 a	0.0 b	0.0 b
	MSO	1	% v/v	25.6	oz/a	A				
	AMS	17	lb/100 gal			A				
7	VELPAR	1.12	lb ai/a	1.5	lb/a	A	0.0 a	100.0 a	0.0 b	0.0 b
	NIS	0.25	% v/v	6.4	oz/a	A				
8	KARMEX (DIREX)	1.2	lb ai/a	38.4	oz/a	A	0.0 a	100.0 a	0.0 b	0.0 b
LSD (P=.05)							0.00	1.29	9.93	1.82
Standard Deviation							0.00	0.74	5.67	1.04
CV							0.0	0.85	136.03	108.31
Bartlett's X2							0.0	0.0	10.219	1.863
P(Bartlett's X2)							.	.	0.001*	0.172
Replicate F							0.000	1.000	1.052	1.663
Replicate Prob(F)							1.0000	0.3927	0.3753	0.2249
Treatment F							0.000	6833.220	11.562	9.851
Treatment Prob(F)							1.0000	0.0001	0.0001	0.0002

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code
Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

ALFALFA PLOT WEIGHT	ALFALFA WET WEIGHT GRAMS	ALFALFA DRY WEIGHT GRAMS	ALFALFA PERCENT MOISTURE	ALFALFA DRY YIELD LB/ACRE
May/20/2010 75 DA-A	May/20/2010 75 DA-A	Jul/05/2010 75 DA-A		

Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code					
1	UNTREATED						18.047 a	456.73 a	150.90 a	0.331304732 a	2664.3 a
2	GRAMOXONE INTEON	0.5	lb ai/a	32	oz/a	A	21.407 a	390.17 a	139.60 a	0.357227331 a	3424.3 a
	MSO	1	% v/v	25.6	oz/a	A					
	AMS	17	lb/100 gal			A					
3	SHARPEN	0.0445	lb ai/a	2	oz/a	A	22.400 a	401.37 a	149.83 a	0.372775264 a	3738.3 a
	MSO	1	% v/v	25.6	oz/a	A					
	AMS	17	lb/100 gal			A					
4	SHARPEN	0.067	lb ai/a	3	oz/a	A	19.693 a	411.43 a	147.63 a	0.359031803 a	3166.3 a
	MSO	1	% v/v	25.6	oz/a	A					
	AMS	17	lb/100 gal			A					
5	SHARPEN	0.089	lb ai/a	4	oz/a	A	19.080 a	520.83 a	180.23 a	0.351162558 a	2996.3 a
	MSO	1	% v/v	25.6	oz/a	A					
	AMS	17	lb/100 gal			A					
6	CHATEAU (VALOR SX)	0.128	lb ai/a	4	oz/a	A	21.000 a	437.97 a	150.77 a	0.344303255 a	3240.3 a
	MSO	1	% v/v	25.6	oz/a	A					
	AMS	17	lb/100 gal			A					
7	VELPAR	1.12	lb ai/a	1.5	lb/a	A	19.607 a	418.53 a	154.10 a	0.369872577 a	3250.7 a
	NIS	0.25	% v/v	6.4	oz/a	A					
8	KARMEX (DIREX)	1.2	lb ai/a	38.4	oz/a	A	17.780 a	445.97 a	154.00 a	0.345873152 a	2741.7 a
LSD (P=.05)							3.3727	81.833	22.793	0.0501393316	784.27
Standard Deviation							1.9257	46.725	13.014	0.0286283857	447.80
CV							9.69	10.73	8.48	8.09	14.2
Bartlett's X2							4.61	11.148	6.8	3.194	1.929
P(Bartlett's X2)							0.707	0.132	0.45	0.866	0.964
Replicate F							0.554	0.115	0.157	0.015	0.271
Replicate Prob(F)							0.5865	0.8922	0.8562	0.9846	0.7663
Treatment F							2.133	2.343	2.456	0.692	1.851
Treatment Prob(F)							0.1079	0.0830	0.0723	0.6784	0.1548

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

SESAME PREEMERGENCE HERBICIDE STUDY

Trial ID: 112F-10
Location: LORENZO CHAPMAN'S

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LORENZO
State/Prov.: TX

Initiation Date: Jun/04/2010

Country: USA

COOPERATOR/LANDOWNER

Cooperator: STEVE CHAPMAN

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

SESAME Variety: SESACO S32
Planting Date: Jun/03/2010 Planting Method: 8 ROW
Row Spacing: 40 IN
Soil Temperature: 77.9 F Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

APPLICATION DESCRIPTION

A

Application Date: Jun/04/2010
Time of Day: 10:30 AM
Application Method: SPRAY
Application Timing: A - PRE
Applic. Placement: BROADCAST
Air Temp., Unit: 86 F
% Relative Humidity: 44.6
Wind Velocity, Unit: 7.5 MPH
Soil Temp., Unit: 77.9 F
Soil Moisture: ADEQUATE
% Cloud Cover: 0

CROP STAGE AT EACH APPLICATION

A

Stage Scale: SESAME
PRE
N/A

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 28 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 18 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

SESAME PREEMERGENCE HERBICIDE STUDY

Trial ID: 112F-10
Location: LORENZO CHAPMAN'S

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	SESAME	SESAME	SESAME	SESAME
Rating Data Type	INJURY	INJURY	INJURY	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	Jun/18/2010	Jul/01/2010	Jul/29/2010	Oct/08/2010
Trt-Eval Interval	14 DA-A	27 DA-A	25 DA-A	25 DA-A

Trt No.	Treatment Name	Rate	Rate Unit	Product	Product Rate	Product Unit	Appl Code				
1	UNTREATED CHECK							0.0	f	0.0	k
2	DUAL MAGNUM	0.635	lb ai/a	10.7	oz/a	A		0.0	f	1.7	jk
3	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A		0.0	f	8.3	h-k
4	DIREX	0.5	lb ai/a	1	pt/a	A		0.0	f	6.7	h-k
5	DIREX	1	lb ai/a	2	pt/a	A		13.3	e	30.0	def
6	LAYBY PRO	0.5	lb ai/a	1	pt/a	A		0.0	f	30.0	def
7	LAYBY PRO	1	lb ai/a	2	pt/a	A		3.3	f	41.7	cd
8	LAYBY PRO	2	lb ai/a	4	pt/a	A		43.3	b	50.0	bc
9	CAPAROL	1	lb ai/a	2	pt/a	A		33.3	c	57.7	ab
10	DUAL MAGNUM	0.635	lb ai/a	10.7	oz/a	A		1.7	f	35.0	de
	DIREX	0.5	lb ai/a	1	pt/a	A				13.3	b-f
11	DUAL MAGNUM	0.635	lb ai/a	10.7	oz/a	A		21.7	d	40.0	cd
	DIREX	1	lb ai/a	2	pt/a	A				13.3	b-f
12	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A		6.7	ef	23.3	efg
	DIREX	0.5	lb ai/a	1	pt/a	A				6.7	ef
13	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A		26.7	d	34.0	de
	DIREX	1	lb ai/a	2	pt/a	A				23.3	b
14	COTORAN	0.5	lb ai/a	1	pt/a	A		0.0	f	3.3	ijk
15	COTORAN	1	lb ai/a	2	pt/a	A		3.3	f	0.0	k
16	COTORAN	2	lb ai/a	4	pt/a	A		12.3	e	6.7	h-k
17	LINEX	0.5	lb ai/a	1	pt/a	A		0.0	f	5.0	h-k
18	LINEX	1	lb ai/a	2	pt/a	A		9.3	ef	15.7	f-k
19	LINEX	2	lb ai/a	4	pt/a	A		73.3	a	65.0	a
20	SHARPEN	0.0223	lb ai/a	1	oz/a	A		0.0	f	16.7	f-j
21	SHARPEN	0.0445	lb ai/a	2	oz/a	A		25.0	d	18.3	f-i
22	MON 63410	1.13	lb ai/a	48	oz/a	A		0.0	f	20.0	fgh
23	UNTREATED CHECK							0.0	f	0.0	k
24	MON63410	2.25	lb ai/a	96	oz/a	A		0.0	f	13.3	g-k
LSD (P=.05)								5.32		9.49	
Standard Deviation								3.23		5.75	
CV								28.33		26.43	
Bartlett's X2								11.279		15.597	
P(Bartlett's X2)								0.505		0.621	
Replicate F								0.149		0.386	
Replicate Prob(F)								0.8616		0.6822	
Treatment F								94.540		33.019	
Treatment Prob(F)								0.0001		0.0001	

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

SESAME POST HERBICIDE STUDY

Trial ID: 113F-10
Location: LORENZO CHAPMAN'S

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LORENZO
State/Prov.: TX

Initiation Date: Jun/03/2010

Country: USA

COOPERATOR/LANDOWNER

Cooperator: STEVE CHAPMAN

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

SESAME Variety: SESACO S32
Planting Date: Jun/03/2010 Planting Method: 8 ROW
Row Spacing: 40 IN

Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 27 FT Reps: 3
Study Design: FACTORIAL

APPLICATION DESCRIPTION

	A	B	C	D	E
Application Date:	Jun/18/2010	Jul/01/2010	Jul/15/2010	Jul/29/2010	Aug/13/2010
Time of Day:	9:15 AM	1:30 PM	10:00 AM	1:00 PM	11:00 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	A 2WAP	B 4WAP	C 6WAP	D 8WAP	E 10WAP
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	78 F	80 F	76 F	80.1 F	81.3 F
% Relative Humidity:	76	66	80	73.7	60
Wind Velocity, Unit:	8 MPH	9.4 MPH	4 MPH	6.1 MPH	2.1 MPH
Soil Temp., Unit:	77.8 F	84.2 F	76 F	83.7 F	83.1 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE	DRY	ADEQUATE
% Cloud Cover:	60	90	100	75	10

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E
SESAME	SESAME	SESAME	SESAME	SESAME	SESAME
Stage Scale:	2 LEAF	8 LEAF	18 LF/BLM	W/PODS	
Height, Unit:	2 IN	5 IN	19 IN	36 IN	51 IN

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E
MORNINGGL					
Stage Scale:	1"-4"				

APPLICATION EQUIPMENT

	A	B	C	D	E
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	24 PSI	28 PSI	26 PSI	24 PSI	28 PSI
Nozzle Type:	TURBOTEE	TURBOTEE	TURBOTEE	TURBOTEE	TURBOTEE
Nozzle Size:	110015	110015	110015	110015	110015
Nozzle Spacing, Unit:	19 IN	19 IN	19 IN	19 IN	19 IN
Boom Height, Unit:	18 IN	24 IN	36 IN	50 IN	70 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA	10 GPA	10 GPA
Propellant:	C02	C02	C02	C02	C02

Treatment Application Comment

7/1 - SPRAYED SELECT + COC ON VARIETAL TOLERANCE @ 4 WAP
7/15 - SPRAYED SELECT + COC ON VARIETAL TOLERANCE @ 6 WAP

Texas Agricultural Experiment Station

SESAME POST HERBICIDE STUDY

Trial ID: 113F-10
Location: LORENZO CHAPMAN'S

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	SESAME	SESAME	SESAME	SESAME	SESAME	SESAME
Rating Data Type	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	Jul/01/2010	Jul/15/2010	Jul/29/2010	Aug/13/2010	Aug/27/2010	Sep/10/2010
Trt-Eval Interval	13 DA-A					

Trt	Treatment	Rate	Product	Product
No.	Name	Rate	Unit	Rate Unit

TABLE OF R MEANS

Replicate 1	32.0	16.0	20.7	14.3	10.0	8.2
Replicate 2	32.8	17.8	18.7	13.8	9.4	7.3
Replicate 3	33.0	15.8	18.5	14.0	9.6	7.5

TABLE OF A MEANS

1 SELECT	0.188 lb ai/a	12 oz/a	4.7	1.3	23.9	25.4	9.4	7.8
1 COC	1 % v/v	12.8 oz/a						
2 DIREX	1 lb ai/a	1 qt/a	66.7	28.8	20.2	10.0	13.1	10.3
2 COC	1 % v/v	12.8 oz/a						
3 FUSILADE DX	0.188 lb ai/a	12 oz/a	0.0	0.0	2.2	0.0	0.7	0.7
3 COC	1 % v/v	12.8 oz/a						
4 POAST PLUS	0.187 lb ai/a	1.5 pt/a	0.0	0.0	1.1	0.0	0.0	0.0
4 COC	1 % v/v	12.8 oz/a						
5 LINEX	1 lb ai/a	32 oz/a	91.7	52.5	48.9	34.6	25.3	19.5
5 COC	1 % v/v	12.8 oz/a						

TABLE OF B MEANS

1 2 WEEKS AFTER PLANTING	32.6	27.7	24.7	15.0	10.0	8.2
2 4 WEEKS AFTER PLANTING	.	5.4	4.7	2.3	4.7	3.5
3 6 WEEKS AFTER PLANTING	.	.	28.5	19.3	13.4	11.5
4 8 WEEKS AFTER PLANTING	.	.	.	19.3	11.9	8.7
5 10 WEEKS AFTER PLANTING	.	.	.	.	8.5	6.4

TABLE OF AB MEANS

1 SELECT	0.188 lb ai/a	12 oz/a	4.7	1.7	0.0	0.0	0.0	0.0
1 COC	1 % v/v	12.8 oz/a						
1 2 WEEKS AFTER PLANTING								
2 DIREX	1 lb ai/a	1 qt/a	66.7	53.3	41.7	16.7	21.7	17.7
2 COC	1 % v/v	12.8 oz/a						
1 2 WEEKS AFTER PLANTING								
3 FUSILADE DX	0.188 lb ai/a	12 oz/a	0.0	0.0	1.7	0.0	0.0	0.0
3 COC	1 % v/v	12.8 oz/a						
1 2 WEEKS AFTER PLANTING								
4 POAST PLUS	0.187 lb ai/a	1.5 pt/a	0.0	0.0	3.3	0.0	0.0	0.0
4 COC	1 % v/v	12.8 oz/a						
1 2 WEEKS AFTER PLANTING								
5 LINEX	1 lb ai/a	32 oz/a	91.7	83.3	76.7	58.3	28.3	23.3
5 COC	1 % v/v	12.8 oz/a						
1 2 WEEKS AFTER PLANTING								
1 SELECT	0.188 lb ai/a	12 oz/a	.	1.0	1.7	1.7	1.7	0.0
1 COC	1 % v/v	12.8 oz/a						
2 4 WEEKS AFTER PLANTING								
2 DIREX	1 lb ai/a	1 qt/a	.	4.3	3.3	0.0	3.3	1.7
2 COC	1 % v/v	12.8 oz/a						
2 4 WEEKS AFTER PLANTING								
3 FUSILADE DX	0.188 lb ai/a	12 oz/a	.	0.0	0.0	0.0	0.0	0.0
3 COC	1 % v/v	12.8 oz/a						
2 4 WEEKS AFTER PLANTING								
4 POAST PLUS	0.187 lb ai/a	1.5 pt/a	.	0.0	0.0	0.0	0.0	0.0
4 COC	1 % v/v	12.8 oz/a						
2 4 WEEKS AFTER PLANTING								
5 LINEX	1 lb ai/a	32 oz/a	.	21.7	18.3	10.0	18.3	15.7
5 COC	1 % v/v	12.8 oz/a						
2 4 WEEKS AFTER PLANTING								
1 SELECT	0.188 lb ai/a	12 oz/a	.	.	70.0	56.7	19.3	17.7
1 COC	1 % v/v	12.8 oz/a						
3 6 WEEKS AFTER PLANTING								
2 DIREX	1 lb ai/a	1 qt/a	.	.	15.7	15.0	14.3	11.7
2 COC	1 % v/v	12.8 oz/a						
3 6 WEEKS AFTER PLANTING								
3 FUSILADE DX	0.188 lb ai/a	12 oz/a	.	.	5.0	0.0	3.3	3.3
3 COC	1 % v/v	12.8 oz/a						
3 6 WEEKS AFTER PLANTING								

Texas Agricultural Experiment Station

Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

SESAME INJURY PERCENT Jul/01/2010	SESAME INJURY PERCENT Jul/15/2010	SESAME INJURY PERCENT Jul/29/2010	SESAME INJURY PERCENT Aug/13/2010	SESAME INJURY PERCENT Aug/27/2010	SESAME INJURY PERCENT Sep/10/2010
13 DA-A					

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit						
4	POAST PLUS	0.187	lb ai/a	1.5	pt/a	.	.	0.0	0.0	0.0	0.0
4	COC	1	% v/v	12.8	oz/a	.	.				
3	6 WEEKS AFTER PLANTING										
5	LINEX	1	lb ai/a	32	oz/a	.	.	51.7	25.0	30.0	25.0
5	COC	1	% v/v	12.8	oz/a						
3	6 WEEKS AFTER PLANTING										
1	SELECT	0.188	lb ai/a	12	oz/a	.	.	.	43.3	10.0	8.3
1	COC	1	% v/v	12.8	oz/a						
4	8 WEEKS AFTER PLANTING										
2	DIREX	1	lb ai/a	1	qt/a	.	.	.	8.3	19.3	13.3
2	COC	1	% v/v	12.8	oz/a						
4	8 WEEKS AFTER PLANTING										
3	FUSILADE DX	0.188	lb ai/a	12	oz/a	.	.	.	0.0	0.0	0.0
3	COC	1	% v/v	12.8	oz/a						
4	8 WEEKS AFTER PLANTING										
4	POAST PLUS	0.187	lb ai/a	1.5	pt/a	.	.	.	0.0	0.0	0.0
4	COC	1	% v/v	12.8	oz/a						
4	8 WEEKS AFTER PLANTING										
5	LINEX	1	lb ai/a	32	oz/a	.	.	.	45.0	30.0	21.7
5	COC	1	% v/v	12.8	oz/a						
4	8 WEEKS AFTER PLANTING										
1	SELECT	0.188	lb ai/a	12	oz/a	.	.	.	.	16.0	13.0
1	COC	1	% v/v	12.8	oz/a						
5	10 WEEKS AFTER PLANTING										
2	DIREX	1	lb ai/a	1	qt/a	.	.	.	.	6.7	7.0
2	COC	1	% v/v	12.8	oz/a						
5	10 WEEKS AFTER PLANTING										
3	FUSILADE DX	0.188	lb ai/a	12	oz/a	.	.	.	.	0.0	0.0
3	COC	1	% v/v	12.8	oz/a						
5	10 WEEKS AFTER PLANTING										
4	POAST PLUS	0.187	lb ai/a	1.5	pt/a	.	.	.	.	0.0	0.0
4	COC	1	% v/v	12.8	oz/a						
5	10 WEEKS AFTER PLANTING										
5	LINEX	1	lb ai/a	32	oz/a	.	.	.	.	20.0	12.0
5	COC	1	% v/v	12.8	oz/a						
5	10 WEEKS AFTER PLANTING										

Texas Agricultural Experiment Station

SESAME POST HERBICIDE STUDY

Trial ID: 113F-10
Location: LORENZO CHAPMAN'S

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Jul/01/2010 13 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	35452.720000				
R	2	0.560000	0.280000	0.359	0.7012	0.5
A	4	4533.120000	1133.280000	1452.923	0.0001	0.7
RA	8	6.240000	0.780000	1.000	0.4551	1.1
B	4	12753.120000	3188.280000	11386.715	0.0001	0.4
RB	8	2.240000	0.280000	0.359	0.9344	1.1
AB	16	18132.480000	1133.280000	1452.923	0.0001	1.5
RAB	32	24.960000	0.780000			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Jul/01/2010 13 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	35452.720000				
R	2	0.560000	0.280000	0.402	0.6713	0.5
A	4	4533.120000	1133.280000	1626.718	0.0001	0.6
B	4	12753.120000	3188.280000	4576.479	0.0001	0.6
AB	16	18132.480000	1133.280000	1626.718	0.0001	1.4
ERROR	48	33.440000	0.696667			

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Jul/15/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	27717.786667				
R	2	9.706667	4.853333	1.861	0.1719	0.9
A	4	5334.320000	1333.580000	389.936	0.0001	1.6
RA	8	27.360000	3.420000	1.312	0.2731	2.1
B	4	8638.853333	2159.713333	496.106	0.0001	1.8
RB	8	34.826667	4.353333	1.670	0.1445	2.1
AB	16	13589.280000	849.330000	325.726	0.0001	2.7
RAB	32	83.440000	2.607500			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Jul/15/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	27717.786667				
R	2	9.706667	4.853333	1.600	0.2125	1.0
A	4	5334.320000	1333.580000	439.561	0.0001	1.3
B	4	8638.853333	2159.713333	711.863	0.0001	1.3
AB	16	13589.280000	849.330000	279.948	0.0001	2.9
ERROR	48	145.626667	3.033889			

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Jul/29/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	38396.480000				
R	2	26.640000	13.320000	0.697	0.5055	2.5
A	4	8207.413333	2051.853333	65.863	0.0001	4.7
RA	8	249.226667	31.153333	1.630	0.1553	5.6
B	4	11586.080000	2896.520000	294.961	0.0001	2.6
RB	8	78.560000	9.820000	0.514	0.8370	5.6
AB	16	17636.986667	1102.311667	57.677	0.0001	7.3
RAB	32	611.573333	19.111667			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Jul/29/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	38396.480000				
R	2	26.640000	13.320000	0.681	0.5111	2.5
A	4	8207.413333	2051.853333	104.847	0.0001	3.3
B	4	11586.080000	2896.520000	148.008	0.0001	3.3
AB	16	17636.986667	1102.311667	56.327	0.0001	7.3
ERROR	48	939.360000	19.570000			

Texas Agricultural Experiment Station

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Aug/13/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	26492.000000				
R	2	2.000000	1.000000	0.112	0.8943	1.7
A	4	9235.333333	2308.833333	176.471	0.0001	3.0
RA	8	104.666667	13.083333	1.467	0.2080	3.9
B	4	5262.000000	1315.500000	181.448	0.0001	2.3
RB	8	58.000000	7.250000	0.813	0.5964	3.9
AB	16	11544.666667	721.541667	80.921	0.0001	5.0
RAB	32	285.333333	8.916667			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Aug/13/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	26492.000000				
R	2	2.000000	1.000000	0.107	0.8986	1.7
A	4	9235.333333	2308.833333	247.375	0.0001	2.3
B	4	5262.000000	1315.500000	140.946	0.0001	2.3
AB	16	11544.666667	721.541667	77.308	0.0001	5.0
ERROR	48	448.000000	9.333333			

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Aug/27/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	9163.946667				
R	2	4.026667	2.013333	0.129	0.8797	2.3
A	4	6472.746667	1618.186667	201.100	0.0001	2.4
RA	8	64.373333	8.046667	0.514	0.8367	5.1
B	4	677.546667	169.386667	16.612	0.0006	2.7
RB	8	81.573333	10.196667	0.652	0.7288	5.1
AB	16	1362.986667	85.186667	5.444	0.0001	6.6
RAB	32	500.693333	15.646667			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Aug/27/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	9163.946667				
R	2	4.026667	2.013333	0.149	0.8616	2.1
A	4	6472.746667	1618.186667	120.118	0.0001	2.7
B	4	677.546667	169.386667	12.574	0.0001	2.7
AB	16	1362.986667	85.186667	6.323	0.0001	6.1
ERROR	48	646.640000	13.471667			

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Sep/10/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	5822.986667				
R	2	9.946667	4.973333	0.563	0.5750	1.7
A	4	3830.586667	957.646667	91.147	0.0001	2.7
RA	8	84.053333	10.506667	1.190	0.3358	3.8
B	4	532.186667	133.046667	29.522	0.0001	1.8
RB	8	36.053333	4.506667	0.510	0.8396	3.8
AB	16	1047.546667	65.471667	7.413	0.0001	5.0
RAB	32	282.613333	8.831667			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Sep/10/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	5822.986667				
R	2	9.946667	4.973333	0.593	0.5568	1.7
A	4	3830.586667	957.646667	114.141	0.0001	2.1
B	4	532.186667	133.046667	15.858	0.0001	2.1
AB	16	1047.546667	65.471667	7.804	0.0001	4.8
ERROR	48	402.720000	8.390000			

Texas Agricultural Experiment Station

Crop Code	SESAME
Rating Data Type	INJURY
Rating Unit	PERCENT
Rating Date	Oct/08/2010
Trt-Eval Interval	

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit
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TABLE OF R MEANS

Replicate 1	7.2
Replicate 2	5.4
Replicate 3	5.3

TABLE OF A MEANS

1 SELECT	0.188 lb ai/a	12 oz/a	5.5
1 COC	1 % v/v	12.8 oz/a	
2 DIREX	1 lb ai/a	1 qt/a	7.5
2 COC	1 % v/v	12.8 oz/a	
3 FUSILADE DX	0.188 lb ai/a	12 oz/a	0.3
3 COC	1 % v/v	12.8 oz/a	
4 POAST PLUS	0.187 lb ai/a	1.5 pt/a	0.0
4 COC	1 % v/v	12.8 oz/a	
5 LINEX	1 lb ai/a	32 oz/a	16.4
5 COC	1 % v/v	12.8 oz/a	

TABLE OF B MEANS

1 2 WEEKS AFTER PLANTING	7.0
2 4 WEEKS AFTER PLANTING	2.5
3 6 WEEKS AFTER PLANTING	8.9
4 8 WEEKS AFTER PLANTING	6.3
5 10 WEEKS AFTER PLANTING	5.0

TABLE OF AB MEANS

1 SELECT	0.188 lb ai/a	12 oz/a	0.0
1 COC	1 % v/v	12.8 oz/a	
1 2 WEEKS AFTER PLANTING			
2 DIREX	1 lb ai/a	1 qt/a	15.0
2 COC	1 % v/v	12.8 oz/a	
1 2 WEEKS AFTER PLANTING			
3 FUSILADE DX	0.188 lb ai/a	12 oz/a	0.0
3 COC	1 % v/v	12.8 oz/a	
1 2 WEEKS AFTER PLANTING			
4 POAST PLUS	0.187 lb ai/a	1.5 pt/a	0.0
4 COC	1 % v/v	12.8 oz/a	
1 2 WEEKS AFTER PLANTING			
5 LINEX	1 lb ai/a	32 oz/a	20.0
5 COC	1 % v/v	12.8 oz/a	
1 2 WEEKS AFTER PLANTING			
1 SELECT	0.188 lb ai/a	12 oz/a	0.0
1 COC	1 % v/v	12.8 oz/a	
2 4 WEEKS AFTER PLANTING			
2 DIREX	1 lb ai/a	1 qt/a	0.0
2 COC	1 % v/v	12.8 oz/a	
2 4 WEEKS AFTER PLANTING			
3 FUSILADE DX	0.188 lb ai/a	12 oz/a	0.0
3 COC	1 % v/v	12.8 oz/a	
2 4 WEEKS AFTER PLANTING			
4 POAST PLUS	0.187 lb ai/a	1.5 pt/a	0.0
4 COC	1 % v/v	12.8 oz/a	
2 4 WEEKS AFTER PLANTING			
5 LINEX	1 lb ai/a	32 oz/a	12.3
5 COC	1 % v/v	12.8 oz/a	
2 4 WEEKS AFTER PLANTING			
1 SELECT	0.188 lb ai/a	12 oz/a	10.7
1 COC	1 % v/v	12.8 oz/a	
3 6 WEEKS AFTER PLANTING			
2 DIREX	1 lb ai/a	1 qt/a	10.7
2 COC	1 % v/v	12.8 oz/a	
3 6 WEEKS AFTER PLANTING			
3 FUSILADE DX	0.188 lb ai/a	12 oz/a	1.7
3 COC	1 % v/v	12.8 oz/a	
3 6 WEEKS AFTER PLANTING			
4 POAST PLUS	0.187 lb ai/a	1.5 pt/a	0.0
4 COC	1 % v/v	12.8 oz/a	
3 6 WEEKS AFTER PLANTING			121

Texas Agricultural Experiment Station

Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

SESAME
INJURY
PERCENT
Oct/08/2010

Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	
5	LINEX	1	lb ai/a	32	oz/a	21.7
5	COC	1	% v/v	12.8	oz/a	
3	6 WEEKS AFTER PLANTING					
1	SELECT	0.188	lb ai/a	12	oz/a	6.7
1	COC	1	% v/v	12.8	oz/a	
4	8 WEEKS AFTER PLANTING					
2	DIREX	1	lb ai/a	1	qt/a	6.0
2	COC	1	% v/v	12.8	oz/a	
4	8 WEEKS AFTER PLANTING					
3	FUSILADE DX	0.188	lb ai/a	12	oz/a	0.0
3	COC	1	% v/v	12.8	oz/a	
4	8 WEEKS AFTER PLANTING					
4	POAST PLUS	0.187	lb ai/a	1.5	pt/a	0.0
4	COC	1	% v/v	12.8	oz/a	
4	8 WEEKS AFTER PLANTING					
5	LINEX	1	lb ai/a	32	oz/a	19.0
5	COC	1	% v/v	12.8	oz/a	
4	8 WEEKS AFTER PLANTING					
1	SELECT	0.188	lb ai/a	12	oz/a	10.0
1	COC	1	% v/v	12.8	oz/a	
5	10 WEEKS AFTER PLANTING					
2	DIREX	1	lb ai/a	1	qt/a	6.0
2	COC	1	% v/v	12.8	oz/a	
5	10 WEEKS AFTER PLANTING					
3	FUSILADE DX	0.188	lb ai/a	12	oz/a	0.0
3	COC	1	% v/v	12.8	oz/a	
5	10 WEEKS AFTER PLANTING					
4	POAST PLUS	0.187	lb ai/a	1.5	pt/a	0.0
4	COC	1	% v/v	12.8	oz/a	
5	10 WEEKS AFTER PLANTING					
5	LINEX	1	lb ai/a	32	oz/a	9.0
5	COC	1	% v/v	12.8	oz/a	
5	10 WEEKS AFTER PLANTING					

Texas Agricultural Experiment Station

SESAME POST HERBICIDE STUDY

Trial ID: 113F-10
Location: LORENZO CHAPMAN'S

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For SESAME INJURY PERCENT Oct/08/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	4065.786667				
R	2	58.986667	29.493333	7.118	0.0028	1.2
A	4	2683.386667	670.846667	75.151	0.0001	2.5
RA	8	71.413333	8.926667	2.154	0.0591	2.6
B	4	347.786667	86.946667	14.192	0.0010	2.1
RB	8	49.013333	6.126667	1.479	0.2038	2.6
AB	16	722.613333	45.163333	10.900	0.0001	3.4
RAB	32	132.586667	4.143333			

FACTORIAL/POOLED ERROR AOV For SESAME INJURY PERCENT Oct/08/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	74	4065.786667				
R	2	58.986667	29.493333	5.595	0.0065	1.3
A	4	2683.386667	670.846667	127.269	0.0001	1.7
B	4	347.786667	86.946667	16.495	0.0001	1.7
AB	16	722.613333	45.163333	8.568	0.0001	3.8
ERROR	48	253.013333	5.271111			

Texas Agricultural Experiment Station

SESAME POST-DIRECTED STUDY

Trial ID: 114F-10
Location: LORENZO CHAPMAN'S

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LORENZO
State/Prov.: TX
Country: USA
Initiation Date: Jul/15/2010

COOPERATOR/LANDOWNER

Cooperator: STEVE CHAPMAN
Conducted Under GLP (Y/N): N
Conducted Under GEP (Y/N): N

SESAME
Planting Date: Jun/03/2010
Row Spacing: 40 IN
Variety: SESACO S32
Planting Method: 8 ROW

Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT
Plot Length, Unit: 27 FT
Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

APPLICATION DESCRIPTION

A
Application Date: Jul/15/2010
Time of Day: 9:30 AM
Application Method: SPRAY
Application Timing: A - PDIR
Applic. Placement: PDIR
Air Temp., Unit: 76.3 F
% Relative Humidity: 80
Wind Velocity, Unit: 4 MPH
Soil Temp., Unit: 76.1 F
Soil Moisture: ADEQUATE
% Cloud Cover: 100

CROP STAGE AT EACH APPLICATION

A
SESAME
Stage Scale: 18 LF/BLM
Height, Unit: 19 IN

APPLICATION EQUIPMENT

A
Appl. Equipment: BACKPACK
Operating Pressure: 26 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 4 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Treatment Application Comment

SPRAYED LOWER 4 INCHES OF PLANTS WITH DROPS; MIDDLE 2 ROWS

Texas Agricultural Experiment Station

SESAME POST-DIRECTED STUDY

Trial ID: 114F-10
Location: LORENZO CHAPMAN'S

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	SESAME	SESAME	SESAME	SESAME
Rating Data Type	INJURY	INJURY	INJURY	INJURY
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	Jul/29/2010	Aug/13/2010	Sep/10/2010	Oct/08/2010
Trt-Eval Interval	14 DA-A	29 DA-A	29 DA-A	29 DA-A

Trt No.	Treatment Name	Rate	Product	Product Rate	Appl Unit	Code				
1	UNTREATED CHECK									
2	CAPAROL	1 lb ai/a	2 pt/a		A		0.0 d	0.0 c	0.0 b	0.0 b
	COC	1 % v/v	12.8 oz/a		A		10.7 bc	5.0 b	0.0 b	0.0 b
3	DIREX	1 lb ai/a	2 pt/a		A		7.0 cd	4.0 bc	0.0 b	0.0 b
	COC	1 % v/v	12.8 oz/a		A					
4	VALOR	0.063 lb ai/a	1.98 oz/a		A		30.0 a	23.3 a	21.7 a	19.3 a
	COC	1 % v/v	12.8 oz/a		A					
5	MILO PRO	0.75 lb ai/a	1.5 pt/a		A		5.0 cd	1.0 bc	0.0 b	0.0 b
	COC	1 % v/v	12.8 oz/a		A					
6	LINEX	1 lb ai/a	2 pt/a		A		15.0 b	4.7 b	2.7 b	1.7 b
	COC	1 % v/v	12.8 oz/a		A					
7	LAYBY PRO	1 lb ai/a	2 pt/a		A		10.3 bc	4.3 b	0.0 b	0.0 b
	COC	1 % v/v	12.8 oz/a		A					
8	COTORAN	1 lb ai/a	2 pt/a		A		5.7 cd	2.0 bc	0.0 b	0.0 b
	COC	1 % v/v	12.8 oz/a		A					
9	MON63410	1.13 lb ai/a	48 oz/a		A		0.0 d	0.0 c	0.0 b	0.0 b
10	UNTREATED CHECK #2						0.0 d	0.0 c	0.0 b	0.0 b
	LSD (P=.05)						5.25	2.67	1.98	1.65
	Standard Deviation						3.06	1.56	1.16	0.96
	CV						36.57	35.08	47.52	45.91
	Bartlett's X2						3.349	2.123	0.037	1.45
	P(Bartlett's X2)						0.501	0.832	0.848	0.229
	Replicate F						0.399	0.096	1.970	1.398
	Replicate Prob(F)						0.6770	0.9085	0.1685	0.2726
	Treatment F						26.760	59.879	104.047	119.207
	Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

PEANUT RESPONSE TO IGNITE

Trial ID: 115F-10
Location: AG-CARES

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LAMESA
State/Prov.: TX

Initiation Date: Apr/28/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

RUNNER PEANUT Variety: FLAVORRUNNER 458
Planting Date: Apr/28/2010 Planting Method: 8 ROW
Rate: 70000 PLANT/ACRE
Row Spacing: 40 IN Spacing Within Row: 5.4 SD/FT
Soil Temperature: 66 F Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 4
Study Design: FACTORIAL

SOIL DESCRIPTION

Texture: FINE SANDY LOAM
Soil Name: AMARILLO

APPLICATION DESCRIPTION

	A	B	C
Application Date:	May/26/2010	Jun/25/2010	Jul/26/2010
Time of Day:	12:00 PM	10:15 AM	10:00 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	A 30 DAP	B 60 DAP	C 90 DAP
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	78 F	82.5 F	79.3 F
% Relative Humidity:	63	52	66.4
Wind Velocity, Unit:	5 MPH	8.2 MPH	1.8 MPH
Soil Temp., Unit:	73 F	81 F	73.8 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE
% Cloud Cover:	60	10	2

CROP STAGE AT EACH APPLICATION

	A	B	C
Stage Scale:	PEANUT	PEANUT BLOOM	PEANUT PODS
Height, Unit: 4	INCH 21	INCH 39	INCH

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	30 PSI	26 PSI	26 PSI
Nozzle Type:	TURBOTEE	TURBOTEE	TURBOTEE
Nozzle Size:	11002	11002	11002
Nozzle Spacing, Unit:	19 IN	19 IN	19 IN
Boom Height, Unit:	20 IN	24 IN	34 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA
Propellant:	C02	C02	C02

Texas Agricultural Experiment Station

PEANUT RESPONSE TO IGNITE

Trial ID: 115F-10
Location: AG-CARES

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

PEANUT INJURY PERCENT	PEANUT INJURY PERCENT	PEANUT INJURY PERCENT	PEANUT INJURY PERCENT	PEANUT INJURY PERCENT	PEANUT INJURY PERCENT
Jun/09/2010	Jun/25/2010	Jul/07/2010	Jul/26/2010	Aug/09/2010	Aug/23/2010
14 DA-A					

Trt	Treatment	Rate	Rate	Product	Product	Appl
No.	Name	Unit	Unit	Rate	Rate	Code

TABLE OF R MEANS

Replicate 1	45.0	45.0	38.3	33.4	34.9	34.4
Replicate 2	51.7	50.3	39.6	35.0	37.1	32.4
Replicate 3	51.7	46.7	38.5	35.6	37.1	29.9
Replicate 4	53.3	49.2	38.9	36.8	36.8	35.8

TABLE OF A MEANS

1 30 DAYS AFTER PLANTING	A	50.4	47.8	40.5	35.6	30.4	30.8
2 60 DAYS AFTER PLANTING	B	.	.	37.1	34.8	32.6	32.4
3 90 DAYS AFTER PLANTING	C	.	.	.	.	46.5	36.3

TABLE OF B MEANS

1 IGNITE 280	0.58 lb ai/a	32 oz/a	93.8	88.8	87.4	92.0	87.3	78.4
2 IGNITE 280	0.29 lb ai/a	16 oz/a	86.3	83.0	68.8	75.1	65.4	55.8
3 IGNITE 280	0.146 lb ai/a	8 oz/a	62.5	65.0	40.6	31.3	37.9	37.1
4 IGNITE 280	0.073 lb ai/a	4 oz/a	40.0	32.5	22.0	8.4	17.9	16.6
5 IGNITE 280	0.0364 lb ai/a	2 oz/a	20.0	17.5	14.3	4.4	10.4	10.9
6 IGNITE 280	0 lb ai/a	0 oz/a	0.0	0.0	0.0	0.0	0.0	0.0

TABLE OF AB MEANS

1 30 DAYS AFTER PLANTING			A	93.8	88.8	82.5	85.0	81.3	65.0
1 IGNITE 280	0.58 lb ai/a	32 oz/a							
2 60 DAYS AFTER PLANTING			B	.	.	92.3	99.0	98.3	97.8
1 IGNITE 280	0.58 lb ai/a	32 oz/a							
3 90 DAYS AFTER PLANTING			C	.	.	.	.	82.5	72.5
1 IGNITE 280	0.58 lb ai/a	32 oz/a							
1 30 DAYS AFTER PLANTING			A	86.3	83.0	73.8	75.0	65.0	60.0
2 IGNITE 280	0.29 lb ai/a	16 oz/a							
2 60 DAYS AFTER PLANTING			B	.	.	63.8	75.3	58.8	53.8
2 IGNITE 280	0.29 lb ai/a	16 oz/a							
3 90 DAYS AFTER PLANTING			C	.	.	.	.	72.5	53.8
2 IGNITE 280	0.29 lb ai/a	16 oz/a							
1 30 DAYS AFTER PLANTING			A	62.5	65.0	46.3	37.5	27.5	37.5
3 IGNITE 280	0.146 lb ai/a	8 oz/a							
2 60 DAYS AFTER PLANTING			B	.	.	35.0	25.0	25.0	31.3
3 IGNITE 280	0.146 lb ai/a	8 oz/a							
3 90 DAYS AFTER PLANTING			C	.	.	.	.	61.3	42.5
3 IGNITE 280	0.146 lb ai/a	8 oz/a							
1 30 DAYS AFTER PLANTING			A	40.0	32.5	25.0	11.3	7.5	15.5
4 IGNITE 280	0.073 lb ai/a	4 oz/a							
2 60 DAYS AFTER PLANTING			B	.	.	19.0	5.5	8.8	8.0
4 IGNITE 280	0.073 lb ai/a	4 oz/a							
3 90 DAYS AFTER PLANTING			C	.	.	.	.	37.5	26.3
4 IGNITE 280	0.073 lb ai/a	4 oz/a							
1 30 DAYS AFTER PLANTING			A	20.0	17.5	15.8	5.0	1.3	6.5
5 IGNITE 280	0.0364 lb ai/a	2 oz/a							
2 60 DAYS AFTER PLANTING			B	.	.	12.8	3.8	5.0	3.8
5 IGNITE 280	0.0364 lb ai/a	2 oz/a							
3 90 DAYS AFTER PLANTING			C	.	.	.	.	25.0	22.5
5 IGNITE 280	0.0364 lb ai/a	2 oz/a							
1 30 DAYS AFTER PLANTING			A	0.0	0.0	0.0	0.0	0.0	0.0
6 IGNITE 280	0 lb ai/a	0 oz/a							
2 60 DAYS AFTER PLANTING			B	.	.	0.0	0.0	0.0	0.0
6 IGNITE 280	0 lb ai/a	0 oz/a							
3 90 DAYS AFTER PLANTING			C	.	.	.	.	0.0	0.0
6 IGNITE 280	0 lb ai/a	0 oz/a							

Texas Agricultural Experiment Station

PEANUT RESPONSE TO IGNITE

Trial ID: 115F-10
Location: AG-CARES

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jun/09/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	68715.277778				
R	3	81.944444	27.314815	4.609	0.0091	1.7
A	2	40669.444444	20334.722222	744.458	0.0001	3.7
RA	6	163.888889	27.314815	4.609	0.0020	2.9
B	5	9177.777778	1835.555556	309.750	0.0001	2.1
RB	15	88.888889	5.925926	1.000	0.4801	4.1
AB	10	18355.555556	1835.555556	309.750	0.0001	3.5
RAB	30	177.777778	5.925926			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jun/09/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	68715.277778				
R	3	81.944444	27.314815	3.235	0.0297	1.9
A	2	40669.444444	20334.722222	2408.681	0.0001	1.7
B	5	9177.777778	1835.555556	217.425	0.0001	2.4
AB	10	18355.555556	1835.555556	217.425	0.0001	4.1
ERROR	51	430.555556	8.442266			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jun/25/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	63346.652778				
R	3	34.819444	11.606481	5.106	0.0057	1.0
A	2	36544.694444	18272.347222	1574.323	0.0001	2.4
RA	6	69.638889	11.606481	5.106	0.0010	1.8
B	5	8865.069444	1773.013889	779.982	0.0001	1.3
RB	15	34.097222	2.273148	1.000	0.4801	2.5
AB	10	17730.138889	1773.013889	779.982	0.0001	2.2
RAB	30	68.194444	2.273148			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jun/25/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	63346.652778				
R	3	34.819444	11.606481	3.443	0.0234	1.2
A	2	36544.694444	18272.347222	5420.152	0.0001	1.1
B	5	8865.069444	1773.013889	525.932	0.0001	1.5
AB	10	17730.138889	1773.013889	525.932	0.0001	2.6
ERROR	51	171.930556	3.371187			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jul/07/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	70375.111111				
R	3	7.444444	2.481481	0.455	0.7155	1.6
A	2	24268.527778	12134.263889	973.265	0.0001	2.5
RA	6	74.805556	12.467593	2.287	0.0616	2.8
B	5	30134.611111	6026.922222	1375.545	0.0001	1.8
RB	15	65.722222	4.381481	0.804	0.6651	3.9
AB	10	15660.472222	1566.047222	287.299	0.0001	3.4
RAB	30	163.527778	5.450926			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jul/07/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	70375.111111				
R	3	7.444444	2.481481	0.416	0.7421	1.6
A	2	24268.527778	12134.263889	2035.311	0.0001	1.4
B	5	30134.611111	6026.922222	1010.911	0.0001	2.0
AB	10	15660.472222	1566.047222	262.677	0.0001	3.5
ERROR	51	304.055556	5.961874			

Texas Agricultural Experiment Station

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jul/26/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	82877.875000				
R	3	46.152778	15.384259	2.503	0.0782	1.7
A	2	19819.750000	9909.875000	1235.161	0.0001	2.0
RA	6	48.138889	8.023148	1.306	0.2850	2.9
B	5	41304.791667	8260.958333	2151.395	0.0001	1.7
RB	15	57.597222	3.839815	0.625	0.8313	4.1
AB	10	21417.083333	2141.708333	348.508	0.0001	3.6
RAB	30	184.361111	6.145370			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jul/26/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	82877.875000				
R	3	46.152778	15.384259	2.705	0.0550	1.6
A	2	19819.750000	9909.875000	1742.187	0.0001	1.4
B	5	41304.791667	8260.958333	1452.303	0.0001	1.9
AB	10	21417.083333	2141.708333	376.519	0.0001	3.4
ERROR	51	290.097222	5.688181			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Aug/09/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	78016.000000				
R	3	59.000000	19.666667	1.804	0.1678	2.2
A	2	3628.583333	1814.291667	163.082	0.0001	2.4
RA	6	66.750000	11.125000	1.020	0.4312	3.9
B	5	69361.666667	13872.333333	960.392	0.0001	3.3
RB	15	216.666667	14.444444	1.325	0.2481	5.5
AB	10	4356.250000	435.625000	39.955	0.0001	4.8
RAB	30	327.083333	10.902778			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Aug/09/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	78016.000000				
R	3	59.000000	19.666667	1.643	0.1910	2.3
A	2	3628.583333	1814.291667	151.562	0.0001	2.0
B	5	69361.666667	13872.333333	1158.868	0.0001	2.8
AB	10	4356.250000	435.625000	36.391	0.0001	4.9
ERROR	51	610.500000	11.970588			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Aug/23/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	60952.611111				
R	3	357.611111	119.203704	2.702	0.0632	4.5
A	2	381.777778	190.888889	1.545	0.2875	7.9
RA	6	741.222222	123.537037	2.801	0.0277	7.8
B	5	53361.277778	10672.255556	166.340	0.0001	7.0
RB	15	962.388889	64.159259	1.455	0.1858	11.1
AB	10	3825.055556	382.505556	8.672	0.0001	9.6
RAB	30	1323.277778	44.109259			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Aug/23/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	60952.611111				
R	3	357.611111	119.203704	2.008	0.1244	5.1
A	2	381.777778	190.888889	3.216	0.0484	4.4
B	5	53361.277778	10672.255556	179.817	0.0001	6.3
AB	10	3825.055556	382.505556	6.445	0.0001	10.9
ERROR	51	3026.888889	59.350763			

Texas Agricultural Experiment Station

Crop Code	PEANUT	PEANUT
Rating Data Type	INJURY	YIELD
Rating Unit	PERCENT	LB/ACRE
Rating Date	Sep/20/2010	Oct/20/2010
Trt-Eval Interval		

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code
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TABLE OF R MEANS

Replicate 1	32.3	3738.3
Replicate 2	32.8	3892.1
Replicate 3	30.0	3732.3
Replicate 4	33.3	3824.3

TABLE OF A MEANS

1 30 DAYS AFTER PLANTING	A	28.3	4605.4
2 60 DAYS AFTER PLANTING	B	30.9	3743.5
3 90 DAYS AFTER PLANTING	C	37.1	3041.4

TABLE OF B MEANS

1 IGNITE 280	0.58	lb ai/a	32 oz/a	77.8	1178.6
2 IGNITE 280	0.29	lb ai/a	16 oz/a	54.6	2287.8
3 IGNITE 280	0.146	lb ai/a	8 oz/a	33.8	3555.0
4 IGNITE 280	0.073	lb ai/a	4 oz/a	15.2	4727.7
5 IGNITE 280	0.0364	lb ai/a	2 oz/a	11.3	4983.4
6 IGNITE 280	0	lb ai/a	0 oz/a	0.0	6048.0

TABLE OF AB MEANS

1 30 DAYS AFTER PLANTING	0.58	lb ai/a	32 oz/a	A	61.3	2532.5
1 IGNITE 280						
2 60 DAYS AFTER PLANTING				B	96.0	91.5
1 IGNITE 280	0.58	lb ai/a	32 oz/a			
3 90 DAYS AFTER PLANTING				C	76.3	911.8
1 IGNITE 280	0.58	lb ai/a	32 oz/a			
1 30 DAYS AFTER PLANTING				A	56.3	3110.0
2 IGNITE 280	0.29	lb ai/a	16 oz/a			
2 60 DAYS AFTER PLANTING				B	50.0	2372.8
2 IGNITE 280	0.29	lb ai/a	16 oz/a			
3 90 DAYS AFTER PLANTING				C	57.5	1380.8
2 IGNITE 280	0.29	lb ai/a	16 oz/a			
1 30 DAYS AFTER PLANTING				A	33.8	4695.8
3 IGNITE 280	0.146	lb ai/a	8 oz/a			
2 60 DAYS AFTER PLANTING				B	27.5	3547.5
3 IGNITE 280	0.146	lb ai/a	8 oz/a			
3 90 DAYS AFTER PLANTING				C	40.0	2421.8
3 IGNITE 280	0.146	lb ai/a	8 oz/a			
1 30 DAYS AFTER PLANTING				A	12.5	5785.8
4 IGNITE 280	0.073	lb ai/a	4 oz/a			
2 60 DAYS AFTER PLANTING				B	8.0	4984.0
4 IGNITE 280	0.073	lb ai/a	4 oz/a			
3 90 DAYS AFTER PLANTING				C	25.0	3413.3
4 IGNITE 280	0.073	lb ai/a	4 oz/a			
1 30 DAYS AFTER PLANTING				A	6.3	5831.8
5 IGNITE 280	0.0364	lb ai/a	2 oz/a			
2 60 DAYS AFTER PLANTING				B	3.8	5182.8
5 IGNITE 280	0.0364	lb ai/a	2 oz/a			
3 90 DAYS AFTER PLANTING				C	23.8	3935.8
5 IGNITE 280	0.0364	lb ai/a	2 oz/a			
1 30 DAYS AFTER PLANTING				A	0.0	5676.8
6 IGNITE 280	0	lb ai/a	0 oz/a			
2 60 DAYS AFTER PLANTING				B	0.0	6282.3
6 IGNITE 280	0	lb ai/a	0 oz/a			
3 90 DAYS AFTER PLANTING				C	0.0	6185.0
6 IGNITE 280	0	lb ai/a	0 oz/a			

Texas Agricultural Experiment Station

PEANUT RESPONSE TO IGNITE

Trial ID: 115F-10
Location: AG-CARES

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Sep/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	58368.319444				
R	3	115.597222	38.532407	1.441	0.2504	3.5
A	2	972.527778	486.263889	8.876	0.0161	5.2
RA	6	328.694444	54.782407	2.049	0.0898	6.1
B	5	52219.569444	10443.913889	340.696	0.0001	4.8
RB	15	459.819444	30.654630	1.146	0.3615	8.6
AB	10	3469.972222	346.997222	12.978	0.0001	7.5
RAB	30	802.138889	26.737963			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Sep/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	58368.319444				
R	3	115.597222	38.532407	1.235	0.3065	3.7
A	2	972.527778	486.263889	15.591	0.0001	3.2
B	5	52219.569444	10443.913889	334.856	0.0001	4.6
AB	10	3469.972222	346.997222	11.126	0.0001	7.9
ERROR	51	1590.652778	31.189270			

COMPLETE FACTORIAL AOV For PEANUT YIELD LB/ACRE Oct/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	253461931.500000				
R	3	313436.944444	104478.981481	1.041	0.3885	215.6
A	2	29456956.083333	14728478.041667	127.797	0.0001	239.8
RA	6	691495.138889	115249.189815	1.149	0.3592	373.4
B	5	198395753.333333	39679150.666667	246.413	0.0001	349.1
RB	15	2415401.222222	161026.748148	1.605	0.1315	528.1
AB	10	19179234.083333	1917923.408333	19.118	0.0001	457.3
RAB	30	3009654.694444	100321.823148			

FACTORIAL/POOLED ERROR AOV For PEANUT YIELD LB/ACRE Oct/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	71	253461931.500000				
R	3	313436.944444	104478.981481	0.871	0.4622	230.9
A	2	29456956.083333	14728478.041667	122.807	0.0001	199.9
B	5	198395753.333333	39679150.666667	330.846	0.0001	282.8
AB	10	19179234.083333	1917923.408333	15.992	0.0001	489.8
ERROR	51	6116551.055556	119932.373638			

Texas Agricultural Experiment Station

PREPLANT BURNDOWN WITH RESIDUAL CONTROL

Trial ID: 116F-10
Location: LORENZO CHAPMAN'S

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LORENZO
State/Prov.: TX

Initiation Date: Mar/29/2010

Country: USA

COOPERATOR/LANDOWNER

Cooperator: STEVE CHAPMAN

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
HORSEWEED

COTTON

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

APPLICATION DESCRIPTION

A

Application Date: Mar/29/2010
Time of Day: 10:00 AM
Application Method: SPRAY
Application Timing: A PREPLAN
Applic. Placement: BROADCAST
Air Temp., Unit: 62 F
% Relative Humidity: 28
Wind Velocity, Unit: 7 MPH
Soil Temp., Unit: 51 F
Soil Moisture: DRY
% Cloud Cover: 0

CROP STAGE AT EACH APPLICATION

A

COTTON
Stage Scale: PREPLANT
N/A

WEED STAGE AT EACH APPLICATION

A

HORSEWEED
Stage Scale: 1-4"ROSET

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 26 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 30 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Treatment Application Comment
SPRAYED ALL 4 ROWS

Texas Agricultural Experiment Station

PREPLANT BURNDOWN WITH RESIDUAL CONTROL

Trial ID: 116F-10
Location: LORENZO CHAPMAN'S

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code		HORSEWEE		HORSEWEE		COTTON		HORSEWEE		COTTON		HORSEWEE	
Crop Code													
Part Rated													
Rating Data Type													
Rating Unit													
Rating Date													
Trt-Eval Interval													
		CONTROL		CONTROL		INJURY		CONTROL		INJURY		CONTROL	
		PERCENT		PERCENT		PERCENT		PERCENT		PERCENT		PERCENT	
		Apr/12/2010		Apr/26/2010		Jun/04/2010		Jun/04/2010		Jun/17/2010		Jun/17/2010	
		14 DA-A		14 DA-A		67 DA-A		67 DA-A		80 DA-A		80 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code							
1	UNTREATED						0.0 g	0.0 d	0.0 a	0.0 c	0.0 b	0.0 e	
2	SHARPEN	0.0223	lb ai/a	1 oz/a	A		71.7 b-f	56.7 abc	0.0 a	25.0 b	0.0 b	11.7 e	
	MSO	1	% v/v	12.8 oz/a	A								
3	SHARPEN	0.0223	lb ai/a	1 oz/a	A		90.0 ab	75.0 abc	3.3 a	76.7 a	0.0 b	70.0 abc	
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
	MSO	1	% v/v	12.8 oz/a	A								
4	SHARPEN	0.0223	lb ai/a	1 oz/a	A		97.0 a	81.7 ab	0.0 a	63.3 a	0.0 b	51.0 bc	
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
	2,4-D AMINE	0.95	lb ai/a	32 oz/a	A								
	MSO	1	% v/v	12.8 oz/a	A								
5	2,4-D AMINE	0.475	lb ai/a	16 oz/a	A		66.7 b-f	75.0 abc	0.0 a	66.7 a	0.0 b	60.0 abc	
6	2,4-D AMINE	0.475	lb ai/a	16 oz/a	A		86.7 a-d	82.7 ab	0.0 a	86.7 a	0.0 b	78.0 ab	
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
7	2,4-D AMINE	0.475	lb ai/a	16 oz/a	A		88.3 abc	90.0 a	3.3 a	86.7 a	0.0 b	71.7 abc	
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
	CLARITY	0.0625	lb ai/a	2 oz/a	A								
8	2,4-D AMINE	0.95	lb ai/a	32 oz/a	A		63.3 def	63.3 abc	3.3 a	70.0 a	0.0 b	56.7 abc	
9	2,4-D AMINE	0.95	lb ai/a	32 oz/a	A		70.0 b-f	80.0 ab	3.3 a	94.0 a	0.0 b	90.3 a	
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
10	2,4-D AMINE	0.95	lb ai/a	32 oz/a	A		86.7 a-d	84.3 ab	0.0 a	92.7 a	0.0 b	83.3 ab	
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
	CLARITY	0.0625	lb ai/a	2 oz/a	A								
11	VALOR SX	0.064	lb ai/a	2 oz/a	A		51.7 f	40.0 c	0.0 a	3.3 c	0.0 b	0.0 e	
	MSO	1	% v/v	12.8 oz/a	A								
12	VALOR SX	0.064	lb ai/a	2 oz/a	A		60.0 ef	48.3 bc	0.0 a	61.7 a	0.0 b	18.3 de	
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
	MSO	1	% v/v	12.8 oz/a	A								
13	VALOR SX	0.064	lb ai/a	2 oz/a	A		83.3 a-d	78.3 ab	0.0 a	71.7 a	0.0 b	55.0 abc	
	2,4-D AMINE	0.95	lb ai/a	32 oz/a	A								
	MSO	1	% v/v	12.8 oz/a	A								
14	VALOR SX	0.064	lb ai/a	2 oz/a	A		84.3 a-d	78.3 ab	0.0 a	79.3 a	0.0 b	74.0 abc	
	2,4-D AMINE	0.95	lb ai/a	32 oz/a	A								
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
	MSO	1	% v/v	12.8 oz/a	A								
15	VALOR SX	0.064	lb ai/a	2 oz/a	A		70.0 b-f	71.7 abc	0.0 a	69.3 a	0.0 b	71.0 abc	
	SHARPEN	0.0111	lb ai/a	0.5 oz/a	A								
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
	MSO	1	% v/v	12.8 oz/a	A								
16	VALOR SX	0.064	lb ai/a	2 oz/a	A		88.3 abc	80.0 ab	3.3 a	86.0 a	0.0 b	71.7 abc	
	SHARPEN	0.0223	lb ai/a	1.0 oz/a	A								
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
	MSO	1	% v/v	12.8 oz/a	A								
17	FIRSTSHOT	0.0206	lb ai/a	0.66 oz/a	A		70.0 b-f	81.0 ab	0.0 a	83.3 a	6.7 b	68.3 abc	
	2,4-D AMINE	0.475	lb ai/a	16 oz/a	A								
	CLARITY	0.0625	lb ai/a	2 oz/a	A								
	NIS	0.5	% v/v	6.4 oz/a	A								
18	FIRSTSHOT	0.0234	lb ai/a	0.75 oz/a	A		73.3 b-f	75.0 abc	0.0 a	84.0 a	3.3 b	70.0 abc	
	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A								
	NIS	0.5	% v/v	6.4 oz/a	A								
19	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A		70.0 b-f	67.7 abc	0.0 a	59.3 a	0.0 b	38.3 cd	
20	ROUNDUP POWERMAX	0.77	lb ae/a	22 oz/a	A		65.0 c-f	61.7 abc	0.0 a	63.3 a	0.0 b	48.3 bc	
	CLARITY	0.0625	lb ai/a	2 oz/a	A								
21	ROUNDUP POWERMAX	1.13	lb ae/a	32 oz/a	A		75.0 a-e	76.7 ab	0.0 a	73.3 a	0.0 b	56.7 abc	
22	OUTLAW	0.476	lb ai/a	1.5 pt/a	A		90.0 ab	93.3 a	0.0 a	94.0 a	20.0 a	85.0 ab	
LSD (P=.05)							13.50	21.75	4.63	20.49	5.73	21.75	
Standard Deviation							8.18	13.18	2.80	12.42	3.47	13.18	
CV							11.24	18.82	370.17	18.33	254.55	23.59	
Bartlett's X2							27.231	22.591	0.0	60.587	0.897	43.992	
P(Bartlett's X2)							0.027*	0.309	1.00	0.001*	0.639	0.001*	

Texas Agricultural Experiment Station

Weed Code	HORSEWEE		HORSEWEE		HORSEWEE		HORSEWEE	
Crop Code					COTTON		COTTON	
Part Rated								
Rating Data Type	CONTROL		CONTROL		INJURY		INJURY	
Rating Unit	PERCENT		PERCENT		PERCENT		PERCENT	
Rating Date	Apr/12/2010		Apr/26/2010		Jun/04/2010		Jun/04/2010	
Trt-Eval Interval	14 DA-A		14 DA-A		67 DA-A		67 DA-A	
	80 DA-A		80 DA-A					
Trt	Treatment	Rate	Product	Product	Appl			
No.	Name	Rate	Unit	Rate	Rate	Unit	Code	
Replicate F		0.334		0.231		0.193		0.116
Replicate Prob(F)		0.7176		0.7945		0.8255		0.8906
Treatment F		17.985		7.066		0.780		13.465
Treatment Prob(F)		0.0001		0.0001		0.7260		0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	
Crop Code	COTTON
Part Rated	TRUE
Rating Data Type	LINT YIELD
Rating Unit	LB/ACRE
Rating Date	Nov/22/2010
Trt-Eval Interval	238 DA-A

Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code	
1	UNTREATED						591.7 ab
2	SHARPEN	0.0223	lb ai/a	1	oz/a	A	536.7 ab
	MSO	1	% v/v	12.8	oz/a	A	
3	SHARPEN	0.0223	lb ai/a	1	oz/a	A	779.0 ab
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
	MSO	1	% v/v	12.8	oz/a	A	
4	SHARPEN	0.0223	lb ai/a	1	oz/a	A	833.0 ab
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
	2,4-D AMINE	0.95	lb ai/a	32	oz/a	A	
	MSO	1	% v/v	12.8	oz/a	A	
5	2,4-D AMINE	0.475	lb ai/a	16	oz/a	A	765.7 ab
6	2,4-D AMINE	0.475	lb ai/a	16	oz/a	A	1086.0 ab
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
7	2,4-D AMINE	0.475	lb ai/a	16	oz/a	A	1090.0 ab
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
	CLARITY	0.0625	lb ai/a	2	oz/a	A	
8	2,4-D AMINE	0.95	lb ai/a	32	oz/a	A	1042.7 ab
9	2,4-D AMINE	0.95	lb ai/a	32	oz/a	A	1096.0 ab
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
10	2,4-D AMINE	0.95	lb ai/a	32	oz/a	A	1021.3 ab
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
	CLARITY	0.0625	lb ai/a	2	oz/a	A	
11	VALOR SX	0.064	lb ai/a	2	oz/a	A	355.1 b
	MSO	1	% v/v	12.8	oz/a	A	
12	VALOR SX	0.064	lb ai/a	2	oz/a	A	1114.3 ab
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
	MSO	1	% v/v	12.8	oz/a	A	
13	VALOR SX	0.064	lb ai/a	2	oz/a	A	820.3 ab
	2,4-D AMINE	0.95	lb ai/a	32	oz/a	A	
	MSO	1	% v/v	12.8	oz/a	A	
14	VALOR SX	0.064	lb ai/a	2	oz/a	A	870.1 ab
	2,4-D AMINE	0.95	lb ai/a	32	oz/a	A	
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
	MSO	1	% v/v	12.8	oz/a	A	
15	VALOR SX	0.064	lb ai/a	2	oz/a	A	971.3 ab
	SHARPEN	0.0111	lb ai/a	0.5	oz/a	A	
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
	MSO	1	% v/v	12.8	oz/a	A	
16	VALOR SX	0.064	lb ai/a	2	oz/a	A	1089.3 ab
	SHARPEN	0.0223	lb ai/a	1.0	oz/a	A	
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
	MSO	1	% v/v	12.8	oz/a	A	
17	FIRSTSHOT	0.0206	lb ai/a	0.66	oz/a	A	1055.3 ab
	2,4-D AMINE	0.475	lb ai/a	16	oz/a	A	
	CLARITY	0.0625	lb ai/a	2	oz/a	A	
	NIS	0.5	% v/v	6.4	oz/a	A	
18	FIRSTSHOT	0.0234	lb ai/a	0.75	oz/a	A	1029.0 ab
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	
	NIS	0.5	% v/v	6.4	oz/a	A	
19	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	934.0 ab
20	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	1089.0 ab
	CLARITY	0.0625	lb ai/a	2	oz/a	A	
21	ROUNDUP POWERMAX	1.13	lb ae/a	32	oz/a	A	1136.7 ab
22	OUTLAW	0.476	lb ai/a	1.5	pt/a	A	1193.3 a
LSD (P=.05)							431.96
Standard Deviation							261.77
CV							28.09
Bartlett's X2							21.676
P(Bartlett's X2)							0.418
Replicate F							0.172
Replicate Prob(F)							0.8430
Treatment F							2.078
Treatment Prob(F)							0.0244

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

SHARPEN - SOIL MOVEMENT II

Trial ID: 117F-10
Location: AGCARES

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: GOSHI COTTON, SHORT STAPLE
Planting Date: May/13/2010

Variety: ST 5458 B2RF

SITE AND DESIGN

Plot Width, Unit: 26.67 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: FINE SANDY LOAM
Soil Name: AMARILLO

APPLICATION DESCRIPTION

	A	B	C
Application Date:	Apr/01/2010	Apr/13/2010	Apr/27/2010
Time of Day:	9:30AM	10:00AM	4:30PM
Application Method:	BACKPACK	BACKPACK	BACKPACK
Application Timing:	42 DBP	28 DBP	14 DBP
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	65 F	60 F	77 F
% Relative Humidity:	68	73	29
Wind Velocity, Unit:	8 MPH	6 MPH	1 MPH
Soil Temp., Unit:	64 F	62 F	69 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE
% Cloud Cover:	80	100	30

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GOSHI COTTON	GOSHI COTTON	GOSHI COTTON
Stage Scale:	PRE	PRE	PRE

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	30	30	30
Nozzle Type:	TURBO TEE	TURBO TEE	TURBO TEE
Nozzle Size:	110015	110015	110015
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA
Propellant:	CO2	CO2	CO2

Treatment Application Comment

RODWEEDED PRIOR TO APPLICATION
LOW BEDS = 2-3 INCHES OF SOIL MOVED OFF TOP OF BEDS AT PLANTING

Texas Agricultural Experiment Station

SHARPEN - SOIL MOVEMENT II

Trial ID: 117F-10
Location: AGCARES

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	NORM BED	NORM BED	NORM BED	LOW BED	LOW BED	LOW BED	NORM BED
Crop Code	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Rating Data Type	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY
Rating Unit	%	%	%	%	%	%	%
Rating Date	May/31/2010	May/31/2010	May/31/2010	May/31/2010	May/31/2010	May/31/2010	Jun/17/2010
Crop Stage	UNTREAT	TEMIK	THIMET	UNTREAT	TEMIK	THIMET	UNTREAT

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Description						
1	UNTREATED					0.0 c	0.0 c	0.0 c	0.0 b	0.0 b	0.0 c
2	SHARPEN	1 oz/a	A	42 DBP		0.0 c	0.0 c	4.3 c	0.0 b	0.0 b	1.7 bc
3	SHARPEN	2 oz/a	A	42 DBP		0.0 c	0.0 c	3.3 c	0.0 b	1.7 b	3.3 bc
4	SHARPEN	1 oz/a	B	28 DBP		0.0 c	1.7 c	5.0 c	0.0 b	1.7 b	5.0 bc
5	SHARPEN	2 oz/a	B	28 DBP		1.7 c	1.7 c	5.0 c	0.0 b	0.0 b	3.3 bc
6	SHARPEN	1 oz/a	C	14 DBP		30.0 b	31.7 b	36.7 b	16.7 b	13.3 b	13.3 b
7	SHARPEN	2 oz/a	C	14 DBP		76.7 a	68.3 a	73.3 a	58.3 a	51.7 a	60.0 a
LSD (P=.05)						7.18	12.04	7.33	11.70	13.02	8.46
Standard Deviation						4.03	6.77	4.12	6.58	7.32	4.76
CV						26.06	45.86	22.59	61.38	74.98	38.41
Bartlett's X2						2.506	7.126	6.636	1.746	8.95	3.875
P(Bartlett's X2)						0.286	0.068	0.249	0.186	0.03*	0.568
Replicate F						2.707	3.455	8.805	0.743	1.622	3.211
Replicate Prob(F)						0.1071	0.0653	0.0044	0.4963	0.2379	0.0764
Treatment F						156.854	45.299	131.764	33.257	20.400	60.895
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code				NORM BED	NORM BED	LOW BED	LOW BED	LOW BED	NORM BED	NORM BED	NORM BED
Crop Code				COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Rating Data Type				INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY
Rating Unit				%	%	%	%	%	%	%	%
Rating Date				Jun/17/2010	Jun/17/2010	Jun/17/2010	Jun/17/2010	Jun/17/2010	Jul/06/2010	Jul/06/2010	Jul/06/2010
Crop Stage				TEMIK	THIMET	UNTREAT	TEMIK	THIMET	UNTREATE	TEMIK	THIMET
Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Description						
1	UNTREATED					0.0 c	0.0 c	0.0 c	0.0 c	0.0 c	0.0 c
2	SHARPEN	1 oz/a	A	42 DBP		0.0 c	0.0 c	0.0 c	0.0 c	0.0 c	0.0 c
3	SHARPEN	2 oz/a	A	42 DBP		2.7 c	2.7 c	1.7 c	1.7 c	1.7 c	0.0 c
4	SHARPEN	1 oz/a	B	28 DBP		1.7 c	1.7 c	0.0 c	0.0 c	0.0 c	0.0 c
5	SHARPEN	2 oz/a	B	28 DBP		5.0 c	5.0 c	1.7 c	1.7 c	3.3 c	1.7 c
6	SHARPEN	1 oz/a	C	14 DBP		33.3 b	33.3 b	20.0 b	16.7 b	25.0 b	16.7 b
7	SHARPEN	2 oz/a	C	14 DBP		71.7 a	70.0 a	61.7 a	56.7 a	81.7 a	73.3 a
LSD (P=.05)						7.92	6.55	7.13	6.44	8.75	6.82
Standard Deviation						4.45	3.68	4.01	3.62	4.92	3.83
CV						27.27	22.88	33.01	33.04	31.31	29.26
Bartlett's X2						6.131	4.348	4.034	1.639	3.888	4.256
P(Bartlett's X2)						0.19	0.361	0.258	0.651	0.143	0.119
Replicate F						5.664	6.755	0.222	0.364	1.918	2.514
Replicate Prob(F)						0.0185	0.0108	0.8040	0.7025	0.1893	0.1225
Treatment F						111.294	156.029	98.815	101.364	115.197	151.811
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	LOW BED	LOW BED	LOW BED
Crop Code	COTTON	COTTON	COTTON
Rating Data Type	INJURY	INJURY	INJURY
Rating Unit	%	%	%
Rating Date	Jul/06/2010	Jul/06/2010	Jul/06/2010
Crop Stage	UNTREATE	TEMIK	THIMET

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description			
1	UNTREATED					0.0	c	0.0
2	SHARPEN	1 oz/a	A	42 DBP		0.0	c	0.0
3	SHARPEN	2 oz/a	A	42 DBP		0.0	c	0.0
4	SHARPEN	1 oz/a	B	28 DBP		0.0	c	0.0
5	SHARPEN	2 oz/a	B	28 DBP		1.7	c	0.0
6	SHARPEN	1 oz/a	C	14 DBP		13.3	b	10.0
7	SHARPEN	2 oz/a	C	14 DBP		56.7	a	46.7
LSD (P=.05)						5.93		4.75
Standard Deviation						3.33		2.67
CV						32.56		33.01
Bartlett's X2						1.555		0.04
P(Bartlett's X2)						0.46		0.842
Replicate F						3.000		2.167
Replicate Prob(F)						0.0878		0.1573
Treatment F						119.607		127.333
Treatment Prob(F)						0.0001		0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

HERBICIDE-FUNGICIDE STUDY FOR BROADLEAF WEED CONTROL II

Trial ID: 120F-10
Location: HALFWAY

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: HALFWAY
State/Prov.: TX
Country: USA
Initiation Date: May/10/2010
Conducted Under GLP (Y/N): N
Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
PALMER AMARANTH
KOCHIA
RUSSIAN THISTLE
JOHNSONGRASS
SPANISH PEANUT
Variety: OLIN
Planting Date: May/10/2010
Planting Method: 4 ROW
Rate: 68000 PLANT/ACRE
Row Spacing: 40 IN
Spacing Within Row: 5.2 SD/FT
Soil Moisture: DRY

SITE AND DESIGN

Plot Width, Unit: 13.33 FT
Plot Length, Unit: 30 FT
Study Design: FACTORIAL
Reps: 3

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: OLTON

APPLICATION DESCRIPTION

A
Application Date: Jun/14/2010
Time of Day: 3:30 PM
Application Method: SPRAY
Application Timing: A-POST
Applic. Placement: BROADCAST
Air Temp., Unit: 84 F
% Relative Humidity: 54
Wind Velocity, Unit: 4 MPH
Soil Temp., Unit: 86 F
Soil Moisture: ADEQUATE
% Cloud Cover: 80

CROP STAGE AT EACH APPLICATION

A
PEANUT
Height, Unit: 4 IN

WEED STAGE AT EACH APPLICATION

A
PALMER AM
Stage Scale: 1"-8"
KOCHIA
Stage Scale: 9"-15"
RUSS THIS
Stage Scale: 2"
JOHNSONGR
Stage Scale: 4"-10"

APPLICATION EQUIPMENT

A
Appl. Equipment: BACKPACK
Operating Pressure: 28 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 28 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

Treatment Application Comment

TRIAL AREA HAD SONALAN @ 2 PT/ACRE APPLIED PPI BEFORE PLANTING

Texas Agricultural Experiment Station

HERBICIDE-FUNGICIDE STUDY FOR BROADLEAF WEED CONTROL II

Trial ID: 120F-10
Location: HALFWAY

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code	PIGWEEED		PIGWEEED		PIGWEEED	
Crop Code	PEANUT	CONTROL	PEANUT	CONTROL	PEANUT	PEANUT
Rating Data Type	INJURY	PERCENT	INJURY	PERCENT	INJURY	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	LB/ACRE
Rating Date	Jun/28/2010	Jun/28/2010	Jul/12/2010	Jul/12/2010	Aug/11/2010	Oct/14/2010
Trt-Eval Interval	14 DA-A	14 DA-A	28 DA-A	28 DA-A	58 DA-A	122 DA-A

Trt No.	Treatment Name	Rate	Product	Product	Appl
		Rate	Unit	Rate	Unit
					Code

TABLE OF R MEANS

Replicate 1	6.7	40.0	6.4	35.3	5.8	3411.8
Replicate 2	6.1	41.4	3.4	30.5	5.5	3985.8
Replicate 3	6.4	32.2	7.8	19.2	7.2	3178.5

TABLE OF A MEANS

1 NO HERBICIDE				0.0	0.0	0.0	0.0	0.0	3107.0
2 COBRA	0.2 lb ai/a	12.8 oz/a	A	18.9	80.6	11.7	18.5	4.3	3554.7
2 COC	1 % v/v	12.8 oz/a	A						
3 ULTRA BLAZER	0.375 lb ai/a	24 oz/a	A	19.4	17.8	10.6	13.3	5.6	3696.6
3 COC	1 % v/v	12.8 oz/a	A						
4 PURSUIT	0.063 lb ai/a	4.03 oz/a	A	0.0	31.7	3.9	56.7	6.7	3822.3
4 COC	1 % v/v	12.8 oz/a	A						
5 CADRE	0.063 lb ai/a	4.03 oz/a	A	0.0	57.8	7.9	74.8	11.0	3678.3
5 COC	1 % v/v	12.8 oz/a	A						
6 2,4 -DB	0.4 lb ai/a	25.6 oz/a	A	0.0	39.4	1.1	6.7	9.4	3293.2
6 COC	1 % v/v	12.8 oz/a	A						

TABLE OF B MEANS

1 NO FUNGICIDE				6.4	34.7	4.7	30.0	5.6	3452.1
2 ENDURA	0.438 lb ai/a	10 oz/a	A	6.4	36.1	6.2	27.8	5.7	3593.3
2 COC	1 % v/v	12.8 oz/a	A						
3 OMEGA	1.5 pt/a	24 oz/a	A	6.4	42.8	6.7	27.2	7.2	3530.6
3 COC	1 % v/v	12.8 oz/a	A						

TABLE OF AB MEANS

1 NO HERBICIDE				0.0	0.0	0.0	0.0	0.0	2468.0
1 NO FUNGICIDE									
2 COBRA	0.2 lb ai/a	12.8 oz/a	A	20.0	83.3	10.0	26.7	5.0	3646.3
2 COC	1 % v/v	12.8 oz/a	A						
1 NO FUNGICIDE									
3 ULTRA BLAZER	0.375 lb ai/a	24 oz/a	A	18.3	10.0	10.0	13.3	5.0	3941.0
3 COC	1 % v/v	12.8 oz/a	A						
1 NO FUNGICIDE									
4 PURSUIT	0.063 lb ai/a	4.03 oz/a	A	0.0	26.7	0.0	53.3	5.0	3517.7
4 COC	1 % v/v	12.8 oz/a	A						
1 NO FUNGICIDE									
5 CADRE	0.063 lb ai/a	4.03 oz/a	A	0.0	53.3	8.3	76.7	10.0	3728.7
5 COC	1 % v/v	12.8 oz/a	A						
1 NO FUNGICIDE									
6 2,4 -DB	0.4 lb ai/a	25.6 oz/a	A	0.0	35.0	0.0	10.0	8.3	3411.2
6 COC	1 % v/v	12.8 oz/a	A						
1 NO FUNGICIDE									
1 NO HERBICIDE				0.0	0.0	0.0	0.0	0.0	3645.0
2 ENDURA	0.438 lb ai/a	10 oz/a	A						
2 COC	1 % v/v	12.8 oz/a	A						
2 COBRA	0.2 lb ai/a	12.8 oz/a	A	20.0	88.3	13.5	15.5	3.0	3346.6
2 COC	1 % v/v	12.8 oz/a	A						
2 ENDURA	0.438 lb ai/a	10 oz/a	A						
2 COC	1 % v/v	12.8 oz/a	A						
3 ULTRA BLAZER	0.375 lb ai/a	24 oz/a	A	18.3	10.0	11.7	10.0	5.0	3434.7
3 COC	1 % v/v	12.8 oz/a	A						
2 ENDURA	0.438 lb ai/a	10 oz/a	A						
2 COC	1 % v/v	12.8 oz/a	A						
4 PURSUIT	0.063 lb ai/a	4.03 oz/a	A	0.0	28.3	5.0	70.0	6.7	3978.7
4 COC	1 % v/v	12.8 oz/a	A						
2 ENDURA	0.438 lb ai/a	10 oz/a	A						
2 COC	1 % v/v	12.8 oz/a	A						
5 CADRE	0.063 lb ai/a	4.03 oz/a	A	0.0	60.0	3.8	71.1	9.7	3841.7
5 COC	1 % v/v	12.8 oz/a	A						
2 ENDURA	0.438 lb ai/a	10 oz/a	A						
2 COC	1 % v/v	12.8 oz/a	A						

Texas Agricultural Experiment Station

Weed Code
Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

						PIGWEEED		PIGWEEED		PIGWEEED	
						PEANUT	PEANUT	PEANUT	PEANUT	PEANUT	PEANUT
						INJURY	CONTROL	INJURY	CONTROL	INJURY	YIELD
						PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	LB/ACRE
						Jun/28/2010	Jun/28/2010	Jul/12/2010	Jul/12/2010	Aug/11/2010	Oct/14/2010
						14 DA-A	14 DA-A	28 DA-A	28 DA-A	58 DA-A	122 DA-A
Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code					
6	2,4 -DB	0.4	lb ai/a	25.6	oz/a	A	0.0	30.0	3.3	0.0	3313.3
6	COC	1	% v/v	12.8	oz/a	A					
2	ENDURA	0.438	lb ai/a	10	oz/a	A					
2	COC	1	% v/v	12.8	oz/a	A					
1	NO HERBICIDE						0.0	0.0	0.0	0.0	3208.0
3	OMEGA	1.5	pt/a	24	oz/a	A					
3	COC	1	% v/v	12.8	oz/a	A					
2	COBRA	0.2	lb ai/a	12.8	oz/a	A	16.7	70.0	11.7	13.3	3671.2
2	COC	1	% v/v	12.8	oz/a	A					
3	OMEGA	1.5	pt/a	24	oz/a	A					
3	COC	1	% v/v	12.8	oz/a	A					
3	ULTRA BLAZER	0.375	lb ai/a	24	oz/a	A	21.7	33.3	10.0	16.7	3714.0
3	COC	1	% v/v	12.8	oz/a	A					
3	OMEGA	1.5	pt/a	24	oz/a	A					
3	COC	1	% v/v	12.8	oz/a	A					
4	PURSUIT	0.063	lb ai/a	4.03	oz/a	A	0.0	40.0	6.7	46.7	3970.7
4	COC	1	% v/v	12.8	oz/a	A					
3	OMEGA	1.5	pt/a	24	oz/a	A					
3	COC	1	% v/v	12.8	oz/a	A					
5	CADRE	0.063	lb ai/a	4.03	oz/a	A	0.0	60.0	11.7	76.7	3464.7
5	COC	1	% v/v	12.8	oz/a	A					
3	OMEGA	1.5	pt/a	24	oz/a	A					
3	COC	1	% v/v	12.8	oz/a	A					
6	2,4 -DB	0.4	lb ai/a	25.6	oz/a	A	0.0	53.3	0.0	10.0	3155.0
6	COC	1	% v/v	12.8	oz/a	A					
3	OMEGA	1.5	pt/a	24	oz/a	A					
3	COC	1	% v/v	12.8	oz/a	A					

Texas Agricultural Experiment Station

HERBICIDE-FUNGICIDE STUDY FOR BROADLEAF WEED CONTROL II

Trial ID: 120F-10
Location: HALFWAY

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jun/28/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	4520.833333				
R	2	2.777778	1.388889	0.556	0.5824	1.1
A	5	4409.722222	881.944444	1058.333	0.0001	1.0
RA	10	8.333333	0.833333	0.333	0.9612	2.7
B	2	0.000000	0.000000	0.000	1.0000	1.1
RB	4	5.555556	1.388889	0.556	0.6974	1.9
AB	10	44.444444	4.444444	1.778	0.1312	2.7
RAB	20	50.000000	2.500000			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jun/28/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	4520.833333				
R	2	2.777778	1.388889	0.739	0.4850	0.9
A	5	4409.722222	881.944444	469.348	0.0001	1.3
B	2	0.000000	0.000000	0.000	1.0000	0.9
AB	10	44.444444	4.444444	2.365	0.0300	2.3
ERROR	34	63.888889	1.879085			

COMPLETE FACTORIAL AOV For PIGWEED CONTROL PERCENT Jun/28/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	45030.092593				
R	2	878.703704	439.351852	4.205	0.0299	7.1
A	5	36874.537037	7374.907407	38.274	0.0001	14.6
RA	10	1926.851852	192.685185	1.844	0.1172	17.4
B	2	667.592593	333.796296	4.156	0.1056	8.3
RB	4	321.296296	80.324074	0.769	0.5581	12.3
AB	10	2271.296296	227.129630	2.174	0.0669	17.4
RAB	20	2089.814815	104.490741			

FACTORIAL/POOLED ERROR AOV For PIGWEED CONTROL PERCENT Jun/28/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	45030.092593				
R	2	878.703704	439.351852	3.444	0.0435	7.7
A	5	36874.537037	7374.907407	57.803	0.0001	10.9
B	2	667.592593	333.796296	2.616	0.0877	7.7
AB	10	2271.296296	227.129630	1.780	0.1026	18.8
ERROR	34	4337.962963	127.587146			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jul/12/2010 28 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	2431.406124				
R	2	181.168496	90.584248	3.539	0.0483	3.5
A	5	1091.897191	218.379438	7.226	0.0042	5.8
RA	10	302.193583	30.219358	1.181	0.3587	8.6
B	2	37.172336	18.586168	0.564	0.6087	5.3
RB	4	131.918520	32.979630	1.289	0.3079	6.1
AB	10	175.150774	17.515077	0.684	0.7269	8.6
RAB	20	511.905224	25.595261			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jul/12/2010 28 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	2431.406124				
R	2	181.168496	90.584248	3.256	0.0509	3.6
A	5	1091.897191	218.379438	7.849	0.0001	5.1
B	2	37.172336	18.586168	0.668	0.5193	3.6
AB	10	175.150774	17.515077	0.629	0.7782	8.8
ERROR	34	946.017327	27.824039			

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COMPLETE FACTORIAL AOV For PIGWEED CONTROL PERCENT Jul/12/2010 28 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	49522.422900				
R	2	2436.466133	1218.233067	13.914	0.0002	6.5
A	5	41004.551723	8200.910345	36.433	0.0001	15.8
RA	10	2250.956183	225.095618	2.571	0.0347	15.9
B	2	78.260791	39.130395	0.272	0.7749	11.1
RB	4	575.327764	143.831941	1.643	0.2027	11.3
AB	10	1425.741665	142.574167	1.628	0.1695	15.9
RAB	20	1751.118641	87.555932			

FACTORIAL/POOLED ERROR AOV For PIGWEED CONTROL PERCENT Jul/12/2010 28 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	49522.422900				
R	2	2436.466133	1218.233067	9.049	0.0007	7.9
A	5	41004.551723	8200.910345	60.915	0.0001	11.2
B	2	78.260791	39.130395	0.291	0.7496	7.9
AB	10	1425.741665	142.574167	1.059	0.4188	19.3
ERROR	34	4577.402588	134.629488			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Aug/11/2010 58 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	943.500000				
R	2	28.000000	14.000000	5.261	0.0146	1.1
A	5	685.055556	137.011111	18.913	0.0001	2.8
RA	10	72.444444	7.244444	2.722	0.0271	2.8
B	2	30.333333	15.166667	1.368	0.3525	3.1
RB	4	44.333333	11.083333	4.165	0.0129	2.0
AB	10	30.111111	3.011111	1.132	0.3880	2.8
RAB	20	53.222222	2.661111			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Aug/11/2010 58 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	943.500000				
R	2	28.000000	14.000000	2.800	0.0749	1.5
A	5	685.055556	137.011111	27.402	0.0001	2.2
B	2	30.333333	15.166667	3.033	0.0614	1.5
AB	10	30.111111	3.011111	0.602	0.8007	3.7
ERROR	34	170.000000	5.000000			

COMPLETE FACTORIAL AOV For PEANUT YIELD LB/ACRE Oct/14/2010 122 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	21722532.413434				
R	2	6213362.967289	3106681.483645	18.237	0.0001	287.0
A	5	3336300.271294	667260.054259	1.398	0.3043	725.7
RA	10	4773537.588087	477353.758809	2.802	0.0239	703.0
B	2	180118.650598	90059.325299	0.662	0.5643	341.2
RB	4	543910.402154	135977.600538	0.798	0.5404	497.1
AB	10	3268321.328885	326832.132889	1.919	0.1031	703.0
RAB	20	3406981.205127	170349.060256			

FACTORIAL/POOLED ERROR AOV For PEANUT YIELD LB/ACRE Oct/14/2010 122 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	21722532.413434				
R	2	6213362.967289	3106681.483645	12.107	0.0001	344.8
A	5	3336300.271294	667260.054259	2.600	0.0427	487.6
B	2	180118.650598	90059.325299	0.351	0.7065	344.8
AB	10	3268321.328885	326832.132889	1.274	0.2835	844.6
ERROR	34	8724429.195367	256600.858687			

Texas Agricultural Experiment Station

SHARPEN - IN-FURROW INSECTICIDES

Trial ID: 121F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING **Title:** Sharpen-In Furrow
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N

Crop 1: GOSHI COTTON, SHORT STAPLE **Variety:** FM 1740 B2RF
Planting Date: May/11/2010

SITE AND DESIGN

Plot Width, Unit: 26.67 FT **Plot Length, Unit:** 30 FT **Reps:** 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: PULLMAN

APPLICATION DESCRIPTION

	A	B	C
Application Date:	Mar/31/2010	Apr/14/2010	Apr/28/2010
Time of Day:	10:15AM	10:30AM	1:30PM
Application Method:	BACKPACK	BACKPACK	BACKPACK
Application Timing:	42 DBP	28 DBP	14 DBP
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	76 F	64 F	60 F
% Relative Humidity:	26	79	27
Wind Velocity, Unit:	10 MPH	6 MPH	10 MPH
Soil Temp., Unit:	50 F	51 F	60 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE
% Cloud Cover:	5	100	40

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GOSHI COTTON	GOSHI COTTON	GOSHI COTTON
Stage Scale:	PRE	PRE	PRE

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	30	30	30
Nozzle Type:	TURBO TEE	TURBO TEE	TURBO TEE
Nozzle Size:	110015	110015	110015
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA
Propellant:	C02	C02	C02

Treatment Application Comment
RODWEEDED PRIOR TO APPLICATION

Texas Agricultural Experiment Station

SHARPEN - IN-FURROW INSECTICIDES

Trial ID: 121F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Rating Data Type	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY
Rating Unit	%	%	%	%	%	%	%	%
Rating Date	Jun/02/2010	Jun/02/2010	Jun/02/2010	Jun/09/2010	Jun/09/2010	Jun/09/2010	Jun/09/2010	Jul/21/2010
Crop Stage	UNTREAT	TEMIK	THIMET	UNTREAT	TEMIK	THIMET	UNTREAT	TEMIK
Trt Treatment	Rate	Appl	Appl					
No. Name	Rate	Unit	Code	Description				
1 UNTREATED					0.0 b	0.0 b	0.0 b	0.0 b
2 SHARPEN	1 oz/a	A	42 DBP		0.0 b	0.0 b	0.0 b	0.0 b
3 SHARPEN	1 oz/a	B	28 DBP		8.3 b	5.0 b	8.3 b	0.0 b
4 SHARPEN	1 oz/a	C	14 DBP		46.7 a	40.0 a	43.3 a	53.3 a
LSD (P=.05)					22.83	23.95	25.52	15.26
Standard Deviation					11.43	11.99	12.77	7.64
CV					83.1	106.57	98.9	57.28
Bartlett's X2					2.498	3.297	2.914	0.0
P(Bartlett's X2)					0.114	0.069	0.088	.
Replicate F					0.574	0.826	0.626	1.000
Replicate Prob(F)					0.5912	0.4821	0.5666	0.4219
Treatment F					11.420	7.783	7.843	36.571
Treatment Prob(F)					0.0068	0.0172	0.0169	0.0003

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Crop Code	COTTON
Rating Data Type	INJURY
Rating Unit	%
Rating Date	Jul/21/2010
Crop Stage	THIMET

Trt	Treatment	Rate	Appl	Appl
No.	Name	Rate	Unit	Code Description

1	UNTREATED			0.0 b
2	SHARPEN	1 oz/a	A	42 DBP 0.0 b
3	SHARPEN	1 oz/a	B	28 DBP 1.7 b
4	SHARPEN	1 oz/a	C	14 DBP 21.7 a
LSD (P=.05)				4.41
Standard Deviation				2.20
CV				37.8
Bartlett's X2				0.0
P(Bartlett's X2)				.

Replicate F	0.429
Replicate Prob(F)	0.6699
Treatment F	69.143
Treatment Prob(F)	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

SHARPEN - SOIL MOVEMENT I

Trial ID: 122F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 1740 B2RF

Planting Date: May/11/2010

SITE AND DESIGN

Plot Width, Unit: 26.67 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: LOAM
Soil Name: ACUFF

APPLICATION DESCRIPTION

	A	B	C
Application Date:	Mar/31/2010	Apr/14/2010	Apr/28/2010
Time of Day:	10:00AM	10:45AM	1:15PM
Application Method:	BACKPACK	BACKPACK	BACKPACK
Application Timing:	42 DBP	28 DBP	14 DBP
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	76 F	64 F	82 F
% Relative Humidity:	26	77	27
Wind Velocity, Unit:	10 MPH	7 MPH	9 MPH
Soil Temp., Unit:	50 F	51 F	60 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE
% Cloud Cover:	5	100	40

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GOSHI COTTON	GOSHI COTTON	GOSHI COTTON
Stage Scale:	PRE	PRE	PRE

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	30	30	30
Nozzle Type:	TURBO TEE	TURBO TEE	TURBO TEE
Nozzle Size:	110015	110015	110015
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA
Propellant:	CO2	CO2	CO2

Treatment Application Comment

RODWEEDED PRIOR TO APPLICATION
LOW BEDS = 2-3 INCHES OF SOIL MOVED OFF TOP OF BEDS AT PLANTING

Texas Agricultural Experiment Station

SHARPEN - SOIL MOVEMENT I

Trial ID: 122F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	NORM BED	NORM BED	NORM BED	LOW BED	LOW BED	LOW BED	NORM BED	NORM BED
Crop Code	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Rating Data Type	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY
Rating Unit	%	%	%	%	%	%	%	%
Rating Date	Jun/02/2010	Jun/02/2010	Jun/02/2010	Jun/02/2010	Jun/02/2010	Jun/02/2010	Jun/09/2010	Jun/09/2010
Crop Stage	UNTREAT	TEMIK	THIMET	UNTREAT	TEMIK	THIMET	UNTREAT	TEMIK

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Description							
1	UNTREATED					0.0 d	0.0 d	0.0 d	0.0 b	0.0 b	0.0 c	0.0 c
2	SHARPEN	1 oz/a	A	42	DBP	0.0 d	0.0 d	0.0 d	0.0 b	0.0 b	0.0 c	0.0 c
3	SHARPEN	2 oz/a	A	42	DBP	31.7 bc	28.3 bc	26.7 bc	20.0 b	15.0 b	15.0 bc	23.3 b
4	SHARPEN	1 oz/a	B	28	DBP	12.3 cd	12.3 cd	12.3 cd	10.0 b	10.0 b	10.0 bc	7.3 c
5	SHARPEN	2 oz/a	B	28	DBP	41.7 b	40.0 b	40.0 b	22.7 b	20.0 b	22.7 b	22.7 b
6	SHARPEN	1 oz/a	C	14	DBP	45.0 b	40.0 b	35.0 b	12.7 b	10.0 b	10.0 bc	15.0 bc
7	SHARPEN	2 oz/a	C	14	DBP	81.7 a	80.0 a	75.0 a	45.0 a	43.3 a	40.0 a	86.7 a
LSD (P=.05)						21.60	16.99	17.48	17.97	14.91	11.44	11.66
Standard Deviation						12.14	9.55	9.83	10.10	8.38	6.43	6.56
CV						40.02	33.32	36.39	64.07	59.66	46.11	29.61
Bartlett's X2						5.808	4.341	5.945	10.513	3.048	5.384	8.389
P(Bartlett's X2)						0.214	0.362	0.203	0.015*	0.081	0.068	0.078
Replicate F						0.152	0.190	0.108	0.253	0.525	0.194	1.080
Replicate Prob(F)						0.8610	0.8294	0.8985	0.7808	0.6043	0.8258	0.3704
Treatment F						17.459	26.323	21.806	7.159	9.407	14.211	63.000
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0020	0.0006	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code					NORM BED	LOW BED	LOW BED	LOW BED	NORM BED	NORM BED	NORM BED	LOW BED
Crop Code					COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Rating Data Type					INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY
Rating Unit					%	%	%	%	%	%	%	%
Rating Date					Jun/09/2010	Jun/09/2010	Jun/09/2010	Jun/09/2010	Jul/21/2010	Jul/21/2010	Jul/21/2010	Jul/21/2010
Crop Stage					THIMET	UNTREAT	TEMIK	THIMET	UNTREAT	TEMIK	THIMET	UNTREAT
Trt No.	Treatment Name	Rate	Appl Unit	Appl Code Description								
1	UNTREATED				0.0 c	0.0 b	0.0 b	0.0 b	0.0 b	0.0 c	0.0 b	0.0 c
2	SHARPEN	1 oz/a	A	42 DBP	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b	0.0 c	0.0 b	0.0 c
3	SHARPEN	2 oz/a	A	42 DBP	18.3 b	11.7 b	11.7 ab	11.7 b	0.0 b	0.0 c	0.0 b	0.0 c
4	SHARPEN	1 oz/a	B	28 DBP	7.3 bc	5.0 b	5.0 b	5.0 b	0.0 b	0.0 c	0.0 b	0.0 c
5	SHARPEN	2 oz/a	B	28 DBP	22.3 b	15.0 b	15.0 ab	15.0 b	30.0 b	21.7 b	30.0 a	15.0 b
6	SHARPEN	1 oz/a	C	14 DBP	15.0 bc	5.0 b	5.0 b	5.0 b	6.7 b	3.3 c	3.3 b	3.3 c
7	SHARPEN	2 oz/a	C	14 DBP	80.0 a	30.0 a	23.3 a	26.7 a	56.7 a	45.0 a	45.0 a	36.7 a
LSD (P=.05)					11.37	13.38	11.94	10.12	19.48	12.02	18.16	8.31
Standard Deviation					6.39	7.52	6.71	5.69	10.95	6.76	10.21	4.67
CV					31.28	78.96	78.3	62.86	82.1	67.55	91.2	59.46
Bartlett's X2					5.885	2.938	2.332	1.244	3.851	3.193	6.125	0.44
P(Bartlett's X2)					0.208	0.23	0.312	0.537	0.146	0.203	0.047*	0.803
Replicate F					0.024	0.779	1.031	0.699	1.232	0.939	1.040	0.491
Replicate Prob(F)					0.9759	0.4808	0.3862	0.5161	0.3262	0.4179	0.3832	0.6238
Treatment F					56.233	5.979	4.899	8.491	12.146	19.783	9.886	26.309
Treatment Prob(F)					0.0001	0.0043	0.0094	0.0009	0.0002	0.0001	0.0005	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	LOW BED	LOW BED
Crop Code	COTTON	COTTON
Rating Data Type	INJURY	INJURY
Rating Unit	%	%
Rating Date	Jul/21/2010	Jul/21/2010
Crop Stage	TEMIK	THIMET

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description		
1	UNTREATED					0.0 c	0.0 c
2	SHARPEN	1 oz/a	A	42 DBP		0.0 c	0.0 c
3	SHARPEN	2 oz/a	A	42 DBP		0.0 c	0.0 c
4	SHARPEN	1 oz/a	B	28 DBP		0.0 c	0.0 c
5	SHARPEN	2 oz/a	B	28 DBP		11.7 b	11.7 b
6	SHARPEN	1 oz/a	C	14 DBP		1.7 c	1.7 c
7	SHARPEN	2 oz/a	C	14 DBP		30.0 a	30.0 a
LSD (P=.05)						6.63	6.63
Standard Deviation						3.73	3.73
CV						60.2	60.2
Bartlett's X2						1.605	1.605
P(Bartlett's X2)						0.448	0.448
Replicate F						0.600	0.600
Replicate Prob(F)						0.5645	0.5645
Treatment F						27.743	27.743
Treatment Prob(F)						0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

BAYER - SORGHUM SEED TREATMENTS

Trial ID: 124F-10
Location: AGCARES

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: SORGB SORGHUM
Planting Date: Apr/30/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 30 FT **Reps:** 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: FINE SANDY LOAM
Soil Name: AMARILLO

CROP STAGE AT EACH APPLICATION

A
Crop 1 Code, Stage: SORGB

Texas Agricultural Experiment Station

BAYER - SORGHUM SEED TREATMENTS

Trial ID: 124F-10
Location: AGCARES

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code	SORGHUM	SORGHUM	SORGHUM	SORGHUM	SORGHUM
Part Rated		PLANTS			GRAIN
Rating Data Type	VIGOR	COUNT	VIGOR	YIELD	MOISTURE
Rating Unit	1-9	2RX13FT	1-9	LBS/ACRE	%
Rating Date	May/21/2010	May/25/2010	Jun/18/2010	Aug/31/2010	Sep/01/2010

Trt No.	Treatment Name	Rate	Unit		
1	SEED TREATMENT 1	9.0 a	94.3 a	9.0 a	6388.5 a
2	SEED TREATMENT 2	9.0 a	92.5 a	9.0 a	6388.5 a
3	SEED TREATMENT 3	9.0 a	96.8 a	9.0 a	6764.3 a
4	SEED TREATMENT 4	9.0 a	93.0 a	9.0 a	6127.3 a
	LSD (P=.05)	0.00	8.83	0.00	911.99
	Standard Deviation	0.00	5.52	0.00	570.18
	CV	0.0	5.86	0.0	8.89
	Bartlett's X2	0.0	0.231	0.0	2.533
	P(Bartlett's X2)	.	0.973	.	0.469
	Replicate F	0.000	0.331	0.000	0.112
	Replicate Prob(F)	1.0000	0.8034	1.0000	0.9507
	Treatment F	0.000	0.473	0.000	0.846
	Treatment Prob(F)	1.0000	0.7086	1.0000	0.5029

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

HERBICIDE-FUNGICIDE STUDY FOR GRASS WEED CONTROL - II

Trial ID: 126F-10
Location: HALFWAY

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: HALFWAY
State/Prov.: TX

Initiation Date: May/10/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
PALMER AMARANTH
KOCHIA
RUSSIAN THISTLE
JOHNSONGRASS

SPANISH PEANUT

Variety: OLIN

Planting Date: May/10/2010

Planting Method: 4 ROW

Rate: 68000 PLANT/ACRE

Row Spacing: 40 IN Spacing Within Row: 5.2 SD/FT

Soil Moisture: DRY

SITE AND DESIGN

Plot Width, Unit: 13.33 FT

Plot Length, Unit: 30 FT

Reps: 3

Study Design: FACTORIAL

SOIL DESCRIPTION

Texture: CLAY LOAM

Soil Name: OLTON

APPLICATION DESCRIPTION

A

Application Date: Jun/14/2010

Time of Day: 2:00 PM

Application Method: SPRAY

Application Timing: A-POST

Applic. Placement: BROADCAST

Air Temp., Unit: 87.9 F

% Relative Humidity: 50

Wind Velocity, Unit: 1 MPH

Soil Temp., Unit: 85.8 F

Soil Moisture: ADEQUATE

% Cloud Cover: 80

CROP STAGE AT EACH APPLICATION

A

PEANUT

Height, Unit: 4 IN

WEED STAGE AT EACH APPLICATION

A

Stage Scale: PALMER AM
2"-5"

Stage Scale: KOCHIA
9"-15"

Stage Scale: RUSS THIS
2"

Stage Scale: JOHNSONGR
4"-10"

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK

Operating Pressure: 28 PSI

Nozzle Type: TURBOTEE

Nozzle Size: 110015

Nozzle Spacing, Unit: 19 IN

Boom Height, Unit: 22 IN

Ground Speed, Unit: 3 MPH

Carrier: WATER

Spray Volume, Unit: 10 GPA

Propellant: CO2

Texas Agricultural Experiment Station

Treatment Application Comment

TRIAL AREA HAD SONALAN @ 2 PT/ACRE APPLIED PPI BEFORE PLANTING

Texas Agricultural Experiment Station

HERBICIDE-FUNGICIDE STUDY FOR GRASS WEED CONTROL - II

Trial ID: 126F-10
Location: HALFWAY

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	PEANUT	PEANUT	PEANUT	PEANUT
Rating Data Type	INJURY	INJURY	INJURY	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	LB/ACRE
Rating Date	Jun/28/2010	Jul/12/2010	Aug/11/2010	Oct/14/2010
Trt-Eval Interval	14 DA-A	28 DA-A	58 DA-A	122 DA-A

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code
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TABLE OF R MEANS

Replicate 1	1.7	0.0	0.6	3491.2
Replicate 2	1.7	0.0	0.0	3814.9
Replicate 3	1.7	0.0	0.0	3844.4

TABLE OF A MEANS

1 NO HERBICIDE	0.0	0.0	0.0	3507.6
2 SELECT	0.125 lb ai/a	8 oz/a	A	1.7
2 COC	1 % v/v	12.8 oz/a	A	0.6
3 POAST PLUS	0.185 lb ai/a	23.7 oz/a	A	3.3
3 COC	1 % v/v	12.8 oz/a	A	0.0

TABLE OF B MEANS

1 NO FUNGICIDE	0.0	0.0	0.0	3858.9
2 ENDURA	0.438 lb ai/a	10 oz/a	A	0.0
2 COC	1 % v/v	12.8 oz/a	A	0.6
3 OMEGA	1.5 pt/a	24 oz/a	A	5.0
3 COC	1 % v/v	12.8 oz/a	A	0.0

TABLE OF AB MEANS

1 NO HERBICIDE	0.0	0.0	0.0	3701.7
1 NO FUNGICIDE				
2 SELECT	0.125 lb ai/a	8 oz/a	A	0.0
2 COC	1 % v/v	12.8 oz/a	A	0.0
1 NO FUNGICIDE				
3 POAST PLUS	0.185 lb ai/a	23.7 oz/a	A	0.0
3 COC	1 % v/v	12.8 oz/a	A	0.0
1 NO FUNGICIDE				
1 NO HERBICIDE				
2 ENDURA	0.438 lb ai/a	10 oz/a	A	0.0
2 COC	1 % v/v	12.8 oz/a	A	0.0
2 SELECT	0.125 lb ai/a	8 oz/a	A	0.0
2 COC	1 % v/v	12.8 oz/a	A	1.7
2 ENDURA	0.438 lb ai/a	10 oz/a	A	
2 COC	1 % v/v	12.8 oz/a	A	
3 POAST PLUS	0.185 lb ai/a	23.7 oz/a	A	0.0
3 COC	1 % v/v	12.8 oz/a	A	0.0
2 ENDURA	0.438 lb ai/a	10 oz/a	A	
2 COC	1 % v/v	12.8 oz/a	A	
1 NO HERBICIDE				
3 OMEGA	1.5 pt/a	24 oz/a	A	0.0
3 COC	1 % v/v	12.8 oz/a	A	0.0
2 SELECT	0.125 lb ai/a	8 oz/a	A	5.0
2 COC	1 % v/v	12.8 oz/a	A	0.0
3 OMEGA	1.5 pt/a	24 oz/a	A	
3 COC	1 % v/v	12.8 oz/a	A	
3 POAST PLUS	0.185 lb ai/a	23.7 oz/a	A	10.0
3 COC	1 % v/v	12.8 oz/a	A	0.0
3 OMEGA	1.5 pt/a	24 oz/a	A	
3 COC	1 % v/v	12.8 oz/a	A	

Texas Agricultural Experiment Station

HERBICIDE-FUNGICIDE STUDY FOR GRASS WEED CONTROL - II

Trial ID: 126F-10
Location: HALFWAY

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jun/28/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	26	300.000000				
R	2	0.000000	0.000000	0.000	1.0000	0.0
A	2	50.000000	25.000000	0.000	1.0000	0.0
RA	4	0.000000	0.000000	0.000	0.0000	0.0
B	2	150.000000	75.000000	0.000	1.0000	0.0
RB	4	0.000000	0.000000	0.000	0.0000	0.0
AB	4	100.000000	25.000000	0.000	0.0000	0.0
RAB	8	0.000000	0.000000			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jun/28/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	26	300.000000				
R	2	0.000000	0.000000	0.000	1.0000	0.0
A	2	50.000000	25.000000	0.000	1.0000	0.0
B	2	150.000000	75.000000	0.000	1.0000	0.0
AB	4	100.000000	25.000000	0.000	0.0000	0.0
ERROR	16	0.000000	0.000000			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jul/12/2010 28 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	26	0.000000				
R	2	0.000000	0.000000	0.000	1.0000	0.0
A	2	0.000000	0.000000	0.000	1.0000	0.0
RA	4	0.000000	0.000000	0.000	0.0000	0.0
B	2	0.000000	0.000000	0.000	1.0000	0.0
RB	4	0.000000	0.000000	0.000	0.0000	0.0
AB	4	0.000000	0.000000	0.000	0.0000	0.0
RAB	8	0.000000	0.000000			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jul/12/2010 28 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	26	0.000000				
R	2	0.000000	0.000000	0.000	1.0000	0.0
A	2	0.000000	0.000000	0.000	1.0000	0.0
B	2	0.000000	0.000000	0.000	1.0000	0.0
AB	4	0.000000	0.000000	0.000	0.0000	0.0
ERROR	16	0.000000	0.000000			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Aug/11/2010 58 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	26	24.074074				
R	2	1.851852	0.925926	1.000	0.4096	1.0
A	2	1.851852	0.925926	1.000	0.4444	1.3
RA	4	3.703704	0.925926	1.000	0.4609	1.8
B	2	1.851852	0.925926	1.000	0.4444	1.3
RB	4	3.703704	0.925926	1.000	0.4609	1.8
AB	4	3.703704	0.925926	1.000	0.4609	1.8
RAB	8	7.407407	0.925926			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Aug/11/2010 58 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	26	24.074074				
R	2	1.851852	0.925926	1.000	0.3897	1.0
A	2	1.851852	0.925926	1.000	0.3897	1.0
B	2	1.851852	0.925926	1.000	0.3897	1.0
AB	4	3.703704	0.925926	1.000	0.4362	1.7
ERROR	16	14.814815	0.925926			

Texas Agricultural Experiment Station

COMPLETE FACTORIAL AOV For PEANUT YIELD LB/ACRE Oct/14/2010 122 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	26	3132582.135417				
R	2	691166.843750	345583.421875	4.492	0.0492	301.5
A	2	591781.815972	295890.907986	10.431	0.0259	220.4
RA	4	113465.298611	28366.324653	0.369	0.8247	522.2
B	2	426733.343750	213366.671875	2.094	0.2386	417.7
RB	4	407491.604167	101872.901042	1.324	0.3398	522.2
AB	4	286470.881944	71617.720486	0.931	0.4923	522.2
RAB	8	615472.347222	76934.043403			

FACTORIAL/POOLED ERROR AOV For PEANUT YIELD LB/ACRE Oct/14/2010 122 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	26	3132582.135417				
R	2	691166.843750	345583.421875	4.866	0.0224	266.3
A	2	591781.815972	295890.907986	4.166	0.0350	266.3
B	2	426733.343750	213366.671875	3.004	0.0780	266.3
AB	4	286470.881944	71617.720486	1.008	0.4322	461.3
ERROR	16	1136429.250000	71026.828125			

Texas Agricultural Experiment Station

PEANUT RESPONSE TO DUAL MAGNUM APPLIED POST EMERGENCE

Trial ID: 129F-10
Location: AGCARES

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LAMESA
State/Prov.: TX

Initiation Date: Jun/09/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

RUNNER PEANUT Variety: FLAVORRUNNER 458
Planting Date: Apr/28/2010 Planting Method: 8 ROW
Rate: 70000 PLANT/ACRE
Row Spacing: 40 IN Spacing Within Row: 5.5 SD/FT
Soil Temperature: 66 F Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: FINE SANDY LOAM
Soil Name: AMARILLO

APPLICATION DESCRIPTION

A
Application Date: Jun/09/2010
Time of Day: 10:30 AM
Application Method: SPRAY
Application Timing: A - POST
Applic. Placement: BROADCAST
Air Temp., Unit: 86 F
% Relative Humidity: 56
Wind Velocity, Unit: 5 MPH
Soil Temp., Unit: 80 F
Soil Moisture: ADEQUATE
% Cloud Cover: 0

CROP STAGE AT EACH APPLICATION

A
PEANUT
Height, Unit: 9 IN

APPLICATION EQUIPMENT

A
Appl. Equipment: BACKPACK
Operating Pressure: 28 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 20 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

PEANUT RESPONSE TO DUAL MAGNUM APPLIED POST EMERGENCE

Trial ID: 129F-10
Location: AGCARES

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	PEANUT	PEANUT	PEANUT	PEANUT	PEANUT
Rating Data Type	INJURY	INJURY	INJURY	INJURY	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	LB/ACRE
Rating Date	Jun/16/2010	Jun/25/2010	Jul/26/2010	Sep/20/2010	Oct/20/2010
Trt-Eval Interval	7 DA-A	16 DA-A	47 DA-A	47 DA-A	133 DA-A

Trt No.	Treatment Name	Rate	Product	Product	Appl					
		Rate	Unit	Rate	Unit	Code				
1	UNTREATED						0.0 g	0.0 d	0.0 b	0.0 b
2	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A	0.7 fg	4.3 bcd	0.0 b	0.0 b
3	PROWL H20	1	lb ai/a	33.7	oz/a	A	1.3 efg	1.0 cd	0.0 b	0.0 b
4	PROWL H20	1	lb ai/a	33.7	oz/a	A	3.7 de	1.7 cd	0.0 b	0.0 b
	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A				
5	COBRA	0.2	lb ai/a	12.8	oz/a	A	10.0 bc	5.0 bcd	1.7 b	3.3 ab
	COC	1	% v/v	12.8	oz/a	A				
6	COBRA	0.2	lb ai/a	12.8	oz/a	A	20.0 a	15.0 a	8.3 a	5.3 a
	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A				
	COC	1	% v/v	12.8	oz/a	A				
7	COBRA	0.2	lb ai/a	12.8	oz/a	A	5.0 d	1.7 cd	0.0 b	0.0 b
	NIS	0.25	% v/v	3.2	oz/a	A				
8	COBRA	0.2	lb ai/a	12.8	oz/a	A	11.7 b	10.0 ab	3.3 b	1.7 b
	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A				
	NIS	0.25	% v/v	3.2	oz/a	A				
9	COBRA	0.2	lb ai/a	12.8	oz/a	A	9.3 bc	10.7 ab	0.0 b	0.0 b
	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A				
10	2.4-DB	0.4	lb ai/a	25.6	oz/a	A	2.0 efg	8.3 abc	0.0 b	0.0 b
	COC	1	% v/v	12.8	oz/a	A				
11	2.4-DB	0.4	lb ai/a	25.6	oz/a	A	8.7 c	8.3 abc	0.0 b	0.0 b
	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A				
	COC	1	% v/v	12.8	oz/a	A				
12	2.4-DB	0.4	lb ai/a	25.6	oz/a	A	3.3 def	4.7 bcd	0.0 b	0.0 b
	NIS	0.25	% v/v	3.2	oz/a	A				
13	2.4-DB	0.4	lb ai/a	25.6	oz/a	A	9.0 bc	8.3 abc	1.7 b	1.7 b
	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A				
	NIS	0.25	% v/v	3.2	oz/a	A				
14	2.4-DB	0.4	lb ai/a	25.6	oz/a	A	7.3 c	6.7 bcd	0.0 b	0.0 b
	DUAL MAGNUM	1.27	lb ai/a	21.3	oz/a	A				
LSD (P=.05)							2.06	4.85	3.50	2.60
Standard Deviation							1.23	2.89	2.09	1.55
CV							18.68	47.19	194.66	180.5
Bartlett's X2							3.539	12.741	1.632	0.052
P(Bartlett's X2)							0.896	0.175	0.652	0.997
Replicate F							6.018	0.791	0.411	0.090
Replicate Prob(F)							0.0071	0.4640	0.6675	0.9147
Treatment F							58.838	6.627	3.716	3.357
Treatment Prob(F)							0.0001	0.0001	0.0021	0.0041

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

INTEGRITY - SORGHUM I

Trial ID: 131F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: SORGB SORGHUM
Planting Date: May/24/2010

Variety: DKS 44-20

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: PULLMAN

APPLICATION DESCRIPTION

A

Application Date: May/26/2010
Time of Day: 2:45 PM
Application Method: TRACTOR
Application Timing: A-PRE
Applic. Placement: BROADCAST
Air Temp., Unit: 85 F
% Relative Humidity: 60
Wind Velocity, Unit: 5 MPH
Soil Temp., Unit: 90 F
Soil Moisture: ADEQUATE
% Cloud Cover: 30

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: SORGB

APPLICATION EQUIPMENT

A

Appl. Equipment: TRACTOR
Operating Pressure: 26
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: AIR

Texas Agricultural Experiment Station

INTEGRITY - SORGHUM I

Trial ID: 131F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code				SORGHUM	SORGHUM	SORGHUM	SORGHUM	SORGHUM	SORGHUM
Rating Data Type				STAND COUNT	INJURY	CHLOROSIS	GRO REDUC	INJURY	CHLOROSIS
Rating Unit				2RX3M	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date				Jun/03/2010	Jun/03/2010	Jun/03/2010	Jun/03/2010	Jun/21/2010	Jun/21/2010
Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description				
1	UNTREATED					114.0 a	0.0 b	0.0 b	0.0 a
2	INTEGRITY	16 oz/a	A	PRE		125.8 a	1.3 b	1.3 b	0.0 a
	MSO	1 % v/v	A	PRE					1.3 b
	AMS	17 lb/100 gal	A	PRE					
3	SHARPEN	3 oz/a	A	PRE		103.3 a	10.0 a	10.0 a	0.0 a
	GUARDSMAN MAX	3.5 pt/a	A	PRE					10.0 a
4	BICEP II MAGNUM	2.1 qt/a	A	PRE		110.3 a	0.0 b	0.0 b	0.0 a
5	LUMAX	2.5 qt/a	A	PRE		101.8 a	12.5 a	11.3 a	1.3 a
6	MILO-PRO	32 oz/a	A	PRE		120.8 a	0.0 b	0.0 b	2.5 b
	LSD (P=.05)					78.04	6.34	5.62	0.0 b
	Standard Deviation					51.79	4.21	3.73	0.0 b
	CV					45.99	106.31	99.38	0.0 b
	Bartlett's X2					3.929	5.043	4.164	0.0 b
	P(Bartlett's X2)					0.56	0.08	0.125	0.0 b
	Replicate F					0.288	1.471	1.900	0.0 b
	Replicate Prob(F)					0.8335	0.2625	0.1730	0.0 b
	Treatment F					0.135	7.400	8.280	0.0 b
	Treatment Prob(F)					0.9817	0.0011	0.0006	0.0 b

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Crop Code	SORGHUM	SORGHUM	SORGHUM	SORGHUM
Rating Data Type	GRO REDUC	INJURY	YIELD	MOISTURE
Rating Unit	PERCENT	PERCENT	LBS/ACRE	PERCENT
Rating Date	Jun/21/2010	Jul/13/2010	Aug/31/2010	Aug/31/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description				
1	UNTREATED					0.0 a	0.0 b	7089.5 a	11.43 a
2	INTEGRITY	16	oz/a	A	PRE	0.0 a	1.5 b	7013.3 a	11.73 a
	MISO	1	% v/v	A	PRE				
	AMS	17	lb/100 gal	A	PRE				
3	SHARPEN	3	oz/a	A	PRE	1.3 a	5.0 a	6566.8 a	11.65 a
	GUARDSMAN MAX	3.5	pt/a	A	PRE				
4	BICEP II MAGNUM	2.1	qt/a	A	PRE	0.0 a	0.0 b	7372.5 a	11.33 a
5	LUMAX	2.5	qt/a	A	PRE	2.5 a	0.0 b	6512.0 a	10.98 a
6	MILO-PRO	32	oz/a	A	PRE	0.0 a	0.0 b	7209.3 a	11.10 a
LSD (P=.05)						3.53	1.07	1838.18	1.065
Standard Deviation						2.34	0.71	1219.89	0.707
CV						374.76	65.27	17.53	6.22
Bartlett's X2						1.303	0.0	1.389	2.033
P(Bartlett's X2)						0.254	.	0.926	0.845
Replicate F						0.696	1.000	0.151	1.443
Replicate Prob(F)						0.5686	0.4199	0.9273	0.2697
Treatment F						0.797	32.333	0.326	0.702
Treatment Prob(F)						0.5683	0.0001	0.8892	0.6307

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

INTEGRITY - SORGHUM II

Trial ID: 132F-10
Location: AGCARES

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: SORG SORGHUM
Planting Date: May/03/2010

Variety: DKS 44-20

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: FINE SANDY LOAM
Soil Name: AMARILLO

APPLICATION DESCRIPTION

A

Application Date: Apr/27/2010
Time of Day: 4:00PM
Application Method: SPRAY
Application Timing: A-PRE
Applic. Placement: BROADCAST
Air Temp., Unit: 77 F
% Relative Humidity: 29
Wind Velocity, Unit: 1 MPH
Soil Temp., Unit: 69 F
Soil Moisture: ADEQUATE
% Cloud Cover: 30

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: SORG SORGHUM
Stage Scale: PRE

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 30
Nozzle Type: TURBO TEE
Nozzle Size: 110015
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Texas Agricultural Experiment Station

INTEGRITY - SORGHUM II

Trial ID: 132F-10
Location: AGCARES

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code	SORGHUM	SORGHUM	SORGHUM	SORGHUM	SORGHUM	SORGHUM
Rating Data Type	INJURY	CHLOROSIS	STUNTING	INJURY	CHLOROSIS	STUNTING
Rating Unit	%	%	%	%	%	%
Rating Date	May/20/2010	May/20/2010	May/20/2010	May/31/2010	May/31/2010	May/31/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description						
1	UNTREATED					0.0 b	0.0 b	0.0 a	0.0 b	0.0 a	0.0 b
2	INTEGRITY	10 oz/a		A	PRE	3.5 a	3.5 a	0.0 a	6.3 ab	5.0 a	3.8 ab
	MSO	1 % v/v		A	PRE						
	AMS	17 lb/100 gal		A	PRE						
3	SHARPEN	2 oz/a		A	PRE	3.3 a	3.3 a	0.0 a	7.5 a	5.0 a	5.0 a
	GUARDSMAN MAX	2.5 pt/a		A	PRE						
4	BICEP II MAGNUM	2.1 qt/a		A	PRE	0.0 b	0.0 b	0.0 a	2.5 ab	2.5 a	0.0 b
5	LUMAX	2 qt/a		A	PRE	3.5 a	3.5 a	0.0 a	3.8 ab	3.8 a	0.0 b
6	MILO-PRO	24 oz/a		A	PRE	0.0 b	0.0 b	0.0 a	6.3 ab	3.8 a	3.8 ab
	LSD (P=.05)					1.75	1.75	0.00	4.81	4.96	3.18
	Standard Deviation					1.16	1.16	0.00	3.20	3.29	2.11
	CV					68.08	68.08	0.0	73.03	98.74	101.19
	Bartlett's X2					3.037	3.037	0.0	2.67	2.049	1.154
	P(Bartlett's X2)					0.219	0.219	.	0.615	0.727	0.283
	Replicate F					0.606	0.606	0.000	1.735	1.538	1.563
	Replicate Prob(F)					0.6214	0.6214	1.0000	0.2028	0.2456	0.2398
	Treatment F					10.380	10.380	0.000	3.122	1.308	4.875
	Treatment Prob(F)					0.0002	0.0002	1.0000	0.0396	0.3127	0.0076

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Crop Code	SORGHUM	SORGHUM	SORGHUM	SORGHUM	SORGHUM	SORGHUM
Rating Data Type	INJURY	CHLOROSIS	NECROSIS	GRO REDUC	INJURY	YIELD
Rating Unit	%	%	%	%	%	LB/ACRE
Rating Date	Jul/01/2010	Jul/01/2010	Jul/01/2010	Jul/01/2010	Jul/01/2010	Aug/31/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description						
1	UNTREATED					0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	6672.0 a
2	INTEGRITY	10	oz/a	A	PRE	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	6889.5 a
	MSO	1	% v/v	A	PRE						
	AMS	17	lb/100 gal	A	PRE						
3	SHARPEN	2	oz/a	A	PRE	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	6552.3 a
	GUARDSMAN MAX	2.5	pt/a	A	PRE						
4	BICEP II MAGNUM	2.1	qt/a	A	PRE	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	6780.8 a
5	LUMAX	2	qt/a	A	PRE	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	6563.0 a
6	MILO-PRO	24	oz/a	A	PRE	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	6944.0 a
	LSD (P=.05)					0.00	0.00	0.00	0.00	0.00	852.28
	Standard Deviation					0.00	0.00	0.00	0.00	0.00	565.60
	CV					0.0	0.0	0.0	0.0	0.0	8.4
	Bartlett's X2					0.0	0.0	0.0	0.0	0.0	5.808
	P(Bartlett's X2)					.	.	.	.	.	0.325
	Replicate F					0.000	0.000	0.000	0.000	0.000	6.536
	Replicate Prob(F)					1.0000	1.0000	1.0000	1.0000	1.0000	0.0048
	Treatment F					0.000	0.000	0.000	0.000	0.000	0.342
	Treatment Prob(F)					1.0000	1.0000	1.0000	1.0000	1.0000	0.8797

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

PALMER AMARANTH - COTTON

Trial ID: 134F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name	Scientific Name
PIGWEEED	AMARANTHUS PALMERI

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 1740 B2RF

Planting Date: May/11/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT

Plot Length, Unit: 30 FT

Reps: 3

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: PULLMAN

APPLICATION DESCRIPTION

	A	B
Application Date:	Apr/14/2010	May/11/2010
Time of Day:	10:00AM	1:00PM
Application Method:	SPRAY	SPRAY
Application Timing:	A-21 DBP	B-PRE
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	64 F	92 F
% Relative Humidity:	77	23
Wind Velocity, Unit:	7 MPH	7 MPH
Soil Temp., Unit:	51 F	65 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	95	0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GOSHI	GOSHI

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	TRACTOR	TRACTOR
Operating Pressure:	30	30
Nozzle Type:	TURBO TEE	TURBO TEE
Nozzle Size:	110015	110015
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	AIR	AIR

Texas Agricultural Experiment Station

PALMER AMARANTH - COTTON

Trial ID: 134F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Weed Code	KOCHIA	AMAPA	AMAPA	AMAPA
Crop Code	COTTON	COTTON		
Part Rated				
Rating Data Type	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	%	%	%	%
Rating Date	May/11/2010	May/26/2010	May/26/2010	Jun/10/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description						
1	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	0.0	a	100.0	a
	EXPRESS	0.33	oz/a	A	21-28 DBP						
	HARMONY	0.33	oz/a	A	21-28 DBP						
	REFLEX	16	oz/a	A	21-28 DBP						
	GRAMOXONE INTEON	40	oz/a	B	PRE						
	COTORAN	32	oz/a	B	PRE						
	NIS	0.25	% v/v	B	PRE						
2	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	0.0	a	100.0	a
	EXPRESS	0.33	oz/a	A	21-28 DBP						
	HARMONY	0.33	oz/a	A	21-28 DBP						
	REFLEX	16	oz/a	A	21-28 DBP						
	GRAMOXONE INTEON	40	oz/a	B	PRE						
	COTORAN	24	oz/a	B	PRE						
	STAPLE LX	1.7	oz/a	B	PRE						
	NIS	0.25	% v/v	B	PRE						
3	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	0.0	a	100.0	a
	EXPRESS	0.33	oz/a	A	21-28 DBP						
	HARMONY	0.33	oz/a	A	21-28 DBP						
	REFLEX	16	oz/a	A	21-28 DBP						
	GRAMOXONE INTEON	40	oz/a	B	PRE						
	DIREX	16	oz/a	B	PRE						
	NIS	0.25	% v/v	B	PRE						
4	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	0.0	a	100.0	a
	EXPRESS	0.33	oz/a	A	21-28 DBP						
	HARMONY	0.33	oz/a	A	21-28 DBP						
	REFLEX	16	oz/a	A	21-28 DBP						
	GRAMOXONE INTEON	40	oz/a	B	PRE						
	DIREX	16	oz/a	B	PRE						
	STAPLE LX	1.7	oz/a	B	PRE						
	NIS	0.25	% v/v	B	PRE						
5	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	0.0	a	100.0	a
	EXPRESS	0.33	oz/a	A	21-28 DBP						
	HARMONY	0.33	oz/a	A	21-28 DBP						
	REFLEX	16	oz/a	A	21-28 DBP						
	GRAMOXONE INTEON	40	oz/a	B	PRE						
	STAPLE LX	1.7	oz/a	B	PRE						
	NIS	0.25	% v/v	B	PRE						
6	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	0.0	a	100.0	a
	EXPRESS	0.375	oz/a	A	21-28 DBP						
	HARMONY	0.375	oz/a	A	21-28 DBP						
	REFLEX	16	oz/a	B	PRE						
	COTORAN	32	oz/a	B	PRE						
	COC	1	% v/v	B	PRE						
7	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	0.0	a	100.0	a
	EXPRESS	0.375	oz/a	A	21-28 DBP						
	HARMONY	0.375	oz/a	A	21-28 DBP						
	REFLEX	16	oz/a	B	PRE						
	COTORAN	24	oz/a	B	PRE						
	STAPLE	1.7	oz/a	B	PRE						
	COC	1	% v/v	B	PRE						
8	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	0.0	a	100.0	a
	EXPRESS	0.375	oz/a	A	21-28 DBP						
	HARMONY	0.375	oz/a	A	21-28 DBP						
	REFLEX	16	oz/a	B	PRE						
	DIREX	16	oz/a	B	PRE						
	COC	1	% v/v	B	PRE						
9	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	0.0	a	100.0	a
	EXPRESS	0.375	oz/a	A	21-28 DBP						
	HARMONY	0.375	oz/a	A	21-28 DBP						
	REFLEX	16	oz/a	B	PRE						
	DIREX	16	oz/a	B	PRE						
	STAPLE LX	1.7	oz/a	B	PRE						
	COC	1	% v/v	B	PRE						

Texas Agricultural Experiment Station

Weed Code	KOCHIA		AMAPA		AMAPA	AMAPA
Crop Code		COTTON		COTTON		
Part Rated						
Rating Data Type	CONTROL	INJURY	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit	%	%	%	%	%	%
Rating Date	May/11/2010	May/26/2010	May/26/2010	Jun/03/2010	Jun/03/2010	Jun/10/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description						
10	ROUNDUP POWERMAX EXPRESS	22	oz/a	A	21-28 DBP	100.0	a	0.0	a	100.0	a
	HARMONY	0.375	oz/a	A	21-28 DBP						
	REFLEX	16	oz/a	B	PRE						
	STAPLE LX	1.7	oz/a	B	PRE						
	COC	1		B	PRE						
11	UNTREATED					0.0	b	0.0	a	0.0	b
	LSD (P=.05)					0.00		0.00		0.00	
	Standard Deviation					0.00		0.00		0.00	
	CV					0.0		0.0		58.61	
	Bartlett's X2					0.0		0.0		6.263	
	P(Bartlett's X2)					.		.		0.509	
	Replicate F					0.000		0.000		0.000	
	Replicate Prob(F)					1.0000		1.0000		0.0854	
	Treatment F					0.000		0.000		2.232	
	Treatment Prob(F)					1.0000		1.0000		0.0607	

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	AMAPA	AMAPA	AMAPA	COTTON
Crop Code				LINT
Part Rated				YIELD
Rating Data Type	CONTROL	CONTROL	CONTROL	LBS/ACRE
Rating Unit	%	%	%	
Rating Date	Jun/28/2010	Jul/19/2010	Aug/24/2010	Nov/01/2010

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Appl Description				
1	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	99.7	ab	94.0	ab
	EXPRESS	0.33	oz/a	A	21-28 DBP			98.7	a
	HARMONY	0.33	oz/a	A	21-28 DBP				
	REFLEX	16	oz/a	A	21-28 DBP				
	GRAMOXONE INTEON	40	oz/a	B	PRE				
	COTORAN	32	oz/a	B	PRE				
	NIS	0.25	% v/v	B	PRE				
2	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	99.3	ab	91.7	b
	EXPRESS	0.33	oz/a	A	21-28 DBP			99.3	a
	HARMONY	0.33	oz/a	A	21-28 DBP				
	REFLEX	16	oz/a	A	21-28 DBP				
	GRAMOXONE INTEON	40	oz/a	B	PRE				
	COTORAN	24	oz/a	B	PRE				
	STAPLE LX	1.7	oz/a	B	PRE				
	NIS	0.25	% v/v	B	PRE				
3	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	99.3	ab	96.0	ab
	EXPRESS	0.33	oz/a	A	21-28 DBP			100.0	a
	HARMONY	0.33	oz/a	A	21-28 DBP				
	REFLEX	16	oz/a	A	21-28 DBP				
	GRAMOXONE INTEON	40	oz/a	B	PRE				
	DIREX	16	oz/a	B	PRE				
	NIS	0.25	% v/v	B	PRE				
4	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	99.0	a
	EXPRESS	0.33	oz/a	A	21-28 DBP			100.0	a
	HARMONY	0.33	oz/a	A	21-28 DBP				
	REFLEX	16	oz/a	A	21-28 DBP				
	GRAMOXONE INTEON	40	oz/a	B	PRE				
	DIREX	16	oz/a	B	PRE				
	STAPLE LX	1.7	oz/a	B	PRE				
	NIS	0.25	% v/v	B	PRE				
5	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	99.0	ab	96.0	ab
	EXPRESS	0.33	oz/a	A	21-28 DBP			100.0	a
	HARMONY	0.33	oz/a	A	21-28 DBP				
	REFLEX	16	oz/a	A	21-28 DBP				
	GRAMOXONE INTEON	40	oz/a	B	PRE				
	STAPLE LX	1.7	oz/a	B	PRE				
	NIS	0.25	% v/v	B	PRE				
6	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	97.3	b	90.7	b
	EXPRESS	0.375	oz/a	A	21-28 DBP			100.0	a
	HARMONY	0.375	oz/a	A	21-28 DBP				
	REFLEX	16	oz/a	B	PRE				
	COTORAN	32	oz/a	B	PRE				
	COC	1	% v/v	B	PRE				
7	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	99.7	ab	98.7	a
	EXPRESS	0.375	oz/a	A	21-28 DBP			100.0	a
	HARMONY	0.375	oz/a	A	21-28 DBP				
	REFLEX	16	oz/a	B	PRE				
	COTORAN	24	oz/a	B	PRE				
	STAPLE	1.7	oz/a	B	PRE				
	COC	1	% v/v	B	PRE				
8	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	100.0	a
	EXPRESS	0.375	oz/a	A	21-28 DBP			99.7	a
	HARMONY	0.375	oz/a	A	21-28 DBP				
	REFLEX	16	oz/a	B	PRE				
	DIREX	16	oz/a	B	PRE				
	COC	1	% v/v	B	PRE				
9	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	100.0	a
	EXPRESS	0.375	oz/a	A	21-28 DBP			66.7	a
	HARMONY	0.375	oz/a	A	21-28 DBP				
	REFLEX	16	oz/a	B	PRE				
	DIREX	16	oz/a	B	PRE				
	STAPLE LX	1.7	oz/a	B	PRE				
	COC	1	% v/v	B	PRE				

Texas Agricultural Experiment Station

Weed Code	AMAPA	AMAPA	AMAPA	
Crop Code				COTTON
Part Rated				LINT
Rating Data Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	%	%	%	LBS/ACRE
Rating Date	Jun/28/2010	Jul/19/2010	Aug/24/2010	Nov/01/2010

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description				
10	ROUNDUP POWERMAX	22	oz/a	A	21-28 DBP	100.0	a	99.3	a
	EXPRESS	0.375	oz/a	A	21-28 DBP				
	HARMONY	0.375	oz/a	A	21-28 DBP				
	REFLEX	16	oz/a	B	PRE				
	STAPLE LX	1.7	oz/a	B	PRE				
	COC	1		B	PRE				
11	UNTREATED					0.0	c	0.0	c
	LSD (P=.05)					1.55		4.43	
	Standard Deviation					0.91		2.60	
	CV					1.01		2.96	
	Bartlett's X2					4.34		14.414	
	P(Bartlett's X2)					0.502		0.044*	
	Replicate F					0.476		0.408	
	Replicate Prob(F)					0.6280		0.6703	
	Treatment F					3261.627		380.867	
	Treatment Prob(F)					0.0001		0.0001	
								1.090	
								0.3555	
								9.414	
								3.696	
								0.0062	

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

V-10206 / VALOR / DUAL MAGNUM WEED CONTROL IN PEANUT

Trial ID: 135F-10
Location: HALFWAY PEANUT

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: HALFWAY
State/Prov.: TX

Initiation Date: May/10/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
PALMER AMARANTH

SPANISH PEANUT Variety: OLIN
Planting Date: May/10/2010 Planting Method: 4 ROW
Rate: 68000 PLANT/ACRE
Row Spacing: 40 IN Spacing Within Row: 5.2 SD/FT
Soil Moisture: DRY

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: OLTON

APPLICATION DESCRIPTION

	A	B
Application Date:	May/11/2010	Jun/03/2010
Time of Day:	10:45 AM	11:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	A - PRE	B - EPOST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	87.4 F	79 F
% Relative Humidity:	10.5	48
Wind Velocity, Unit:	6.7 MPH	6 MPH
Soil Temp., Unit:	64.2 F	74 F
Soil Moisture:	DRY	ADEQUATE
% Cloud Cover:	0	0

CROP STAGE AT EACH APPLICATION

	A	B
	PEANUT	PEANUT
Stage Scale:	PRE	
Height, Unit:	N/A	2 IN

WEED STAGE AT EACH APPLICATION

	A	B
	PIGWEEED	
Stage Scale:	2"	

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CUB	BACKPACK
Operating Pressure:	30 PSI	28 PSI
Nozzle Type:	TURBOTEE	TURBOTEE
Nozzle Size:	110015	110015
Nozzle Spacing, Unit:	20 IN	19 IN
Boom Height, Unit:	18 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH
Incorporation Equip.:	WATER	
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	AIR	CO2

Treatment Application Comment

5/12-0.25" IRRIGATION AFTER PRE'S
5/14- 1.5" RAINFALL
5/17- 1.5" RAINFALL

Texas Agricultural Experiment Station

V-10206 / VALOR / DUAL MAGNUM WEED CONTROL IN PEANUT

Trial ID: 135F-10
Location: HALFWAY PEANUT

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code						PIGWEEED		PIGWEEED		PIGWEEED	
Crop Code						PEANUT	PEANUT	PEANUT	PEANUT	PEANUT	PEANUT
Rating Data Type						INJURY	STAND	CONTROL	PLANTS PER	INJURY	CONTROL
Rating Unit						PERCENT	PERCENT	PERCENT	40"x30'	PERCENT	PERCENT
Rating Date						Jun/02/2010	Jun/02/2010	Jun/02/2010	Jun/02/2010	Jun/15/2010	Jun/15/2010
Trt	Treatment	Rate	Product	Product	Appl						
No.	Name	Rate	Unit	Rate	Unit	Code					
1	UNTREATED						0.0 a	12.0 a	0.0 b	35.0 a	0.0 a
2	VALOR SX	0.096	lb ai/a	3 oz/a	A		0.0 a	12.0 a	92.0 a	3.7 b	0.0 a
3	VALOR SX	0.096	lb ai/a	3 oz/a	A		0.0 a	11.3 a	89.0 a	4.0 b	0.0 a
	V-10206	0.16	lb ai/a	3 oz/a	B						
4	VALOR SX	0.096	lb ai/a	3 oz/a	A		0.0 a	11.7 a	88.3 a	5.0 b	0.0 a
	DUAL MAGNUM	1.27	lb ai/a	1.33 pt/a	B						
LSD (P=.05)							0.00	1.79	9.60	11.32	0.00
Standard Deviation							0.00	0.90	4.80	5.66	0.00
CV							0.0	7.64	7.14	47.53	0.0
Bartlett's X2							0.0	0.824	0.932	6.451	0.0
P(Bartlett's X2)							.	0.662	0.628	0.092	.
Replicate F							0.000	0.310	1.693	3.618	0.000
Replicate Prob(F)							1.0000	0.7443	0.2612	0.0931	1.0000
Treatment F							0.000	0.379	262.209	22.174	0.000
Treatment Prob(F)							1.0000	0.7718	0.0001	0.0012	1.0000

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	PIGWEEED	PIGWEEED	
Crop Code		PEANUT	PEANUT
Rating Data Type	CONTROL	INJURY	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT
Rating Date	Jun/30/2010	Jul/14/2010	Jul/14/2010
			Oct/12/2010

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code				
1	UNTREATED						0.0 b	0.0 a	0.0 c	2315.0 a
2	VALOR SX	0.096	lb ai/a	3	oz/a	A	76.7 a	0.0 a	46.7 b	2594.3 a
3	VALOR SX	0.096	lb ai/a	3	oz/a	A	86.7 a	0.0 a	76.7 a	3033.3 a
	V-10206	0.16	lb ai/a	3	oz/a	B				
4	VALOR SX	0.096	lb ai/a	3	oz/a	A	85.0 a	0.0 a	66.7 a	3354.3 a
	DUAL MAGNUM	1.27	lb ai/a	1.33	pt/a	B				
LSD (P=.05)							8.32	0.00	15.26	873.51
Standard Deviation							4.17	0.00	7.64	437.20
CV							6.71	0.0	16.08	15.48
Bartlett's X2							0.824	0.0	1.248	1.061
P(Bartlett's X2)							0.662	.	0.536	0.786
Replicate F							0.840	0.000	0.429	2.375
Replicate Prob(F)							0.4768	1.0000	0.6699	0.1739
Treatment F							299.320	0.000	59.571	3.332
Treatment Prob(F)							0.0001	1.0000	0.0001	0.0977

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

VALOR TANK MIX COMBINATIONS I

Trial ID: 136F-10
Location: AGCARES-LAMESA

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LAMESA
State/Prov.: TX

Initiation Date: Apr/28/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

RUNNER PEANUT Variety: FLAVORRUNNER 458
Planting Date: Apr/28/2010 Planting Method: 8 ROW
Rate: 70000 SEED/ACRE
Row Spacing: 40 IN Spacing Within Row: 5.5 SD/FT
Soil Temperature: 66.2 F Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: FACTORIAL

SOIL DESCRIPTION

Texture: FINE SANDY LOAM
Soil Name: AMARILLO

APPLICATION DESCRIPTION

	A	B
Application Date:	Apr/30/2010	May/12/2010
Time of Day:	9:30 AM	12:00 PM
Application Method:	SPRAY	SPRAY
Application Timing:	A PRE	B ATCRACK
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	65.3 F	85 F
% Relative Humidity:	26	30
Wind Velocity, Unit:	11.8 MPH	10 MPH
Soil Temp., Unit:	66.2 F	75 F
Soil Moisture:	ADEQUATE	WET
% Cloud Cover:	5	30

CROP STAGE AT EACH APPLICATION

	A	B
Stage Scale:	PEANUT	PEANUT
	PRE	AT CRACK
	N/A	N/A

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	BACKPACK	BACKPACK
Operating Pressure:	26 PSI	24 PSI
Nozzle Type:	TURBOTEE	TURBOTEE
Nozzle Size:	110015	110015
Nozzle Spacing, Unit:	19 IN	19 IN
Boom Height, Unit:	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH
Incorporation Equip.:	WATER	WATER
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	CO2	CO2

Treatment Application Comment

4/30 - SPRAYED PRE'S; 5/3/2010 0.5" IRRIGATION TO INCORPORATE

Texas Agricultural Experiment Station

VALOR TANK MIX COMBINATIONS I

Trial ID: 136F-10
Location: AGCARES-LAMESA

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	PEANUT	PEANUT	PEANUT	PEANUT	PEANUT	PEANUT
Rating Data Type	INJURY	INJURY	INJURY	INJURY	INJURY	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	LB/ACRE
Rating Date	May/26/2010	Jun/09/2010	Jun/25/2010	Jul/07/2010	Sep/20/2010	Oct/20/2010

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Appl Code
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TABLE OF R MEANS

Replicate 1									
Replicate 2									
Replicate 3									

TABLE OF A MEANS

1 PREEMERGENCE				A	0.0	0.2	0.0	0.0	0.0	5403.0
2 AT CRACK				B	15.7	19.4	9.0	8.6	4.2	5452.9

TABLE OF B MEANS

1 VALOR SX	0 lb ai/a	0 oz/a	0.0	0.0	0.6	1.1	0.6	5395.7
2 VALOR SX	0.064 lb ai/a	2 oz/a	10.8	12.2	5.9	5.6	2.9	5454.6
3 VALOR SX	0.096 lb ai/a	3 oz/a	12.8	17.2	7.1	6.2	2.8	5433.4

TABLE OF C MEANS

1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a	8.3	10.0	4.3	4.3	2.3	5413.0
2 GRAMOXONE INTEON	0.125 lb ai/a	8 oz/a	7.2	9.2	4.0	3.9	1.7	5382.7
2 NIS	0.25 % v/v	3.2 oz/a						
3 GRAMOXONE INTEON	0.25 lb ai/a	16 oz/a	8.1	10.3	5.3	4.7	2.3	5488.0
3 NIS	0.25 % v/v	3.2 oz/a						

TABLE OF AB MEANS

1 PREEMERGENCE				A	0.0	0.0	0.0	0.0	0.0	5240.2
1 VALOR SX	0 lb ai/a	0 oz/a								
2 AT CRACK				B	0.0	0.0	1.1	2.2	1.1	5551.2
1 VALOR SX	0 lb ai/a	0 oz/a								
1 PREEMERGENCE				A	0.0	0.0	0.0	0.0	0.0	5532.7
2 VALOR SX	0.064 lb ai/a	2 oz/a								
2 AT CRACK				B	21.7	24.4	11.9	11.1	5.8	5376.6
2 VALOR SX	0.064 lb ai/a	2 oz/a								
1 PREEMERGENCE				A	0.0	0.6	0.0	0.0	0.0	5436.0
3 VALOR SX	0.096 lb ai/a	3 oz/a								
2 AT CRACK				B	25.6	33.9	14.1	12.3	5.7	5430.8
3 VALOR SX	0.096 lb ai/a	3 oz/a								

TABLE OF AC MEANS

1 PREEMERGENCE				A	0.0	0.6	0.0	0.0	0.0	5479.4
1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a								
2 AT CRACK				B	16.7	19.4	8.6	8.6	4.6	5346.6
1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a								
1 PREEMERGENCE				A	0.0	0.0	0.0	0.0	0.0	5271.7
2 GRAMOXONE INTEON	0.125 lb ai/a	8 oz/a								
2 NIS	0.25 % v/v	3.2 oz/a								
2 AT CRACK				B	14.4	18.3	8.0	7.8	3.4	5493.8
2 GRAMOXONE INTEON	0.125 lb ai/a	8 oz/a								
2 NIS	0.25 % v/v	3.2 oz/a								
1 PREEMERGENCE				A	0.0	0.0	0.0	0.0	0.0	5457.8
3 GRAMOXONE INTEON	0.25 lb ai/a	16 oz/a								
3 NIS	0.25 % v/v	3.2 oz/a								
2 AT CRACK				B	16.1	20.6	10.6	9.3	4.6	5518.2
3 GRAMOXONE INTEON	0.25 lb ai/a	16 oz/a								
3 NIS	0.25 % v/v	3.2 oz/a								

TABLE OF BC MEANS

1 VALOR SX	0 lb ai/a	0 oz/a	0.0	0.0	0.0	0.0	0.0	5371.8
1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a						
2 VALOR SX	0.064 lb ai/a	2 oz/a	11.7	12.5	6.7	7.0	3.8	5507.3
1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a						
3 VALOR SX	0.096 lb ai/a	3 oz/a	13.3	17.5	6.2	5.8	3.0	5359.8
1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a						
1 VALOR SX	0 lb ai/a	0 oz/a	0.0	0.0	0.0	0.8	0.0	5483.0
2 GRAMOXONE INTEON	0.125 lb ai/a	8 oz/a						
2 NIS	0.25 % v/v	3.2 oz/a	177					

Texas Agricultural Experiment Station

Crop Code
Rating Data Type
Rating Unit
Rating Date

PEANUT INJURY PERCENT May/26/2010	PEANUT INJURY PERCENT Jun/09/2010	PEANUT INJURY PERCENT Jun/25/2010	PEANUT INJURY PERCENT Jul/07/2010	PEANUT INJURY PERCENT Sep/20/2010	PEANUT YIELD LB/ACRE Oct/20/2010
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Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code						
2	VALOR SX	0.064	lb ai/a	2	oz/a		9.2	10.8	4.5	4.3	2.2	5369.3
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a							
2	NIS	0.25	% v/v	3.2	oz/a							
3	VALOR SX	0.096	lb ai/a	3	oz/a		12.5	16.7	7.5	6.5	3.0	5295.8
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a							
2	NIS	0.25	% v/v	3.2	oz/a							
1	VALOR SX	0	lb ai/a	0	oz/a		0.0	0.0	1.7	2.5	1.7	5332.3
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a							
3	NIS	0.25	% v/v	3.2	oz/a							
2	VALOR SX	0.064	lb ai/a	2	oz/a		11.7	13.3	6.7	5.3	2.7	5487.2
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a							
3	NIS	0.25	% v/v	3.2	oz/a							
3	VALOR SX	0.096	lb ai/a	3	oz/a		12.5	17.5	7.5	6.2	2.5	5644.5
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a							
3	NIS	0.25	% v/v	3.2	oz/a							

TABLE OF ABC MEANS

1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	0.0	5408.0
1	VALOR SX	0	lb ai/a	0	oz/a							
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a							
2	AT CRACK					B	0.0	0.0	0.0	0.0	0.0	5335.7
1	VALOR SX	0	lb ai/a	0	oz/a							
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a							
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	0.0	5673.0
2	VALOR SX	0.064	lb ai/a	2	oz/a							
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a							
2	AT CRACK					B	23.3	25.0	13.3	14.0	7.7	5341.7
2	VALOR SX	0.064	lb ai/a	2	oz/a							
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a							
1	PREEMERGENCE					A	0.0	1.7	0.0	0.0	0.0	5357.3
3	VALOR SX	0.096	lb ai/a	3	oz/a							
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a							
2	AT CRACK					B	26.7	33.3	12.3	11.7	6.0	5362.3
3	VALOR SX	0.096	lb ai/a	3	oz/a							
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a							
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	0.0	5264.0
1	VALOR SX	0	lb ai/a	0	oz/a							
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a							
2	NIS	0.25	% v/v	3.2	oz/a							
2	AT CRACK					B	0.0	0.0	0.0	1.7	0.0	5702.0
1	VALOR SX	0	lb ai/a	0	oz/a							
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a							
2	NIS	0.25	% v/v	3.2	oz/a							
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	0.0	5338.3
2	VALOR SX	0.064	lb ai/a	2	oz/a							
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a							
2	NIS	0.25	% v/v	3.2	oz/a							
2	AT CRACK					B	18.3	21.7	9.0	8.7	4.3	5400.3
2	VALOR SX	0.064	lb ai/a	2	oz/a							
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a							
2	NIS	0.25	% v/v	3.2	oz/a							
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	0.0	5212.7
3	VALOR SX	0.096	lb ai/a	3	oz/a							
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a							
2	NIS	0.25	% v/v	3.2	oz/a							
2	AT CRACK					B	25.0	33.3	15.0	13.0	6.0	5379.0
3	VALOR SX	0.096	lb ai/a	3	oz/a							
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a							
2	NIS	0.25	% v/v	3.2	oz/a							
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	0.0	5048.7
1	VALOR SX	0	lb ai/a	0	oz/a							
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a							
3	NIS	0.25	% v/v	3.2	oz/a							
2	AT CRACK					B	0.0	0.0	3.3	5.0	3.3	5616.0
1	VALOR SX	0	lb ai/a	0	oz/a							
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a							
3	NIS	0.25	% v/v	3.2	oz/a							

Texas Agricultural Experiment Station

Crop Code
Rating Data Type
Rating Unit
Rating Date

PEANUT INJURY PERCENT May/26/2010
PEANUT INJURY PERCENT Jun/09/2010
PEANUT INJURY PERCENT Jun/25/2010
PEANUT INJURY PERCENT Jul/07/2010
PEANUT INJURY PERCENT Sep/20/2010
PEANUT YIELD LB/ACRE Oct/20/2010

Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code						
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	0.0	5586.7
2	VALOR SX	0.064	lb ai/a	2	oz/a							
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a							
3	NIS	0.25	% v/v	3.2	oz/a							
2	AT CRACK					B	23.3	26.7	13.3	10.7	5.3	5387.7
2	VALOR SX	0.064	lb ai/a	2	oz/a							
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a							
3	NIS	0.25	% v/v	3.2	oz/a							
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	0.0	5738.0
3	VALOR SX	0.096	lb ai/a	3	oz/a							
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a							
3	NIS	0.25	% v/v	3.2	oz/a							
2	AT CRACK					B	25.0	35.0	15.0	12.3	5.0	5551.0
3	VALOR SX	0.096	lb ai/a	3	oz/a							
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a							
3	NIS	0.25	% v/v	3.2	oz/a							

Texas Agricultural Experiment Station

VALOR TANK MIX COMBINATIONS I

Trial ID: 136F-10
Location: AGCARES-LAMESA

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT May/26/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	6980.092593				
R	2	28.703704	14.351852	5.636	0.0297	1.2
A	1	3344.907407	3344.907407	233.065	0.0043	4.4
RA	2	28.703704	14.351852	5.636	0.0297	1.7
B	2	1706.481481	853.240741	216.824	0.0001	1.8
RB	4	15.740741	3.935185	1.545	0.2778	2.1
AB	2	1706.481481	853.240741	216.824	0.0001	2.6
RAB	4	15.740741	3.935185	1.545	0.2778	3.0
C	2	12.037037	6.018519	1.300	0.3673	2.0
RC	4	18.518519	4.629630	1.818	0.2187	2.1
AC	2	12.037037	6.018519	1.300	0.3673	2.8
RAC	4	18.518519	4.629630	1.818	0.2187	3.0
BC	4	15.740741	3.935185	1.545	0.2778	2.1
RBC	8	20.370370	2.546296	1.000	0.5000	3.7
ABC	4	15.740741	3.935185	1.545	0.2778	3.0
RABC	8	20.370370	2.546296			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT May/26/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	6980.092593				
R	2	28.703704	14.351852	3.537	0.0402	1.4
A	1	3344.907407	3344.907407	824.329	0.0001	1.1
B	2	1706.481481	853.240741	210.275	0.0001	1.4
AB	2	1706.481481	853.240741	210.275	0.0001	1.9
C	2	12.037037	6.018519	1.483	0.2412	1.4
AC	2	12.037037	6.018519	1.483	0.2412	1.9
BC	4	15.740741	3.935185	0.970	0.4367	2.4
ABC	4	15.740741	3.935185	0.970	0.4367	3.4
ERROR	34	137.962963	4.057734			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jun/09/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	10848.148148				
R	2	84.259259	42.129630	22.750	0.0005	1.0
A	1	5007.407407	5007.407407	177.311	0.0056	6.2
RA	2	56.481481	28.240741	15.250	0.0019	1.5
B	2	2825.925926	1412.962963	122.080	0.0003	3.1
RB	4	46.296296	11.574074	6.250	0.0139	1.8
AB	2	2681.481481	1340.740741	115.840	0.0003	4.5
RAB	4	46.296296	11.574074	6.250	0.0139	2.6
C	2	12.037037	6.018519	2.364	0.2101	1.5
RC	4	10.185185	2.546296	1.375	0.3243	1.8
AC	2	12.037037	6.018519	1.529	0.3211	2.6
RAC	4	15.740741	3.935185	2.125	0.1691	2.6
BC	4	10.185185	2.546296	2.200	0.1592	1.4
RBC	8	9.259259	1.157407	0.625	0.7394	3.1
ABC	4	15.740741	3.935185	2.125	0.1691	2.6
RABC	8	14.814815	1.851852			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jun/09/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	10848.148148				
R	2	84.259259	42.129630	7.195	0.0025	1.6
A	1	5007.407407	5007.407407	855.219	0.0001	1.3
B	2	2825.925926	1412.962963	241.321	0.0001	1.6
AB	2	2681.481481	1340.740741	228.986	0.0001	2.3
C	2	12.037037	6.018519	1.028	0.3686	1.6
AC	2	12.037037	6.018519	1.028	0.3686	2.3
BC	4	10.185185	2.546296	0.435	0.7824	2.9
ABC	4	15.740741	3.935185	0.672	0.6159	4.0
ERROR	34	199.074074	5.855120			

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COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jun/25/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	2195.481481				
R	2	15.592593	7.796296	1.684	0.2453	1.7
A	1	1102.518519	1102.518519	141.416	0.0070	3.3
RA	2	15.592593	7.796296	1.684	0.2453	2.3
B	2	435.148148	217.574074	76.292	0.0007	1.6
RB	4	11.407407	2.851852	0.616	0.6634	2.9
AB	2	435.148148	217.574074	76.292	0.0007	2.2
RAB	4	11.407407	2.851852	0.616	0.6634	4.1
C	2	16.259259	8.129630	3.158	0.1503	1.5
RC	4	10.296296	2.574074	0.556	0.7010	2.9
AC	2	16.259259	8.129630	3.158	0.1503	2.1
RAC	4	10.296296	2.574074	0.556	0.7010	4.1
BC	4	20.740741	5.185185	1.120	0.4113	2.9
RBC	8	37.037037	4.629630	1.000	0.5000	5.0
ABC	4	20.740741	5.185185	1.120	0.4113	4.1
RABC	8	37.037037	4.629630			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jun/25/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	2195.481481				
R	2	15.592593	7.796296	1.992	0.1520	1.3
A	1	1102.518519	1102.518519	281.690	0.0001	1.1
B	2	435.148148	217.574074	55.589	0.0001	1.3
AB	2	435.148148	217.574074	55.589	0.0001	1.9
C	2	16.259259	8.129630	2.077	0.1409	1.3
AC	2	16.259259	8.129630	2.077	0.1409	1.9
BC	4	20.740741	5.185185	1.325	0.2806	2.3
ABC	4	20.740741	5.185185	1.325	0.2806	3.3
ERROR	34	133.074074	3.913943			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jul/07/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	1742.833333				
R	2	16.000000	8.000000	4.840	0.0419	1.0
A	1	988.166667	988.166667	123.521	0.0080	3.3
RA	2	16.000000	8.000000	4.840	0.0419	1.4
B	2	274.111111	137.055556	31.832	0.0035	1.9
RB	4	17.222222	4.305556	2.605	0.1161	1.7
AB	2	274.111111	137.055556	31.832	0.0035	2.7
RAB	4	17.222222	4.305556	2.605	0.1161	2.4
C	2	5.444444	2.722222	0.766	0.5230	1.7
RC	4	14.222222	3.555556	2.151	0.1656	1.7
AC	2	5.444444	2.722222	0.766	0.5230	2.5
RAC	4	14.222222	3.555556	2.151	0.1656	2.4
BC	4	37.111111	9.277778	5.613	0.0188	1.7
RBC	8	13.222222	1.652778	1.000	0.5000	3.0
ABC	4	37.111111	9.277778	5.613	0.0188	2.4
RABC	8	13.222222	1.652778			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jul/07/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	1742.833333				
R	2	16.000000	8.000000	2.582	0.0904	1.2
A	1	988.166667	988.166667	318.965	0.0001	1.0
B	2	274.111111	137.055556	44.239	0.0001	1.2
AB	2	274.111111	137.055556	44.239	0.0001	1.7
C	2	5.444444	2.722222	0.879	0.4245	1.2
AC	2	5.444444	2.722222	0.879	0.4245	1.7
BC	4	37.111111	9.277778	2.995	0.0321	2.1
ABC	4	37.111111	9.277778	2.995	0.0321	2.9
ERROR	34	105.333333	3.098039			

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COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Sep/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	462.537037				
R	2	0.925926	0.462963	0.168	0.8482	1.3
A	1	236.462963	236.462963	510.760	0.0020	0.8
RA	2	0.925926	0.462963	0.168	0.8482	1.8
B	2	63.814815	31.907407	38.719	0.0024	0.8
RB	4	3.296296	0.824074	0.299	0.8706	2.2
AB	2	63.814815	31.907407	38.719	0.0024	1.2
RAB	4	3.296296	0.824074	0.299	0.8706	3.1
C	2	3.703704	1.851852	3.571	0.1289	0.7
RC	4	2.074074	0.518519	0.188	0.9379	2.2
AC	2	3.703704	1.851852	3.571	0.1289	0.9
RAC	4	2.074074	0.518519	0.188	0.9379	3.1
BC	4	17.185185	4.296296	1.560	0.2743	2.2
RBC	8	22.037037	2.754630	1.000	0.5000	3.8
ABC	4	17.185185	4.296296	1.560	0.2743	3.1
RABC	8	22.037037	2.754630			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Sep/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	462.537037				
R	2	0.925926	0.462963	0.282	0.7557	0.9
A	1	236.462963	236.462963	144.235	0.0001	0.7
B	2	63.814815	31.907407	19.462	0.0001	0.9
AB	2	63.814815	31.907407	19.462	0.0001	1.2
C	2	3.703704	1.851852	1.130	0.3350	0.9
AC	2	3.703704	1.851852	1.130	0.3350	1.2
BC	4	17.185185	4.296296	2.621	0.0519	1.5
ABC	4	17.185185	4.296296	2.621	0.0519	2.1
ERROR	34	55.740741	1.639434			

COMPLETE FACTORIAL AOV For PEANUT YIELD LB/ACRE Oct/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	6218026.537037				
R	2	169737.814815	84868.907407	0.717	0.5171	264.4
A	1	33600.166667	33600.166667	0.457	0.5688	317.6
RA	2	147133.444444	73566.722222	0.622	0.5611	374.0
B	2	32022.370370	16011.185185	0.081	0.9233	410.4
RB	4	786921.185185	196730.296296	1.662	0.2504	458.0
AB	2	511435.111111	255717.555556	2.885	0.1677	389.6
RAB	4	354608.444444	88652.111111	0.749	0.5855	647.7
C	2	105750.925926	52875.462963	0.358	0.7192	355.4
RC	4	590120.296296	147530.074074	1.247	0.3652	458.0
AC	2	284308.333333	142154.166667	1.286	0.3705	435.1
RAC	4	442292.222222	110573.055556	0.934	0.4907	647.7
BC	4	447556.407407	111889.101852	0.819	0.5478	492.1
RBC	8	1092826.037037	136603.254630	1.154	0.4221	793.3
ABC	4	272902.555556	68225.638889	0.576	0.6881	647.7
RABC	8	946811.222222	118351.402778			

FACTORIAL/POOLED ERROR AOV For PEANUT YIELD LB/ACRE Oct/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	6218026.537037				
R	2	169737.814815	84868.907407	0.662	0.5225	243.8
A	1	33600.166667	33600.166667	0.262	0.6121	199.0
B	2	32022.370370	16011.185185	0.125	0.8830	243.8
AB	2	511435.111111	255717.555556	1.994	0.1518	344.7
C	2	105750.925926	52875.462963	0.412	0.6654	243.8
AC	2	284308.333333	142154.166667	1.108	0.3417	344.7
BC	4	447556.407407	111889.101852	0.872	0.4906	422.2
ABC	4	272902.555556	68225.638889	0.532	0.7131	597.1
ERROR	34	4360712.851852	128256.260349			

Texas Agricultural Experiment Station

VALOR TANK MIX COMBINATIONS II

Trial ID: 137F-10
Location: HALFWAY PEANUT

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: HALFWAY
State/Prov.: TX

Initiation Date: May/10/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Planting Date: May/10/2010
Rate: 68000 PLANT/ACRE
Row Spacing: 40 IN
SPANISH PEANUT
Variety: OLIN
Planting Method: 4 ROW
Spacing Within Row: 5.2 SD/FT
Soil Moisture: DRY

SITE AND DESIGN

Plot Width, Unit: 13.33 FT
Plot Length, Unit: 30 FT
Study Design: FACTORIAL
Reps: 3

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: OLTON

APPLICATION DESCRIPTION

	A	B
Application Date:	May/11/2010	May/25/2010
Time of Day:	10:00 AM	10:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	A - PRE	B-ATCRACK
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	76 F	71 F
% Relative Humidity:	16	83
Wind Velocity, Unit:	9 MPH	10 MPH
Soil Temp., Unit:	59 F	71 F
Soil Moisture:	DRY	ADEQUATE
% Cloud Cover:	0	80

CROP STAGE AT EACH APPLICATION

	A	B
Stage Scale:	PRE	AT CRACK
Height, Unit:	N/A	1 INCH

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	BACKPACK	BACKPACK
Operating Pressure:	22 PSI	30 PSI
Nozzle Type:	TURBOTEE	TURBOTEE
Nozzle Size:	110015	110015
Nozzle Spacing, Unit:	19 IN	19 IN
Boom Height, Unit:	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH
Incorporation Equip.:	WATER	WATER
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	CO2	CO2

Treatment Application Comment

TRIAL AREA HAD SONALAN @ 2 PT/ACRE APPLIED PPI
5/11 - APPLIED PRE'S FB 0.25" IRRIGATION 5/12/2010
5/14- 1.5" RAINFALL
5/17- 1.5" RAINFALL

Texas Agricultural Experiment Station

VALOR TANK MIX COMBINATIONS II

Trial ID: 137F-10
Location: HALFWAY PEANUT

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	PEANUT	PEANUT	PEANUT	PEANUT	PEANUT
Rating Data Type	INJURY	INJURY	INJURY	INJURY	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	LB/ACRE
Rating Date	Jun/02/2010	Jun/08/2010	Jun/22/2010	Jul/20/2010	Oct/14/2010

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code
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TABLE OF R MEANS

Replicate 1		3.6	3.6	5.6	0.0	3594.9
Replicate 2		4.4	4.2	5.0	0.0	2652.2
Replicate 3		5.3	3.6	5.3	0.0	3246.9

TABLE OF A MEANS

1 PREEMERGENCE		A	0.0	0.0	0.0	0.0	3171.7
2 AT CRACK		B	8.9	7.6	10.6	0.0	3157.6

TABLE OF B MEANS

1 VALOR SX	0 lb ai/a	0 oz/a	3.3	0.8	1.4	0.0	2937.4
2 VALOR SX	0.064 lb ai/a	2 oz/a	3.9	2.2	5.3	0.0	3109.7
3 VALOR SX	0.096 lb ai/a	3 oz/a	6.1	8.3	9.2	0.0	3446.9

TABLE OF C MEANS

1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a	1.7	3.1	2.5	0.0	3356.9
2 GRAMOXONE INTEON	0.125 lb ai/a	8 oz/a	5.6	3.9	5.3	0.0	3085.8
2 NIS	0.25 % v/v	3.2 oz/a					
3 GRAMOXONE INTEON	0.25 lb ai/a	16 oz/a	6.1	4.4	8.1	0.0	3051.3
3 NIS	0.25 % v/v	3.2 oz/a					

TABLE OF AB MEANS

1 PREEMERGENCE		A	0.0	0.0	0.0	0.0	2815.8
1 VALOR SX	0 lb ai/a	0 oz/a					
2 AT CRACK		B	6.7	1.7	2.8	0.0	3059.0
1 VALOR SX	0 lb ai/a	0 oz/a					
1 PREEMERGENCE		A	0.0	0.0	0.0	0.0	3213.2
2 VALOR SX	0.064 lb ai/a	2 oz/a					
2 AT CRACK		B	7.8	4.4	10.6	0.0	3006.2
2 VALOR SX	0.064 lb ai/a	2 oz/a					
1 PREEMERGENCE		A	0.0	0.0	0.0	0.0	3486.2
3 VALOR SX	0.096 lb ai/a	3 oz/a					
2 AT CRACK		B	12.2	16.7	18.3	0.0	3407.6
3 VALOR SX	0.096 lb ai/a	3 oz/a					

TABLE OF AC MEANS

1 PREEMERGENCE		A	0.0	0.0	0.0	0.0	3253.9
1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a					
2 AT CRACK		B	3.3	6.1	5.0	0.0	3459.9
1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a					
1 PREEMERGENCE		A	0.0	0.0	0.0	0.0	3207.9
2 GRAMOXONE INTEON	0.125 lb ai/a	8 oz/a					
2 NIS	0.25 % v/v	3.2 oz/a					
2 AT CRACK		B	11.1	7.8	10.6	0.0	2963.8
2 GRAMOXONE INTEON	0.125 lb ai/a	8 oz/a					
2 NIS	0.25 % v/v	3.2 oz/a					
1 PREEMERGENCE		A	0.0	0.0	0.0	0.0	3053.4
3 GRAMOXONE INTEON	0.25 lb ai/a	16 oz/a					
3 NIS	0.25 % v/v	3.2 oz/a					
2 AT CRACK		B	12.2	8.9	16.1	0.0	3049.2
3 GRAMOXONE INTEON	0.25 lb ai/a	16 oz/a					
3 NIS	0.25 % v/v	3.2 oz/a					

TABLE OF BC MEANS

1 VALOR SX	0 lb ai/a	0 oz/a	0.0	0.0	0.0	0.0	3325.7
1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a					
2 VALOR SX	0.064 lb ai/a	2 oz/a	0.8	2.5	1.7	0.0	3229.5
1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a					
3 VALOR SX	0.096 lb ai/a	3 oz/a	4.2	6.7	5.8	0.0	3515.5
1 GRAMOXONE INTEON	0 lb ai/a	0 oz/a					
1 VALOR SX	0 lb ai/a	0 oz/a	4.2	0.0	0.8	0.0	2951.5
2 GRAMOXONE INTEON	0.125 lb ai/a	8 oz/a					
2 NIS	0.25 % v/v	3.2 oz/a	184				

Texas Agricultural Experiment Station

Crop Code
Rating Data Type
Rating Unit
Rating Date

PEANUT INJURY PERCENT
PEANUT INJURY PERCENT
PEANUT INJURY PERCENT
PEANUT INJURY PERCENT
PEANUT YIELD LB/ACRE

Jun/02/2010 Jun/08/2010 Jun/22/2010 Jul/20/2010 Oct/14/2010

Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code					
2	VALOR SX	0.064	lb ai/a	2	oz/a		5.0	2.5	5.8	0.0	2947.5
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a						
2	NIS	0.25	% v/v	3.2	oz/a						
3	VALOR SX	0.096	lb ai/a	3	oz/a		7.5	9.2	9.2	0.0	3358.5
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a						
2	NIS	0.25	% v/v	3.2	oz/a						
1	VALOR SX	0	lb ai/a	0	oz/a		5.8	2.5	3.3	0.0	2535.1
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a						
3	NIS	0.25	% v/v	3.2	oz/a						
2	VALOR SX	0.064	lb ai/a	2	oz/a		5.8	1.7	8.3	0.0	3152.2
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a						
3	NIS	0.25	% v/v	3.2	oz/a						
3	VALOR SX	0.096	lb ai/a	3	oz/a		6.7	9.2	12.5	0.0	3466.7
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a						
3	NIS	0.25	% v/v	3.2	oz/a						

TABLE OF ABC MEANS

1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	2859.0
1	VALOR SX	0	lb ai/a	0	oz/a						
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a						
2	AT CRACK					B	0.0	0.0	0.0	0.0	3792.3
1	VALOR SX	0	lb ai/a	0	oz/a						
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a						
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	3258.7
2	VALOR SX	0.064	lb ai/a	2	oz/a						
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a						
2	AT CRACK					B	1.7	5.0	3.3	0.0	3200.3
2	VALOR SX	0.064	lb ai/a	2	oz/a						
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a						
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	3644.0
3	VALOR SX	0.096	lb ai/a	3	oz/a						
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a						
2	AT CRACK					B	8.3	13.3	11.7	0.0	3387.0
3	VALOR SX	0.096	lb ai/a	3	oz/a						
1	GRAMOXONE INTEON	0	lb ai/a	0	oz/a						
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	3109.0
1	VALOR SX	0	lb ai/a	0	oz/a						
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a						
2	NIS	0.25	% v/v	3.2	oz/a						
2	AT CRACK					B	8.3	0.0	1.7	0.0	2794.0
1	VALOR SX	0	lb ai/a	0	oz/a						
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a						
2	NIS	0.25	% v/v	3.2	oz/a						
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	3185.3
2	VALOR SX	0.064	lb ai/a	2	oz/a						
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a						
2	NIS	0.25	% v/v	3.2	oz/a						
2	AT CRACK					B	10.0	5.0	11.7	0.0	2709.7
2	VALOR SX	0.064	lb ai/a	2	oz/a						
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a						
2	NIS	0.25	% v/v	3.2	oz/a						
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	3329.3
3	VALOR SX	0.096	lb ai/a	3	oz/a						
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a						
2	NIS	0.25	% v/v	3.2	oz/a						
2	AT CRACK					B	15.0	18.3	18.3	0.0	3387.7
3	VALOR SX	0.096	lb ai/a	3	oz/a						
2	GRAMOXONE INTEON	0.125	lb ai/a	8	oz/a						
2	NIS	0.25	% v/v	3.2	oz/a						
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	2479.3
1	VALOR SX	0	lb ai/a	0	oz/a						
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a						
3	NIS	0.25	% v/v	3.2	oz/a						
2	AT CRACK					B	11.7	5.0	6.7	0.0	2590.8
1	VALOR SX	0	lb ai/a	0	oz/a						
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a						
3	NIS	0.25	% v/v	3.2	oz/a						

Texas Agricultural Experiment Station

Crop Code
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PEANUT INJURY PERCENT
PEANUT INJURY PERCENT
PEANUT INJURY PERCENT
PEANUT INJURY PERCENT
PEANUT YIELD LB/ACRE

Jun/02/2010 Jun/08/2010 Jun/22/2010 Jul/20/2010 Oct/14/2010

Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code					
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	3195.7
2	VALOR SX	0.064	lb ai/a	2	oz/a						
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a						
3	NIS	0.25	% v/v	3.2	oz/a						
2	AT CRACK					B	11.7	3.3	16.7	0.0	3108.7
2	VALOR SX	0.064	lb ai/a	2	oz/a						
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a						
3	NIS	0.25	% v/v	3.2	oz/a						
1	PREEMERGENCE					A	0.0	0.0	0.0	0.0	3485.3
3	VALOR SX	0.096	lb ai/a	3	oz/a						
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a						
3	NIS	0.25	% v/v	3.2	oz/a						
2	AT CRACK					B	13.3	18.3	25.0	0.0	3448.0
3	VALOR SX	0.096	lb ai/a	3	oz/a						
3	GRAMOXONE INTEON	0.25	lb ai/a	16	oz/a						
3	NIS	0.25	% v/v	3.2	oz/a						

Texas Agricultural Experiment Station

VALOR TANK MIX COMBINATIONS II

Trial ID: 137F-10
Location: HALFWAY PEANUT

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jun/02/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	1933.333333				
R	2	25.000000	12.500000	2.571	0.1373	1.7
A	1	1066.666667	1066.666667	85.333	0.0115	4.1
RA	2	25.000000	12.500000	2.571	0.1373	2.4
B	2	77.777778	38.888889	5.091	0.0796	2.6
RB	4	30.555556	7.638889	1.571	0.2714	2.9
AB	2	77.777778	38.888889	5.091	0.0796	3.6
RAB	4	30.555556	7.638889	1.571	0.2714	4.2
C	2	211.111111	105.555556	13.818	0.0160	2.6
RC	4	30.555556	7.638889	1.571	0.2714	2.9
AC	2	211.111111	105.555556	13.818	0.0160	3.6
RAC	4	30.555556	7.638889	1.571	0.2714	4.2
BC	4	19.444444	4.861111	1.000	0.4609	2.9
RBC	8	38.888889	4.861111	1.000	0.5000	5.1
ABC	4	19.444444	4.861111	1.000	0.4609	4.2
RABC	8	38.888889	4.861111			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jun/02/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	1933.333333				
R	2	25.000000	12.500000	1.889	0.1668	1.8
A	1	1066.666667	1066.666667	161.185	0.0001	1.4
B	2	77.777778	38.888889	5.877	0.0064	1.8
AB	2	77.777778	38.888889	5.877	0.0064	2.5
C	2	211.111111	105.555556	15.951	0.0001	1.8
AC	2	211.111111	105.555556	15.951	0.0001	2.5
BC	4	19.444444	4.861111	0.735	0.5748	3.0
ABC	4	19.444444	4.861111	0.735	0.5748	4.3
ERROR	34	225.000000	6.617647			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jun/08/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	2146.759259				
R	2	3.703704	1.851852	0.842	0.4657	1.1
A	1	778.240741	778.240741	420.250	0.0024	1.6
RA	2	3.703704	1.851852	0.842	0.4657	1.6
B	2	573.148148	286.574074	47.615	0.0016	2.3
RB	4	24.074074	6.018519	2.737	0.1052	2.0
AB	2	573.148148	286.574074	47.615	0.0016	3.2
RAB	4	24.074074	6.018519	2.737	0.1052	2.8
C	2	17.592593	8.796296	2.714	0.1800	1.7
RC	4	12.962963	3.240741	1.474	0.2964	2.0
AC	2	17.592593	8.796296	2.714	0.1800	2.4
RAC	4	12.962963	3.240741	1.474	0.2964	2.8
BC	4	35.185185	8.796296	4.000	0.0453	2.0
RBC	8	17.592593	2.199074	1.000	0.5000	3.4
ABC	4	35.185185	8.796296	4.000	0.0453	2.8
RABC	8	17.592593	2.199074			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jun/08/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	2146.759259				
R	2	3.703704	1.851852	0.557	0.5779	1.2
A	1	778.240741	778.240741	234.238	0.0001	1.0
B	2	573.148148	286.574074	86.254	0.0001	1.2
AB	2	573.148148	286.574074	86.254	0.0001	1.8
C	2	17.592593	8.796296	2.648	0.0854	1.2
AC	2	17.592593	8.796296	2.648	0.0854	1.8
BC	4	35.185185	8.796296	2.648	0.0502	2.1
ABC	4	35.185185	8.796296	2.648	0.0502	3.0
ERROR	34	112.962963	3.322440			

Texas Agricultural Experiment Station

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jun/22/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	3570.833333				
R	2	2.777778	1.388889	0.167	0.8493	2.2
A	1	1504.166667	1504.166667	1083.000	0.0009	1.4
RA	2	2.777778	1.388889	0.167	0.8493	3.1
B	2	544.444444	272.222222	17.818	0.0102	3.6
RB	4	61.111111	15.277778	1.833	0.2159	3.8
AB	2	544.444444	272.222222	17.818	0.0102	5.1
RAB	4	61.111111	15.277778	1.833	0.2159	5.4
C	2	277.777778	138.888889	10.526	0.0255	3.4
RC	4	52.777778	13.194444	1.583	0.2686	3.8
AC	2	277.777778	138.888889	10.526	0.0255	4.8
RAC	4	52.777778	13.194444	1.583	0.2686	5.4
BC	4	27.777778	6.944444	0.833	0.5404	3.8
RBC	8	66.666667	8.333333	1.000	0.5000	6.7
ABC	4	27.777778	6.944444	0.833	0.5404	5.4
RABC	8	66.666667	8.333333			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jun/22/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	3570.833333				
R	2	2.777778	1.388889	0.130	0.8787	2.2
A	1	1504.166667	1504.166667	140.542	0.0001	1.8
B	2	544.444444	272.222222	25.435	0.0001	2.2
AB	2	544.444444	272.222222	25.435	0.0001	3.1
C	2	277.777778	138.888889	12.977	0.0001	2.2
AC	2	277.777778	138.888889	12.977	0.0001	3.1
BC	4	27.777778	6.944444	0.649	0.6316	3.9
ABC	4	27.777778	6.944444	0.649	0.6316	5.5
ERROR	34	363.888889	10.702614			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jul/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	0.000000				
R	2	0.000000	0.000000	0.000	1.0000	0.0
A	1	0.000000	0.000000	0.000	1.0000	0.0
RA	2	0.000000	0.000000	0.000	0.0000	0.0
B	2	0.000000	0.000000	0.000	1.0000	0.0
RB	4	0.000000	0.000000	0.000	0.0000	0.0
AB	2	0.000000	0.000000	0.000	0.0000	0.0
RAB	4	0.000000	0.000000	0.000	0.0000	0.0
C	2	0.000000	0.000000	0.000	1.0000	0.0
RC	4	0.000000	0.000000	0.000	0.0000	0.0
AC	2	0.000000	0.000000	0.000	0.0000	0.0
RAC	4	0.000000	0.000000	0.000	0.0000	0.0
BC	4	0.000000	0.000000	0.000	0.0000	0.0
RBC	8	0.000000	0.000000	0.000	0.0000	0.0
ABC	4	0.000000	0.000000	0.000	0.0000	0.0
RABC	8	0.000000	0.000000			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jul/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	0.000000				
R	2	0.000000	0.000000	0.000	1.0000	0.0
A	1	0.000000	0.000000	0.000	1.0000	0.0
B	2	0.000000	0.000000	0.000	1.0000	0.0
AB	2	0.000000	0.000000	0.000	0.0000	0.0
C	2	0.000000	0.000000	0.000	1.0000	0.0
AC	2	0.000000	0.000000	0.000	0.0000	0.0
BC	4	0.000000	0.000000	0.000	0.0000	0.0
ABC	4	0.000000	0.000000	0.000	0.0000	0.0
ERROR	34	0.000000	0.000000			

Texas Agricultural Experiment Station

COMPLETE FACTORIAL AOV For PEANUT YIELD LB/ACRE Oct/14/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	29403668.331885				
R	2	8179755.050489	4089877.525244	10.955	0.0051	469.7
A	1	2697.303921	2697.303921	0.002	0.9677	1332.3
RA	2	2588517.275789	1294258.637894	3.467	0.0824	664.2
B	2	2417661.645471	1208830.822735	3.223	0.1466	566.7
RB	4	1500326.959167	375081.739792	1.005	0.4588	813.5
AB	2	484263.789320	242131.894660	0.360	0.7181	1073.0
RAB	4	2689369.738219	672342.434555	1.801	0.2219	1150.4
C	2	1008300.389127	504150.194564	1.578	0.3124	523.0
RC	4	1277737.305250	319434.326312	0.856	0.5290	813.5
AC	2	456503.728773	228251.864387	0.707	0.5460	743.8
RAC	4	1292226.603503	323056.650876	0.865	0.5241	1150.4
BC	4	1200922.232782	300230.558195	1.033	0.4468	717.9
RBC	8	2325978.813650	290747.351706	0.779	0.6339	1409.0
ABC	4	992785.502468	248196.375617	0.665	0.6339	1150.4
RABC	8	2986621.993956	373327.749245			

FACTORIAL/POOLED ERROR AOV For PEANUT YIELD LB/ACRE Oct/14/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	53	29403668.331885				
R	2	8179755.050489	4089877.525244	9.485	0.0005	447.0
A	1	2697.303921	2697.303921	0.006	0.9374	364.9
B	2	2417661.645471	1208830.822735	2.803	0.0747	447.0
AB	2	484263.789320	242131.894660	0.562	0.5755	632.1
C	2	1008300.389127	504150.194564	1.169	0.3228	447.0
AC	2	456503.728773	228251.864387	0.529	0.5938	632.1
BC	4	1200922.232782	300230.558195	0.696	0.5998	774.2
ABC	4	992785.502468	248196.375617	0.576	0.6822	1094.8
ERROR	34	14660778.689534	431199.373222			

Texas Agricultural Experiment Station

PEANUT VARIETAL TOLERANCE TO HERBICIDES APPLIED PRE AND POST

Trial ID: 138F-10
Location: AG-CARES LAMESA

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: LAMESA
State/Prov.: TX

Initiation Date: Apr/28/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

RUNNER PEANUT Variety: FLAVORRUNNER 458
Planting Date: Apr/28/2010 Planting Method: 4 ROW
Row Spacing: 40 IN Spacing Within Row: 5.5 SD/FT
Soil Temperature: 66.2 F Soil Moisture: ADEQUATE

RUNNER PEANUT Variety: TAMRUN OL01
Planting Date: Apr/28/2010 Planting Method: 4 ROW
Row Spacing: 40 IN Spacing Within Row: 5.5 SD/FT
Soil Temperature: 66.2 F Soil Moisture: ADEQUATE

RUNNER PEANUT Variety: TAMRUN OL02
Planting Date: Apr/28/2010 Planting Method: 4 ROW
Row Spacing: 40 IN Spacing Within Row: 5.5 SD/FT
Soil Temperature: 66.2 F Soil Moisture: ADEQUATE

RUNNER PEANUT Variety: TAMRUN OL07
Planting Date: Apr/28/2010 Planting Method: 4 ROW
Row Spacing: 40 IN Spacing Within Row: 5.5 SD/FT
Soil Temperature: 66.2 F Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 6.67 FT Plot Length, Unit: 40 FT Reps: 3
Study Design: FACTORIAL

SOIL DESCRIPTION

Texture: FINE SANDY LOAM
Soil Name: AMARILLO

APPLICATION DESCRIPTION

	A	B
Application Date:	Apr/30/2010	Jun/02/2010
Time of Day:	10:00 AM	8:45 AM
Application Method:	SPRAY	SPRAY
Application Timing:	A PRE	B POST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	66 F	70.2 F
% Relative Humidity:	26	81.9
Wind Velocity, Unit:	11 MPH	5 MPH
Soil Temp., Unit:	66 F	71.4 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	5	60

CROP STAGE AT EACH APPLICATION

	A	B
Stage Scale:	PEANUT	PEANUT
Height, Unit:	PRE	5.5 IN
Stage Scale:	PEANUT	PEANUT
Height, Unit:	PRE	5.5 IN
Stage Scale:	PEANUT	PEANUT
Height, Unit:	PRE	5.5 IN
Stage Scale:	PEANUT	PEANUT
Height, Unit:	PRE	5.5 IN

Texas Agricultural Experiment Station

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	BACKPACK	BACKPACK
Operating Pressure:	26 PSI	30 PSI
Nozzle Type:	TURBOTEE	TURBOTEE
Nozzle Size:	110015	110015
Nozzle Spacing, Unit:	19 IN	19 IN
Boom Height, Unit:	18 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH
Incorporation Equip.:	WATER	WATER
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	C02	C02

Treatment Application Comment

4/30 - SPRAYED PRE'S; 5/3/2010 0.5" IRRIGATION APPLIED TO INCORPORATE

Texas Agricultural Experiment Station

PEANUT VARIETAL TOLERANCE TO HERBICIDES APPLIED PRE AND POST

Trial ID: 138F-10
Location: AG-CARES LAMESA

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	PEANUT	PEANUT	PEANUT	PEANUT	PEANUT	PEANUT
Rating Data Type	INJURY	INJURY	INJURY	INJURY	INJURY	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	LB/ACRE
Rating Date	May/26/2010	Jun/16/2010	Jul/07/2010	Jul/26/2010	Sep/20/2010	Oct/20/2010
Trt-Eval Interval	26 DA-A					

Trt	Treatment	Rate	Rate	Product	Product	Appl
No.	Name		Unit	Rate	Rate	Unit Code

TABLE OF R MEANS

Replicate 1	2.7	10.0	8.1	1.6	0.5	5760.9
Replicate 2	2.3	9.6	7.3	1.8	1.1	6277.8
Replicate 3	2.8	10.7	7.9	1.4	0.8	5934.9

TABLE OF A MEANS

1 FLAVORRUNNER 458	3.1	7.9	5.7	1.7	0.8	6469.5
2 OL01	3.6	12.4	8.0	2.1	1.0	5666.8
3 OL02	1.0	11.2	9.0	1.2	0.7	6146.1
4 OL07	2.6	9.0	8.4	1.4	0.9	5682.2

TABLE OF B MEANS

1 UNTREATED				0.0	0.0	0.0	0.0	0.0	5981.7
2 VALOR SX	0.048 lb ai/a	1.5 oz/a	A	0.0	3.3	1.8	0.0	0.0	6195.5
3 VALOR SX	0.096 lb ai/a	3 oz/a	A	0.0	7.5	6.1	0.0	0.0	5912.8
4 VALOR SX	0.191 lb ai/a	6 oz/a	A	18.1	16.7	12.0	0.0	0.0	5979.3
5 CADRE	0.0315 lb ai/a	2.02 oz/a	B	0.0	2.5	3.8	0.0	0.0	6019.7
5 COC	1 % v/v	12.8 oz/a	B						
6 CADRE	0.063 lb ai/a	4.03 oz/a	B	0.0	14.2	12.2	3.3	2.5	5774.8
6 COC	1 % v/v	12.8 oz/a	B						
7 CADRE	0.126 lb ai/a	8.1 oz/a	B	0.0	26.7	18.7	7.9	3.3	6074.5
7 COC	1 % v/v	12.8 oz/a	B						

TABLE OF AB MEANS

1 FLAVORRUNNER 458				0.0	0.0	0.0	0.0	0.0	6409.0
1 UNTREATED									
2 OL01				0.0	0.0	0.0	0.0	0.0	5416.3
1 UNTREATED									
3 OL02				0.0	0.0	0.0	0.0	0.0	5882.7
1 UNTREATED									
4 OL07				0.0	0.0	0.0	0.0	0.0	6218.7
1 UNTREATED									
1 FLAVORRUNNER 458				0.0	0.0	0.0	0.0	0.0	7023.7
2 VALOR SX	0.048 lb ai/a	1.5 oz/a	A						
2 OL01				0.0	8.3	2.7	0.0	0.0	5850.3
2 VALOR SX	0.048 lb ai/a	1.5 oz/a	A						
3 OL02				0.0	0.0	0.0	0.0	0.0	6199.0
2 VALOR SX	0.048 lb ai/a	1.5 oz/a	A						
4 OL07				0.0	5.0	4.3	0.0	0.0	5709.0
2 VALOR SX	0.048 lb ai/a	1.5 oz/a	A						
1 FLAVORRUNNER 458				0.0	0.0	0.0	0.0	0.0	6492.0
3 VALOR SX	0.096 lb ai/a	3 oz/a	A						
2 OL01				0.0	5.0	5.0	0.0	0.0	5336.0
3 VALOR SX	0.096 lb ai/a	3 oz/a	A						
3 OL02				0.0	16.7	11.7	0.0	0.0	6235.7
3 VALOR SX	0.096 lb ai/a	3 oz/a	A						
4 OL07				0.0	8.3	7.7	0.0	0.0	5587.7
3 VALOR SX	0.096 lb ai/a	3 oz/a	A						
1 FLAVORRUNNER 458				21.7	11.7	10.0	0.0	0.0	6387.7
4 VALOR SX	0.191 lb ai/a	6 oz/a	A						
2 OL01				25.0	21.7	12.3	0.0	0.0	5672.0
4 VALOR SX	0.191 lb ai/a	6 oz/a	A						
3 OL02				7.3	20.0	13.3	0.0	0.0	6230.7
4 VALOR SX	0.191 lb ai/a	6 oz/a	A						
4 OL07				18.3	13.3	12.3	0.0	0.0	5626.7
4 VALOR SX	0.191 lb ai/a	6 oz/a	A						
1 FLAVORRUNNER 458				0.0	1.7	1.7	0.0	0.0	6070.3
5 CADRE	0.0315 lb ai/a	2.02 oz/a	B						
5 COC	1 % v/v	12.8 oz/a	B						
2 OL01				0.0	3.3	5.0	0.0	0.0	5960.3
5 CADRE	0.0315 lb ai/a	2.02 oz/a	B						
5 COC	1 % v/v	12.8 oz/a	B						

Texas Agricultural Experiment Station

Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

PEANUT INJURY PERCENT May/26/2010 26 DA-A	PEANUT INJURY PERCENT Jun/16/2010	PEANUT INJURY PERCENT Jul/07/2010	PEANUT INJURY PERCENT Jul/26/2010	PEANUT INJURY PERCENT Sep/20/2010	PEANUT YIELD LB/ACRE Oct/20/2010
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Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Unit	Appl Code						
3	OL02						0.0	1.7	5.0	0.0	0.0	6290.7
5	CADRE	0.0315	lb ai/a	2.02	oz/a	B						
5	COC	1	% v/v	12.8	oz/a	B						
4	OL07						0.0	3.3	3.3	0.0	0.0	5757.3
5	CADRE	0.0315	lb ai/a	2.02	oz/a	B						
5	COC	1	% v/v	12.8	oz/a	B						
1	FLAVORRUNNER 458						0.0	15.0	12.3	3.3	3.3	6158.0
6	CADRE	0.063	lb ai/a	4.03	oz/a	B						
6	COC	1	% v/v	12.8	oz/a	B						
2	OL01						0.0	16.7	11.7	6.7	3.3	5355.7
6	CADRE	0.063	lb ai/a	4.03	oz/a	B						
6	COC	1	% v/v	12.8	oz/a	B						
3	OL02						0.0	15.0	14.7	1.7	1.7	6079.3
6	CADRE	0.063	lb ai/a	4.03	oz/a	B						
6	COC	1	% v/v	12.8	oz/a	B						
4	OL07						0.0	10.0	10.0	1.7	1.7	5506.0
6	CADRE	0.063	lb ai/a	4.03	oz/a	B						
6	COC	1	% v/v	12.8	oz/a	B						
1	FLAVORRUNNER 458						0.0	26.7	16.0	8.3	2.0	6745.7
7	CADRE	0.126	lb ai/a	8.1	oz/a	B						
7	COC	1	% v/v	12.8	oz/a	B						
2	OL01						0.0	31.7	19.3	8.3	3.3	6077.0
7	CADRE	0.126	lb ai/a	8.1	oz/a	B						
7	COC	1	% v/v	12.8	oz/a	B						
3	OL02						0.0	25.0	18.3	6.7	3.3	6105.0
7	CADRE	0.126	lb ai/a	8.1	oz/a	B						
7	COC	1	% v/v	12.8	oz/a	B						
4	OL07						0.0	23.3	21.0	8.3	4.3	5370.3
7	CADRE	0.126	lb ai/a	8.1	oz/a	B						
7	COC	1	% v/v	12.8	oz/a	B						

Texas Agricultural Experiment Station

PEANUT VARIETAL TOLERANCE TO HERBICIDES APPLIED PRE AND POST

Trial ID: 138F-10
Location: AG-CARES LAMESA

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT May/26/2010 26 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	4038.416667				
R	2	2.952381	1.476190	0.495	0.6138	0.9
A	3	75.559524	25.186508	8.440	0.0142	1.3
RA	6	17.904762	2.984127	1.000	0.4404	1.9
B	6	3363.500000	560.583333	379.750	0.0001	1.1
RB	12	17.714286	1.476190	0.495	0.9042	2.5
AB	18	453.357143	25.186508	8.440	0.0001	2.9
RAB	36	107.428571	2.984127			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT May/26/2010 26 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	4038.416667				
R	2	2.952381	1.476190	0.557	0.5760	0.9
A	3	75.559524	25.186508	9.508	0.0001	1.0
B	6	3363.500000	560.583333	211.618	0.0001	1.3
AB	18	453.357143	25.186508	9.508	0.0001	2.7
ERROR	54	143.047619	2.649030			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jun/16/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	8548.809524				
R	2	16.666667	8.333333	0.521	0.5985	2.2
A	3	263.095238	87.698413	3.746	0.0792	3.7
RA	6	140.476190	23.412698	1.463	0.2186	4.3
B	6	6557.142857	1092.857143	52.457	0.0001	4.1
RB	12	250.000000	20.833333	1.302	0.2600	5.7
AB	18	745.238095	41.402116	2.587	0.0075	6.6
RAB	36	576.190476	16.005291			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jun/16/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	8548.809524				
R	2	16.666667	8.333333	0.466	0.6303	2.3
A	3	263.095238	87.698413	4.899	0.0044	2.6
B	6	6557.142857	1092.857143	61.049	0.0001	3.5
AB	18	745.238095	41.402116	2.313	0.0092	6.9
ERROR	54	966.666667	17.901235			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jul/07/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	4240.702381				
R	2	10.880952	5.440476	0.463	0.6328	1.9
A	3	129.464286	43.154762	13.476	0.0045	1.4
RA	6	19.214286	3.202381	0.273	0.9461	3.7
B	6	3258.952381	543.158730	41.092	0.0001	3.2
RB	12	158.619048	13.218254	1.126	0.3706	4.9
AB	18	240.952381	13.386243	1.140	0.3571	5.7
RAB	36	422.619048	11.739418			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jul/07/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	4240.702381				
R	2	10.880952	5.440476	0.489	0.6158	1.8
A	3	129.464286	43.154762	3.881	0.0138	2.1
B	6	3258.952381	543.158730	48.847	0.0001	2.7
AB	18	240.952381	13.386243	1.204	0.2912	5.4
ERROR	54	600.452381	11.119489			

Texas Agricultural Experiment Station

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Jul/26/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	1108.035714				
R	2	1.785714	0.892857	0.120	0.8875	1.5
A	3	10.416667	3.472222	0.660	0.6058	1.7
RA	6	31.547619	5.257937	0.705	0.6474	2.9
B	6	668.452381	111.408730	16.394	0.0001	2.3
RB	12	81.547619	6.795635	0.911	0.5454	3.9
AB	18	45.833333	2.546296	0.341	0.9912	4.5
RAB	36	268.452381	7.457011			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Jul/26/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	1108.035714				
R	2	1.785714	0.892857	0.126	0.8816	1.4
A	3	10.416667	3.472222	0.491	0.6897	1.6
B	6	668.452381	111.408730	15.768	0.0001	2.2
AB	18	45.833333	2.546296	0.360	0.9901	4.3
ERROR	54	381.547619	7.065697			

COMPLETE FACTORIAL AOV For PEANUT INJURY PERCENT Sep/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	300.321429				
R	2	4.571429	2.285714	0.802	0.4563	0.9
A	3	0.702381	0.234127	0.074	0.9719	1.3
RA	6	19.047619	3.174603	1.114	0.3738	1.8
B	6	145.071429	24.178571	23.345	0.0001	0.9
RB	12	12.428571	1.035714	0.363	0.9682	2.4
AB	18	15.880952	0.882275	0.310	0.9950	2.8
RAB	36	102.619048	2.850529			

FACTORIAL/POOLED ERROR AOV For PEANUT INJURY PERCENT Sep/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	300.321429				
R	2	4.571429	2.285714	0.920	0.4045	0.8
A	3	0.702381	0.234127	0.094	0.9629	1.0
B	6	145.071429	24.178571	9.737	0.0001	1.3
AB	18	15.880952	0.882275	0.355	0.9909	2.6
ERROR	54	134.095238	2.483245			

COMPLETE FACTORIAL AOV For PEANUT YIELD LB/ACRE Oct/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	34034725.666667				
R	2	3873150.309524	1936575.154762	8.716	0.0008	254.6
A	3	9522282.809524	3174094.269841	3.922	0.0727	679.3
RA	6	4855726.261905	809287.710317	3.642	0.0063	509.2
B	6	1232560.166667	205426.694444	0.980	0.4791	407.2
RB	12	2514876.690476	209573.057540	0.943	0.5171	673.6
AB	18	4037254.690476	224291.927249	1.009	0.4727	777.8
RAB	36	7998874.738095	222190.964947			

FACTORIAL/POOLED ERROR AOV For PEANUT YIELD LB/ACRE Oct/20/2010

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	83	34034725.666667				
R	2	3873150.309524	1936575.154762	6.804	0.0023	285.2
A	3	9522282.809524	3174094.269841	11.152	0.0001	329.3
B	6	1232560.166667	205426.694444	0.722	0.6338	435.6
AB	18	4037254.690476	224291.927249	0.788	0.7044	871.2
ERROR	54	15369477.690476	284619.957231			

Texas Agricultural Experiment Station

LARGE PLOT TILLAGE COMPARISON IN COTTON

Trial ID: 139F-10
Location: HELM'S PIVOT

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: HALFWAY
State/Prov.: TX

Initiation Date: May/04/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

COTTON
Planting Date: May/21/2010
Rate: 50000 SEED/ACRE
Row Spacing: 30 IN
Variety: FIBERMAX FM9180 B2 FLEX
Planting Method: 8 ROW

Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 20 FT
Plot Length, Unit: 300 FT
Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: OLTON

APPLICATION DESCRIPTION

	A	B	C
Application Date:	May/04/2010	May/21/2010	Jun/14/2010
Time of Day:	10:00 AM		
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	A PPI	B PRE	C POST
Applic. Placement:	BROADCAST		
Air Temp., Unit:	76.4 F		
% Relative Humidity:	18		
Wind Velocity, Unit:	17.5 MPH		
Soil Moisture:	ADEQUATE		
% Cloud Cover:	0		

CROP STAGE AT EACH APPLICATION

	A	B	C
Stage Scale:	COTTON		
	PPI		
	N/A		

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	24 ROW		
Operating Pressure:	30 PSI		
Nozzle Type:	FLAT FAN		
Nozzle Size:	8002 EVS		
Nozzle Spacing, Unit:	20 IN		
Boom Height, Unit:	20 IN		
Ground Speed, Unit:	5 MPH		
Incorporation Equip.:	ST/RC/IRR		
Carrier:	WATER		
Spray Volume, Unit:	10 GPA		
Propellant:	AIR		

Treatment Application Comment

4/30/2010 - DISKED DOWN CONVENTIONAL AREA AND RELISTED BEDS
5/4/2010 - SPRAYED CONVENTIONAL; INCORP. W/ROLL. CULT. 1X @ 5 MPH
5/4/2010 - SPRAYED STRIP-TILL; INCORP W/STRIP-TILL RIG 1X @ 4 MPH 8-10"
5/4/2010 - SPRAYED NO-TILL; INCORP. W/IRRIGATION (0.5" IN 1 PASS 5/5
5/4 - SOIL TEMP (CONVENTIONAL; 56.6 F; STRIP-TILL AND NO-TILL 58.1 F)
5/5 - IRRIGATED ENTIRE TRIAL AREA WITH 0.5" IRRIGATION (1 PASS)
5/21 - PLANTED COTTON WITH 3 LBS./ACRE TEMIK APPLIED INFURROW
5/21 - APPLIED DIURON (3 PT./A) PLUS GLYSTAR GOLD (32 OZ/A) AFTER PLANT
6/14 - APPLIED GLYSTAR GOLD (32 OZ/A)
6/28 - APPLIED GLYSTAR GOLD (32 OZ/A)
7/20 - APPLIED GLYSTAR GOLD (32 OZ/A) PLUS MEPIQUAT (12 OZ/A)
8/5 - APPLIED MEPIQUAT (12 OZ/A)
10/7 - HARVEST AIDS APPLIED
10/14 - PARAQUAT APPLIED
11/2 - HARVEST

Texas Agricultural Experiment Station

LARGE PLOT TILLAGE COMPARISON IN COTTON

Trial ID: 139F-10
Location: HELM'S PIVOT

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	COTTON	COTTON
Rating Data Type	PLANT STAND	LINT YIELD
Rating Unit	1R X 2M	LB/ACRE
Rating Date	Nov/02/2010	Nov/02/2010
Trt-Eval Interval	182 DA-A	182 DA-A

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code		
1	STRIP-TILL						15.60 a	1191.8 a
	PROWL H2O	1	lb ai/a	33.7	oz/a	A		
	DIURON	1.5	lb ai/a	3	pt/a	B		
	GLYPHOSATE	1	lb ae/a	32	oz/a	C		
2	NO-TILL						12.60 a	1066.5 a
	PROWL H2O	1	lb ai/a	33.7	oz/a	A		
	DIURON	1.5	lb ai/a	3	pt/a	B		
	GLYPHOSATE	1	lb ae/a	32	oz/a	C		
3	CONVENTIONAL TILL						13.85 a	1127.8 a
	PROWL H2O	1	lb ai/a	33.7	oz/a	A		
	DIURON	1.5	lb ai/a	3	pt/a	B		
	GLYPHOSATE	1	lb ae/a	32	oz/a	C		
LSD (P=.05)							2.721	130.23
Standard Deviation							1.573	75.26
CV							11.22	6.67
Bartlett's X2							0.201	15.451
P(Bartlett's X2)							0.904	0.001*
Replicate F							1.945	0.829
Replicate Prob(F)							0.2238	0.5245
Treatment F							3.673	2.770
Treatment Prob(F)							0.0909	0.1406

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

SORGHUM TOLERANCE AND EFFICACY WITH HUSKIE HERBICIDE

Trial ID: 140F-10
Location: HALFWAY

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: HALFWAY
State/Prov.: TX

Initiation Date: May/25/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
PALMER AMARANTH
DEVIL'S CLAW
SILVERLEAF NIGHTSHADE

SORGHUM Variety: PIONEER 85Y40-N281
Planting Date: May/25/2010 Planting Method: 4 ROW
Rate: 62000 PLANT/ACRE
Row Spacing: 40 IN Spacing Within Row: 4.7 SD/FT
Soil Temperature: 73 F Soil Moisture: ADEQUATE

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: OLTON

APPLICATION DESCRIPTION

	A	B	C
Application Date:	May/25/2010	Jun/17/2010	Jun/21/2010
Time of Day:	12:15 PM	2:00 PM	9:30 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	A PRE	B 2"-4"WD	C 6"-8"WD
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	74 F	89.6 F	82 F
% Relative Humidity:	72	42.4	56
Wind Velocity, Unit:	11 MPH	7.8 MPH	10 MPH
Soil Temp., Unit:	73 F	81.9 F	76 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE
% Cloud Cover:	95	5	0

CROP STAGE AT EACH APPLICATION

	A	B	C
	SORGHUM	SORGHUM	SORGHUM
Stage Scale:	PRE	5 LEAF	6 LEAF
Height, Unit:	N/A	10 IN	12 IN

WEED STAGE AT EACH APPLICATION

	A	B	C
	PALMER AM	PALMER AM	PALMER AM
Stage Scale:	2"-5"	6"-11"	
	DEVILSCLA	DEVILSCLA	
Stage Scale:	2"-5"	4"-5"	
	SILVERLEA	SILVERLEA	
Stage Scale:	2"-11"	4"-11"	

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	30 PSI	28 PSI	24 PSI
Nozzle Type:	TURBOTEE	TURBOTEE	TURBOTEE
Nozzle Size:	110015	110015	110015
Nozzle Spacing, Unit:	19 IN	19 IN	19 IN
Boom Height, Unit:	18 IN	18 IN	30 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA
Propellant:	CO2	CO2	CO2

Texas Agricultural Experiment Station

Treatment Application Comment

6/30/2010 - OBSERVED GOOD ACTIVITY ON GROUNDCHERRY, BINDWEED
POOR ON YELLOW NUTSEDGE

Texas Agricultural Experiment Station

SORGHUM TOLERANCE AND EFFICACY WITH HUSKIE HERBICIDE

Trial ID: 140F-10
Location: HALFWAY

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

						SORGHUM	SORGHUM	SORGHUM	SORGHUM	PIGWEEED	DEVILSCL
Weed Code						INJURY	INJURY	INJURY	INJURY	CONTROL	CONTROL
Crop Code						PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Data Type						Jun/19/2010	Jun/21/2010	Jun/25/2010	Jun/30/2010	Jun/30/2010	Jun/30/2010
Rating Unit											
Rating Date											
Trt	Treatment	Rate	Rate	Product	Product	Appl					
No.	Name		Unit	Rate	Rate	Unit					
1	UNTREATED						0.0 c	0.0 f	0.0 d	0.0 g	0.0 b
2	ROUNDUP POWERMAX	0.56	lb ae/a	16	oz/a	A	1.7 c	0.0 f	0.0 d	0.0 g	0.0 b
	SHARPEN	0.0445	lb ai/a	2	oz/a	A					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	A					
3	HUSKIE	0.217	lb ai/a	13	oz/a	B	1.7 c	5.0 e	3.7 cd	9.3 de	100.0 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	B					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B					
4	HUSKIE	0.268	lb ai/a	16	oz/a	B	5.0 bc	8.3 d	7.7 bc	11.7 cd	100.0 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	B					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B					
5	HUSKIE	0.217	lb ai/a	13	oz/a	B	3.3 bc	10.0 c	8.7 bc	9.0 de	100.0 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	B					
	2,4-D AMINE	0.125	lb ai/a	4.2	oz/a	B					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B					
6	HUSKIE	0.217	lb ai/a	13	oz/a	B	6.7 b	14.0 b	11.0 b	13.3 c	100.0 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	B					
	CLARITY	0.125	lb ai/a	4	oz/a	B					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B					
7	ATRAZINE	0.5	lb ai/a	1	pt/a	B	0.0 c	5.0 e	3.3 cd	4.3 f	100.0 a
	BUCTRIL	0.25	lb ai/a	1	pt/a	B					
8	AIM	0.0156	lb ai/a	1	oz/a	B	43.3 a	28.3 a	23.3 a	15.0 bc	100.0 a
	2,4-D AMINE	0.188	lb ai/a	6.33	oz/a	B					
	NIS	0.25	% v/v	3.2	oz/a	B					
9	HUSKIE	0.217	lb ai/a	13	oz/a	B	1.7 c	5.0 e	23.3 a	25.0 a	100.0 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	B					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B					
	HUSKIE	0.217	lb ai/a	13	oz/a	C					
	ATRAZINE	0.5	lb ai/a	1	pt/a	C					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C					
10	HUSKIE	0.217	lb ai/a	13	oz/a	C	0.0 c	0.0 f	10.7 b	5.3 ef	96.3 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	C					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C					
11	HUSKIE	0.268	lb ai/a	16	oz/a	C	0.0 c	0.0 f	12.7 b	15.0 bc	94.3 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	C					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C					
12	HUSKIE	0.217	lb ai/a	13	oz/a	C	0.0 c	0.0 f	11.7 b	6.7 ef	98.7 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	C					
	2,4-D AMINE	0.125	lb ai/a	4.2	oz/a	C					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C					
13	HUSKIE	0.217	lb ai/a	13	oz/a	C	0.0 c	0.0 f	14.0 b	11.7 cd	97.7 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	C					
	CLARITY	0.125	lb ai/a	4	oz/a	C					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C					
14	ATRAZINE	0.5	lb ai/a	1	pt/a	C	0.0 c	0.0 f	11.0 b	5.7 ef	61.7 d
	BUCTRIL	0.25	lb ai/a	1	pt/a	C					
15	AIM	0.0156	lb ai/a	1	oz/a	C	0.0 c	0.0 f	25.0 a	18.3 b	68.3 cd
	2,4-D AMINE	0.188	lb ai/a	6.33	oz/a	C					
	NIS	0.25	% v/v	3.2	oz/a	C					
LSD (P=.05)							3.14	1.63	4.05	2.92	6.97
Standard Deviation							1.88	0.98	2.42	1.74	4.17
CV							44.51	19.38	21.9	17.4	4.99
Bartlett's X2							0.0	0.938	7.536	7.918	17.87
P(Bartlett's X2)							.	0.626	0.82	0.542	0.085
Replicate F							0.157	0.302	1.669	0.139	1.327
Replicate Prob(F)							0.8552	0.7415	0.2066	0.8710	0.2816
Treatment F							103.101	193.199	32.248	45.540	120.337
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code						SILVERLF	PIGWEEED	DEVILSCL	SILVERLF	SORGHUM	
Crop Code						CONTROL	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Data Type						PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Unit						Jun/30/2010	Jul/14/2010	Jul/14/2010	Jul/14/2010	Jul/14/2010	Jul/28/2010
Rating Date											
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code					
1	UNTREATED						0.0 d	0.0 c	0.0 c	0.0 b	0.0 b
2	ROUNDUP POWERMAX	0.56	lb ae/a	16	oz/a	A	6.7 d	0.0 c	74.3 b	0.0 b	0.0 b
	SHARPEN	0.0445	lb ai/a	2	oz/a	A					0.0 d
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	A					
3	HUSKIE	0.217	lb ai/a	13	oz/a	B	85.0 ab	11.7 b	94.3 a	100.0 a	86.7 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	B					4.0 bc
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B					
4	HUSKIE	0.268	lb ai/a	16	oz/a	B	93.3 a	11.7 b	95.3 a	100.0 a	78.3 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	B					4.3 bc
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B					
5	HUSKIE	0.217	lb ai/a	13	oz/a	B	96.7 a	11.0 b	99.3 a	100.0 a	79.3 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	B					3.3 bc
	2,4-D AMINE	0.125	lb ai/a	4.2	oz/a	B					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B					
6	HUSKIE	0.217	lb ai/a	13	oz/a	B	98.3 a	10.0 b	99.3 a	100.0 a	95.0 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	B					2.7 bc
	CLARITY	0.125	lb ai/a	4	oz/a	B					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B					
7	ATRAZINE	0.5	lb ai/a	1	pt/a	B	53.3 c	2.0 c	66.7 b	90.0 a	56.7 a
	BUCTRIL	0.25	lb ai/a	1	pt/a	B					0.0 d
8	AIM	0.0156	lb ai/a	1	oz/a	B	81.7 b	10.7 b	76.7 b	96.7 a	83.3 a
	2,4-D AMINE	0.188	lb ai/a	6.33	oz/a	B					12.7 a
	NIS	0.25	% v/v	3.2	oz/a	B					
9	HUSKIE	0.217	lb ai/a	13	oz/a	B	99.0 a	25.0 a	100.0 a	100.0 a	81.7 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	B					4.3 bc
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B					
	HUSKIE	0.217	lb ai/a	13	oz/a	C					
	ATRAZINE	0.5	lb ai/a	1	pt/a	C					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C					
10	HUSKIE	0.217	lb ai/a	13	oz/a	C	95.0 a	9.3 b	93.3 a	100.0 a	96.7 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	C					3.7 bc
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C					
11	HUSKIE	0.268	lb ai/a	16	oz/a	C	98.3 a	16.0 b	93.3 a	99.3 a	66.7 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	C					4.7 bc
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C					
12	HUSKIE	0.217	lb ai/a	13	oz/a	C	99.0 a	8.3 b	97.0 a	100.0 a	85.0 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	C					4.3 bc
	2,4-D AMINE	0.125	lb ai/a	4.2	oz/a	C					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C					
13	HUSKIE	0.217	lb ai/a	13	oz/a	C	95.0 a	8.3 b	96.0 a	100.0 a	90.0 a
	ATRAZINE	0.5	lb ai/a	1	pt/a	C					2.0 cd
	CLARITY	0.125	lb ai/a	4	oz/a	C					
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C					
14	ATRAZINE	0.5	lb ai/a	1	pt/a	C	56.7 c	12.0 b	75.0 b	100.0 a	93.3 a
	BUCTRIL	0.25	lb ai/a	1	pt/a	C					0.0 d
15	AIM	0.0156	lb ai/a	1	oz/a	C	80.0 b	15.0 b	65.0 b	100.0 a	86.7 a
	2,4-D AMINE	0.188	lb ai/a	6.33	oz/a	C					5.0 b
	NIS	0.25	% v/v	3.2	oz/a	C					
LSD (P=.05)							8.68	4.51	12.12	7.68	25.16
Standard Deviation							5.19	2.70	7.25	4.59	15.05
CV							6.84	26.78	8.87	5.36	20.91
Bartlett's X2							21.579	10.127	28.265	9.024	17.641
P(Bartlett's X2)							0.043*	0.34	0.005*	0.011*	0.127
Replicate F							2.244	0.725	0.462	1.857	2.082
Replicate Prob(F)							0.1247	0.4933	0.6346	0.1748	0.1435
Treatment F							120.132	16.718	37.987	173.202	12.745
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code	PIGWEEED	DEVILSCL	SILVERLF	
Crop Code				SORGHUM
Rating Data Type	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	BUSHEL/A
Rating Date	Jul/28/2010	Jul/28/2010	Jul/28/2010	Sep/30/2010

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code				
1	UNTREATED						0.0 d	0.0 c	0.0 c	77.3 b
2	ROUNDUP POWERMAX	0.56	lb ae/a	16	oz/a	A	82.3 b	46.7 b	0.0 c	119.0 ab
	SHARPEN	0.0445	lb ai/a	2	oz/a	A				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	A				
3	HUSKIE	0.217	lb ai/a	13	oz/a	B	97.3 a	100.0 a	86.7 ab	119.0 ab
	ATRAZINE	0.5	lb ai/a	1	pt/a	B				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B				
4	HUSKIE	0.268	lb ai/a	16	oz/a	B	99.3 a	100.0 a	89.3 ab	118.3 ab
	ATRAZINE	0.5	lb ai/a	1	pt/a	B				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B				
5	HUSKIE	0.217	lb ai/a	13	oz/a	B	100.0 a	100.0 a	86.7 ab	93.3 ab
	ATRAZINE	0.5	lb ai/a	1	pt/a	B				
	2,4-D AMINE	0.125	lb ai/a	4.2	oz/a	B				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B				
6	HUSKIE	0.217	lb ai/a	13	oz/a	B	100.0 a	100.0 a	95.0 a	94.7 ab
	ATRAZINE	0.5	lb ai/a	1	pt/a	B				
	CLARITY	0.125	lb ai/a	4	oz/a	B				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B				
7	ATRAZINE	0.5	lb ai/a	1	pt/a	B	69.3 c	96.7 a	76.7 ab	99.7 ab
	BUCTRIL	0.25	lb ai/a	1	pt/a	B				
8	AIM	0.0156	lb ai/a	1	oz/a	B	79.0 bc	100.0 a	66.7 b	114.7 ab
	2,4-D AMINE	0.188	lb ai/a	6.33	oz/a	B				
	NIS	0.25	% v/v	3.2	oz/a	B				
9	HUSKIE	0.217	lb ai/a	13	oz/a	B	100.0 a	100.0 a	88.3 ab	105.7 ab
	ATRAZINE	0.5	lb ai/a	1	pt/a	B				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	B				
	HUSKIE	0.217	lb ai/a	13	oz/a	C				
	ATRAZINE	0.5	lb ai/a	1	pt/a	C				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C				
10	HUSKIE	0.217	lb ai/a	13	oz/a	C	99.0 a	100.0 a	91.7 a	120.7 ab
	ATRAZINE	0.5	lb ai/a	1	pt/a	C				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C				
11	HUSKIE	0.268	lb ai/a	16	oz/a	C	95.7 a	100.0 a	83.3 ab	127.0 ab
	ATRAZINE	0.5	lb ai/a	1	pt/a	C				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C				
12	HUSKIE	0.217	lb ai/a	13	oz/a	C	100.0 a	100.0 a	93.0 a	93.3 ab
	ATRAZINE	0.5	lb ai/a	1	pt/a	C				
	2,4-D AMINE	0.125	lb ai/a	4.2	oz/a	C				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C				
13	HUSKIE	0.217	lb ai/a	13	oz/a	C	99.3 a	100.0 a	93.3 a	116.7 ab
	ATRAZINE	0.5	lb ai/a	1	pt/a	C				
	CLARITY	0.125	lb ai/a	4	oz/a	C				
	AMMONIUM SULFATE	8.5	lb/100 gal	8.5	lb/100gal	C				
14	ATRAZINE	0.5	lb ai/a	1	pt/a	C	68.3 c	96.7 a	73.3 ab	130.7 a
	BUCTRIL	0.25	lb ai/a	1	pt/a	C				
15	AIM	0.0156	lb ai/a	1	oz/a	C	76.0 bc	100.0 a	71.7 ab	135.7 a
	2,4-D AMINE	0.188	lb ai/a	6.33	oz/a	C				
	NIS	0.25	% v/v	3.2	oz/a	C				
LSD (P=.05)							9.29	4.32	14.13	28.94
Standard Deviation							5.56	2.58	8.45	17.31
CV							6.59	2.89	11.57	15.59
Bartlett's X2							26.311	0.0	16.957	19.318
P(Bartlett's X2)							0.002*	.	0.109	0.153
Replicate F							0.711	1.000	3.013	0.177
Replicate Prob(F)							0.4999	0.3806	0.0653	0.8389
Treatment F							66.881	358.714	40.041	2.685
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0127

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

MON 63410 ENCAPSULATED ACETOCHLOR EVALUATION IN COTTON

Trial ID: 145F-10
Location: HALFWAY

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: HALFWAY
State/Prov.: TX

Initiation Date: Jun/02/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Common Name
PALMER AMARANTH

COTTON Variety: FIBERMAX FM 1740 B2 FLEX
Planting Date: Jun/02/2010 Planting Method: 4 ROW
Rate: 48000 PLANT/ACRE
Row Spacing: 40 IN Spacing Within Row: 3.7 SD/FT
Soil Moisture: DRY

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 40 FT Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: OLTON

APPLICATION DESCRIPTION

	A	B
Application Date:	Jun/21/2010	Jul/29/2010
Time of Day:	11:45 AM	9:30 AM
Application Method:	SPRAY	SPRAY
Application Timing:	A 2-4LEAF	B - PDIR
Applic. Placement:	BROADCAST	PDIR
Air Temp., Unit:	84 F	72.8 F
% Relative Humidity:	53.6	92.1
Wind Velocity, Unit:	9.4 MPH	6.9 MPH
Soil Temp., Unit:	80.1 F	74.8 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	0	45

CROP STAGE AT EACH APPLICATION

	A	B
	COTTON	COTTON
Stage Scale:	3 LEAF	12-13 LF
Height, Unit:	4 IN	23 IN

WEED STAGE AT EACH APPLICATION

	A	B
	PALMER AM	
Stage Scale:	6"-12"	

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	BACKPACK	BACKPACK
Operating Pressure:	24 PSI	22 PSI
Nozzle Type:	TURBOTEE	FLAT FAN
Nozzle Size:	11002	80015
Nozzle Spacing, Unit:	19 IN	16 IN
Boom Height, Unit:	22 IN	4 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Propellant:	C02	C02

Treatment Application Comment

TRIAL AREA HAD 3 PT/ACRE PROWL H2O APPLIED PPI 4/8/2010
7/29/2010 - SPRAYED 3 CENTER ROW MIDDLES PDIR

Texas Agricultural Experiment Station

MON 63410 ENCAPSULATED ACETOCHLOR EVALUATION IN COTTON

Trial ID: 145F-10
Location: HALFWAY

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Weed Code
Crop Code
Part Rated
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval

		COTTON LEAF		COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
		MALFORMED		NECROSIS	CHLOROSIS	STUNT	MALFORMED	NECROSIS	
		PERCENT		PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
		Jun/25/2010		Jun/25/2010	Jun/25/2010	Jun/25/2010	Jun/28/2010	Jun/28/2010	
		4 DA-A		4 DA-A	4 DA-A	4 DA-A	7 DA-A	7 DA-A	
Trt	Treatment	Rate	Product	Product	Appl				
No.	Name	Rate Unit	Rate	Rate Unit	Code				
1	UNTREATED					0.0 b	0.0 a	0.0 a	0.0 b
2	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	A		0.0 b	0.0 a	0.0 a	0.0 b
3	DUAL MAGNUM	0.95 lb ai/a	16 oz/a	A		0.0 b	0.0 a	0.0 a	1.3 b
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	A					
	AMS SURFACTANT	2 % w/v	38.4 oz/a	A					
	DIREX	1 lb ai/a	32 oz/a	B					
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B					
	AMS SURFACTANT	2 % w/v	38.4 oz/a	B					
4	PROWL H20	0.95 lb ai/a	1 qt/a	A		3.8 a	0.0 a	0.0 a	8.8 a
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	A					
	AMS SURFACTANT	2 % w/v	38.4 oz/a	A					
	DIREX	1 lb ai/a	32 oz/a	B					
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B					
	AMS SURFACTANT	2 % w/v	38.4 oz/a	B					
5	MON 63410	1.13 lb ai/a	1.5 qt/a	A		0.0 b	0.0 a	0.0 a	7.0 a
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	A					
	AMS SURFACTANT	2 % w/v	38.4 oz/a	A					
	DIREX	1 lb ai/a	32 oz/a	B					
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B					
	AMS SURFACTANT	2 % w/v	38.4 oz/a	B					
6	MON 63410	1.13 lb ai/a	1.5 qt/a	A		0.0 b	0.0 a	0.0 a	5.8 ab
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	A					
	AMS SURFACTANT	2 % w/v	38.4 oz/a	A					
	MON 63410	1.13 lb ai/a	1.5 qt/a	B					
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B					
	AMS SURFACTANT	2 % w/v	38.4 oz/a	B					
7	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	A		0.0 b	0.0 a	0.0 a	0.0 b
	AMS SURFACTANT	2 % w/v	38.4 oz/a	A					
	DIREX	1 lb ai/a	32 oz/a	B					
	ROUNDUP POWERMAX	0.77 lb ae/a	22 oz/a	B					
	AMS SURFACTANT	2 % w/v	38.4 oz/a	B					
LSD (P=.05)						1.40	0.00	0.00	4.21
Standard Deviation						0.94	0.00	0.00	2.84
CV						176.38	0.0	0.0	87.24
Bartlett's X2						0.0	0.0	0.0	1.495
P(Bartlett's X2)						.	.	.	0.683
Replicate F						1.000	0.000	0.000	1.059
Replicate Prob(F)						0.4155	1.0000	1.0000	0.3911
Treatment F						9.000	0.000	0.000	7.152
Treatment Prob(F)						0.0001	1.0000	1.0000	0.0005

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code						COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	
Crop Code								LEAF				
Part Rated						CHLOROSIS	STUNT	MALFORMED	NECROSIS	CHLOROSIS	STUNT	
Rating Data Type						PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
Rating Unit						Jun/28/2010	Jun/28/2010	Jul/12/2010	Jul/12/2010	Jul/12/2010	Jul/12/2010	
Rating Date						7 DA-A	7 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A	
Trt-Eval Interval												
Trt	Treatment	Rate	Product	Product	Appl							
No.	Name	Rate	Unit	Rate	Unit	Code						
1	UNTREATED						0.0 b	0.0 c	0.0 b	0.0 a	0.0 b	0.0 c
2	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	0.0 b	0.0 c	0.0 b	0.0 a	0.0 b	0.0 c
3	DUAL MAGNUM	0.95	lb ai/a	16	oz/a	A	0.0 b	0.0 c	0.0 b	0.0 a	0.0 b	0.0 c
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A						
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A						
	DIREX	1	lb ai/a	32	oz/a	B						
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B						
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B						
4	PROWL H2O	0.95	lb ai/a	1	qt/a	A	9.5 a	9.0 a	8.8 a	0.0 a	8.8 a	8.8 a
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A						
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A						
	DIREX	1	lb ai/a	32	oz/a	B						
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B						
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B						
5	MON 63410	1.13	lb ai/a	1.5	qt/a	A	0.0 b	6.3 b	0.0 b	0.0 a	0.0 b	5.8 b
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A						
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A						
	DIREX	1	lb ai/a	32	oz/a	B						
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B						
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B						
6	MON 63410	1.13	lb ai/a	1.5	qt/a	A	0.0 b	5.8 b	0.0 b	0.0 a	0.0 b	5.3 b
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A						
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A						
	MON 63410	1.13	lb ai/a	1.5	qt/a	B						
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B						
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B						
7	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	0.0 b	0.0 c	0.0 b	0.0 a	0.0 b	0.0 c
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A						
	DIREX	1	lb ai/a	32	oz/a	B						
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B						
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B						
LSD (P=.05)							0.56	1.78	1.40	0.00	1.40	2.79
Standard Deviation							0.38	1.20	0.94	0.00	0.94	1.88
CV							27.85	39.9	75.59	0.0	75.59	66.46
Bartlett's X2							0.0	1.814	0.0	0.0	0.0	2.238
P(Bartlett's X2)							.	0.404	.	.	.	0.327
Replicate F							1.000	0.864	1.000	0.000	1.000	0.471
Replicate Prob(F)							0.4155	0.4776	0.4155	1.0000	0.4155	0.7065
Treatment F							361.000	41.942	49.000	0.000	49.000	15.447
Treatment Prob(F)							0.0001	0.0001	0.0001	1.0000	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code						PIGWEEED		PIGWEEED		PIGWEEED	
Crop Code						PIGWEEED	#PLANTS	COTTON		COTTON	PIGWEEED
Part Rated											
Rating Data Type						CONTROL	BETWEEN	INJURY	CONTROL	INJURY	CONTROL
Rating Unit						PERCENT	ROWS 2-3	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date						Jul/12/2010	Jul/12/2010	Jul/28/2010	Jul/28/2010	Aug/11/2010	Aug/11/2010
Trt-Eval Interval						21 DA-A	21 DA-A				
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code					
1	UNTREATED						0.0 c	72.8 a	0.0 a	0.0 d	0.0 c
2	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	0.0 c	77.3 a	0.0 a	22.5 c	0.0 c
3	DUAL MAGNUM	0.95	lb ai/a	16	oz/a	A	97.0 a	1.3 b	0.0 a	96.0 a	2.0 b
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A					
	DIREX	1	lb ai/a	32	oz/a	B					
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B					
4	PROWL H2O	0.95	lb ai/a	1	qt/a	A	82.5 b	8.3 b	2.5 a	85.0 b	5.8 a
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A					
	DIREX	1	lb ai/a	32	oz/a	B					
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B					
5	MON 63410	1.13	lb ai/a	1.5	qt/a	A	99.5 a	0.5 b	0.0 a	99.0 a	2.0 b
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A					
	DIREX	1	lb ai/a	32	oz/a	B					
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B					
6	MON 63410	1.13	lb ai/a	1.5	qt/a	A	92.3 ab	4.3 b	0.0 a	92.5 ab	0.0 c
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A					
	MON 63410	1.13	lb ai/a	1.5	qt/a	B					
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B					
7	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A	0.0 c	72.0 a	0.0 a	22.5 c	3.5 b
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A					
	DIREX	1	lb ai/a	32	oz/a	B					
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B					
LSD (P=.05)							11.63	27.53	1.62	7.71	1.27
Standard Deviation							7.83	18.53	1.09	5.19	0.85
CV							14.76	54.91	305.51	8.7	45.02
Bartlett's X2							14.672	37.62	0.0	14.862	0.06
P(Bartlett's X2)							0.002*	0.001*	.	0.011*	0.806
Replicate F							0.561	4.071	1.000	0.666	1.230
Replicate Prob(F)							0.6473	0.0227	0.4155	0.5837	0.3280
Treatment F							162.422	16.615	3.000	269.855	25.918
Treatment Prob(F)							0.0001	0.0001	0.0327	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Weed Code						PIGWEEED		PIGWEEED			
Crop Code						COTTON		COTTON		COTTON	
Part Rated											
Rating Data Type						INJURY		INJURY		LINT YIELD	
Rating Unit						PERCENT		PERCENT		LB/ACRE	
Rating Date						Aug/26/2010		Sep/24/2010		Nov/03/2010	
Trt-Eval Interval											
Trt	Treatment	Rate	Unit	Product	Product	Appl					
No.	Name	Rate	Unit	Rate	Rate	Unit	Code				
1	UNTREATED							0.0 b	0.0 c	0.0 a	0.0 c
2	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A		0.0 b	2.5 c	0.0 a	2.5 c
3	DUAL MAGNUM	0.95	lb ai/a	16	oz/a	A		0.0 b	99.5 a	0.0 a	99.5 a
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A					
	DIREX	1	lb ai/a	32	oz/a	B					
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B					
4	PROWL H20	0.95	lb ai/a	1	qt/a	A		3.5 a	96.5 a	2.5 a	94.5 a
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A					
	DIREX	1	lb ai/a	32	oz/a	B					
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B					
5	MON 63410	1.13	lb ai/a	1.5	qt/a	A		0.5 b	100.0 a	0.0 a	99.5 a
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A					
	DIREX	1	lb ai/a	32	oz/a	B					
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B					
6	MON 63410	1.13	lb ai/a	1.5	qt/a	A		0.0 b	98.5 a	0.0 a	97.5 a
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A					
	MON 63410	1.13	lb ai/a	1.5	qt/a	B					
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B					
7	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	A		2.3 ab	85.0 b	1.3 a	82.5 b
	AMS SURFACTANT	2	% w/v	38.4	oz/a	A					
	DIREX	1	lb ai/a	32	oz/a	B					
	ROUNDUP POWERMAX	0.77	lb ae/a	22	oz/a	B					
	AMS SURFACTANT	2	% w/v	38.4	oz/a	B					
LSD (P=.05)								1.60	3.76	2.24	4.24
Standard Deviation								1.08	2.53	1.51	2.85
CV								120.77	3.68	281.97	4.2
Bartlett's X2								1.408	7.747	0.06	9.335
P(Bartlett's X2)								0.495	0.101	0.806	0.096
Replicate F								1.096	2.005	0.391	0.713
Replicate Prob(F)								0.3765	0.1494	0.7607	0.5566
Treatment F								6.870	1347.000	1.696	1038.252
Treatment Prob(F)								0.0006	0.0001	0.1794	0.0001

Means followed by same letter do not significantly differ ($P=.05$, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Prowl H2O POST - COTTON

Trial ID: 153F-10
Location: Halfway

Study Dir.: Wayne Keeling
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: Wayne Keeling
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA PALMER AMARANTH	AMARANTHUS PALMERI

COTTON

Variety: FM 1740 B2RF

Planting Date: Jun/02/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT Plot Length, Unit: 250 FT Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOOM
Soil Name: PULLMAN

APPLICATION DESCRIPTION

A

Application Date: Jul/19/2010
Time of Day: 9:30 AM
Application Method: SPRAY
Application Timing: A
Applic. Placement: BROADCAST
Air Temp., Unit: 76 F
% Relative Humidity: 70
Wind Velocity, Unit: 4 MPH
Soil Temp., Unit: 76 F
Soil Moisture: ADEQUATE
% Cloud Cover: 10

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: AMAPA

APPLICATION EQUIPMENT

A

Appl. Equipment: 8 ROW
Operating Pressure: 30
Nozzle Type: TURBO TEE
Nozzle Size: 8002
Ground Speed, Unit: 5 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: AIR

Texas Agricultural Experiment Station

Prowl H2O POST - COTTON

Trial ID: 153F-10
Location: Halfway

Study Dir.: Wayne Keeling
Investigator: Dr. Wayne Keeling

Weed Code			COTTON		AMAPA	AMAPA	COTTON	AMAPA	AMAPA
Crop Code			COTTON			2-4"			
Part Rated			INJURY		PLANTS PER	CONTROL	INJURY	PLANTS PER	CONTROL
Rating Data Type			%		SQ METER	%	%	SQ METER	%
Rating Unit			%		SQ METER	%	%	SQ METER	%
Rating Date			Jul/27/2010	Aug/03/2010	Aug/03/2010	Aug/03/2010	Aug/09/2010	Aug/09/2010	Aug/09/2010
Trt-Eval Interval					15 DA-A		21 DA-A	21 DA-A	
Trt No.	Treatment Name	Rate Unit	Appl Code						
1	ROUNDUP WEATHERMAX AMS	22 fl oz/a 17 lb/100 gal	A A	0.0 b	0.0 a	61.0 a	0.0 c	0.0 a	45.8 a
2	ROUNDUP WEATHERMAX PROWL H2O AMS	22 fl oz/a 1 lb ai/a 17 lb/100 gal	A A A	1.8 b	0.0 a	33.3 b	67.5 b	0.0 a	36.3 a
3	ROUNDUP WEATHERMAX DUAL AMS	22 fl oz/a 1.33 pt/a 17 lb/100 gal	A A A	8.3 a	0.0 a	10.5 c	88.0 a	0.0 a	9.8 b
	LSD (P=.05)			2.90	0.00	13.58	11.51	0.00	19.70
	Standard Deviation			1.67	0.00	7.85	6.65	0.00	11.39
	CV			50.25	0.0	22.47	12.83	0.0	37.23
	Bartlett's X2			0.0	0.0	3.297	0.039	0.0	1.378
	P(Bartlett's X2)			.	.	0.192	0.844	.	0.502
	Replicate F			1.980	0.000	0.662	0.133	0.000	0.474
	Replicate Prob(F)			0.2184	1.0000	0.6051	0.9368	1.0000	0.7119
	Treatment F			26.941	0.000	41.547	191.766	0.000	10.738
	Treatment Prob(F)			0.0010	1.0000	0.0003	0.0001	1.0000	0.0104
									0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Weed Code
 Crop Code COTTON
 Part Rated LINT
 Rating Data Type YIELD
 Rating Unit LBS/AC
 Rating Date Nov/10/2010
 Trt-Eval Interval 114 DA-A

Trt No.	Treatment Name	Rate	Unit	Appl Code	
1	ROUNDUP WEATHERMAX AMS	22 fl oz/a	A		1431.5 a
		17 lb/100 gal	A		
2	ROUNDUP WEATHERMAX PROWL H2O AMS	22 fl oz/a	A		1481.5 a
		1 lb ai/a	A		
		17 lb/100 gal	A		
3	ROUNDUP WEATHERMAX DUAL AMS	22 fl oz/a	A		1498.8 a
		1.33 pt/a	A		
		17 lb/100 gal	A		
	LSD (P=.05)				117.12
	Standard Deviation				67.69
	CV				4.6
	Bartlett's X2				2.508
	P(Bartlett's X2)				0.285
	Replicate F				7.140
	Replicate Prob(F)				0.0209
	Treatment F				1.065
	Treatment Prob(F)				0.4019

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

SHARPEN-PD II

Trial ID: 154F-10
Location: AGCARES

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

COTTON

Variety: ST 5458 B2RF

Planting Date: May/06/2010

SITE AND DESIGN

Plot Width, Unit: 13.33 FT

Plot Length, Unit: 40 FT

Reps: 3

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: FINE SANDY LOAM

Soil Name: AMARILLO

APPLICATION DESCRIPTION

A

Application Date: Jul/15/2010

Time of Day: 10:00 AM

Application Method: SPRAY

Application Timing: A-PDIR

Applic. Placement: PDIR

Air Temp., Unit: 78 F

% Relative Humidity: 80

Wind Velocity, Unit: 3 MPH

Soil Temp., Unit: 78 F

Soil Moisture: ADEQUATE

% Cloud Cover: 100

CROP STAGE AT EACH APPLICATION

A

COTTON

Stage Scale: 10-12NODE

APPLICATION EQUIPMENT

A

Appl. Equipment: REDBALL

Operating Pressure: 25 PSI

Nozzle Type: FLAT FAN

Nozzle Size: 8002

Ground Speed, Unit: 3 MPH

Carrier: WATER

Spray Volume, Unit: 10 GPA

Propellant: CO2

Texas Agricultural Experiment Station

SHARPEN-PD II

Trial ID: 154F-10
Location: AGCARES

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code	COTTON	COTTON	
Rating Data Type	INJURY	INJURY	
Rating Unit	%	%	
Rating Date	Jul/24/2010	Aug/01/2010	

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description		
1	UNTREATED			A	POST DIRECT	0.0 b	0.0 a
2	ROUNDUP POWERMAX	0.75	lb ae/a	A	POST DIRECT	0.0 b	0.0 a
3	SHARPEN	1	oz/a	A	POST DIRECT	0.0 b	0.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	A	POST DIRECT		
	MSO	1	% v/v	A	POST DIRECT		
	AMS	17	lb/100 gal	A	POST DIRECT		
4	SHARPEN	2	oz/a	A	POST DIRECT	0.0 b	0.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	A	POST DIRECT		
	MSO	1	% v/v	A	POST DIRECT		
	AMS	17	lb/100 gal	A	POST DIRECT		
5	VALOR	2	oz/a	A	POST DIRECT	0.0 b	0.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	A	POST DIRECT		
	MSO	1	% v/v	A	POST DIRECT		
	AMS	17	lb/100 gal	A	POST DIRECT		
6	UNTREATED			A	SLOPPY PD	0.0 b	0.0 a
7	ROUNDUP POWERMAX	0.75	lb ae/a	A	SLOPPY PD	0.0 b	0.0 a
8	SHARPEN	1	oz/a	A	SLOPPY PD	1.7 a	1.7 a
	ROUNDUP POWERMAX	0.75	lb ae/a	A	SLOPPY PD		
	MSO	1	% v/v	A	SLOPPY PD		
	AMS	17	lb/100 gal	A	SLOPPY PD		
9	SHARPEN	2	oz/a	A	SLOPPY PD	0.0 b	2.0 a
	ROUNDUP POWERMAX	0.75	lb ae/a	A	SLOPPY PD		
	MSO	1	% v/v	A	SLOPPY PD		
	AMS	17	lb/100 gal	A	SLOPPY PD		
10	VALOR	2	oz/a	A	SLOPPY PD	0.0 b	1.3 a
	ROUNDUP POWERMAX	0.75	lb ae/a	A	SLOPPY PD		
	MSO	1	% v/v	A	SLOPPY PD		
	AMS	17	lb/100 gal	A	SLOPPY PD		
LSD (P=.05)						0.83	1.43
Standard Deviation						0.48	0.83
CV						289.83	166.89
Bartlett's X2						0.0	0.31
P(Bartlett's X2)						.	0.856
Replicate F						1.000	0.574
Replicate Prob(F)						0.3874	0.5730
Treatment F						3.571	2.899
Treatment Prob(F)						0.0103	0.0261

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

COTTON VARIETAL TOLERANCE TO ENVOKE

Trial ID: 155F-10
Location: APPLINGS - FLOYD CO.

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: DR. PETER DOTRAY
Affiliation: TEXAS AGRILIFE RESEARCH
Investigator: Dr. Wayne Keeling

TRIAL LOCATION

City: FLOYDADA
State/Prov.: TX

Initiation Date: Jul/28/2010

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

COTTON
Planting Date: May/12/2010
Rate: 42000 SEED/ACRE
Row Spacing: 40 IN

Variety: MULTIPLE
Planting Method: 8 ROW

SITE AND DESIGN

Plot Width, Unit: 6.667 FT Plot Length, Unit: 30 FT
Study Design: FACTORIAL Reps: 4

APPLICATION DESCRIPTION

A

Application Date: Jul/28/2010
Time of Day: 3:15 PM
Application Method: SPRAY
Application Timing: A POST
Applic. Placement: BROADCAST
Air Temp., Unit: 90 F
% Relative Humidity: 58
Wind Velocity, Unit: 4 MPH
Soil Temp., Unit: 78 F
Soil Moisture: ADEQUATE
% Cloud Cover: 65

CROP STAGE AT EACH APPLICATION

A

COTTON
Stage Scale: 15LF;6NAW
Height, Unit: 33 IN

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 28 PSI
Nozzle Type: TURBOTEE
Nozzle Size: 110015
Nozzle Spacing, Unit: 19 IN
Boom Height, Unit: 45 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 10 GPA
Propellant: CO2

Treatment Application Comment

SPRAYED ROWS 2,3 30 FT PLOTS
ORANGE = TREATED; YELLOW = UNTREATED

Texas Agricultural Experiment Station

COTTON VARIETAL TOLERANCE TO ENVOKE

Trial ID: 155F-10
Location: APPLINGS - FLOYD CO.

Study Dir.: DR. PETER DOTRAY
Investigator: Dr. Wayne Keeling

Crop Code	COTTON	COTTON	COTTON	COTTON
Part Rated	INJURY	INJURY	INJURY	
Rating Data Type	INJURY	INJURY	INJURY	LINT YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	LB/ACRE
Rating Date	Aug/04/2010	Aug/11/2010	Aug/24/2010	Oct/19/2010
Trt-Eval Interval	7 DA-A	14 DA-A	14 DA-A	83 DA-A

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Appl Code
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TABLE OF R MEANS

Replicate 1	0.1	0.0	0.0	1321.6
Replicate 2	0.6	0.1	0.0	1188.1
Replicate 3	0.2	0.0	0.0	1385.4
Replicate 4	0.2	0.1	0.0	1274.0

TABLE OF A MEANS

1 NG 3348B2RF	0.8	0.5	0.0	1131.3
2 FM 9170B2F	0.0	0.0	0.0	1317.0
3 DP 0912B2RF	0.3	0.0	0.0	1446.9
4 PHY 375WRF	0.0	0.0	0.0	1441.5
5 DP 1032B2RF	0.3	0.0	0.0	1443.8
6 FM 1740B2F	0.0	0.0	0.0	1323.1
7 NG 4012B2RF	0.0	0.0	0.0	1185.8
8 FM 9180B2F	0.4	0.0	0.0	1170.9
9 ST 4288B2F	0.0	0.0	0.0	1257.8
10 DP 1044B2RF	0.0	0.0	0.0	1294.8
11 NG 4010B2RF	0.0	0.0	0.0	1264.3
12 AT Epic RF	0.0	0.0	0.0	1371.8
13 NG 3410RF	2.0	0.0	0.0	1189.3
14 FM 9058F	0.3	0.0	0.0	1254.3

TABLE OF B MEANS

1 UNTREATED				0.0	0.0	0.0	1300.8
2 ENVOKE	0.0047 lb ai/a	0.1 oz/a	A	0.6	0.1	0.0	1283.8
2 NIS	0.25 % v/v	3.2 oz/a	A				

TABLE OF AB MEANS

1 NG 3348B2RF	0.0	0.0	0.0	1159.3
1 UNTREATED				
2 FM 9170B2F	0.0	0.0	0.0	1262.8
1 UNTREATED				
3 DP 0912B2RF	0.0	0.0	0.0	1360.0
1 UNTREATED				
4 PHY 375WRF	0.0	0.0	0.0	1486.3
1 UNTREATED				
5 DP 1032B2RF	0.0	0.0	0.0	1424.8
1 UNTREATED				
6 FM 1740B2F	0.0	0.0	0.0	1375.3
1 UNTREATED				
7 NG 4012B2RF	0.0	0.0	0.0	1187.3
1 UNTREATED				
8 FM 9180B2F	0.0	0.0	0.0	1127.8
1 UNTREATED				
9 ST 4288B2F	0.0	0.0	0.0	1283.0
1 UNTREATED				
10 DP 1044B2RF	0.0	0.0	0.0	1302.8
1 UNTREATED				
11 NG 4010B2RF	0.0	0.0	0.0	1333.3
1 UNTREATED				
12 AT Epic RF	0.0	0.0	0.0	1346.5
1 UNTREATED				
13 NG 3410RF	0.0	0.0	0.0	1236.5
1 UNTREATED				
14 FM 9058F	0.0	0.0	0.0	1326.0
1 UNTREATED				
1 NG 3348B2RF	1.5	1.0	0.0	1103.3
2 ENVOKE	0.0047 lb ai/a	0.1 oz/a	A	
2 NIS	0.25 % v/v	3.2 oz/a	A	
2 FM 9170B2F	0.0	0.0	0.0	1371.3
2 ENVOKE	0.0047 lb ai/a	0.1 oz/a	A	
2 NIS	0.25 % v/v	3.2 oz/a	A	

Texas Agricultural Experiment Station

Crop Code	COTTON	COTTON	COTTON	COTTON
Part Rated	INJURY	INJURY	INJURY	
Rating Data Type	INJURY	INJURY	INJURY	LINT YIELD
Rating Unit	PERCENT	PERCENT	PERCENT	LB/ACRE
Rating Date	Aug/04/2010	Aug/11/2010	Aug/24/2010	Oct/19/2010
Trt-Eval Interval	7 DA-A	14 DA-A	14 DA-A	83 DA-A

Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Appl Code				
3	DP 0912B2RF						0.5	0.0	0.0	1533.8
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
4	PHY 375WRF						0.0	0.0	0.0	1396.8
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
5	DP 1032B2RF						0.5	0.0	0.0	1462.8
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
6	FM 1740B2F						0.0	0.0	0.0	1271.0
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
7	NG 4012B2RF						0.0	0.0	0.0	1184.3
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
8	FM 9180B2F						0.8	0.0	0.0	1214.0
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
9	ST 4288B2F						0.0	0.0	0.0	1232.5
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
10	DP 1044B2RF						0.0	0.0	0.0	1286.8
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
11	NG 4010B2RF						0.0	0.0	0.0	1195.3
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
12	AT Epic RF						0.0	0.0	0.0	1397.0
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
13	NG 3410RF						4.0	0.0	0.0	1142.0
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				
14	FM 9058F						0.5	0.0	0.0	1182.5
2	ENVOKE	0.0047	lb ai/a	0.1	oz/a	A				
2	NIS	0.25	% v/v	3.2	oz/a	A				

Texas Agricultural Experiment Station

COTTON VARIETAL TOLERANCE TO ENVOKE

Trial ID: 155F-10

Study Dir.: DR. PETER DOTRAY

Location: APPLINGS - FLOYD CO.

Investigator: Dr. Wayne Keeling

COMPLETE FACTORIAL AOV For COTTON INJURY INJURY PERCENT Aug/04/2010 7 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	111	98.419643				
R	3	4.241071	1.413690	5.441	0.0032	0.3
A	13	30.544643	2.349588	9.042	0.0001	0.5
RA	39	10.133929	0.259844	1.000	0.5000	1.0
B	1	8.580357	8.580357	6.069	0.0906	0.7
RB	3	4.241071	1.413690	5.441	0.0032	0.4
AB	13	30.544643	2.349588	9.042	0.0001	0.7
RAB	39	10.133929	0.259844			

FACTORIAL/POOLED ERROR AOV For COTTON INJURY INJURY PERCENT Aug/04/2010 7 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	111	98.419643				
R	3	4.241071	1.413690	4.672	0.0046	0.3
A	13	30.544643	2.349588	7.765	0.0001	0.6
B	1	8.580357	8.580357	28.357	0.0001	0.2
AB	13	30.544643	2.349588	7.765	0.0001	0.8
ERROR	81	24.508929	0.302579			

COMPLETE FACTORIAL AOV For COTTON INJURY INJURY PERCENT Aug/11/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	111	7.857143				
R	3	0.142857	0.047619	1.000	0.4031	0.1
A	13	1.857143	0.142857	3.000	0.0040	0.2
RA	39	1.857143	0.047619	1.000	0.5000	0.4
B	1	0.142857	0.142857	3.000	0.1817	0.1
RB	3	0.142857	0.047619	1.000	0.4031	0.2
AB	13	1.857143	0.142857	3.000	0.0040	0.3
RAB	39	1.857143	0.047619			

FACTORIAL/POOLED ERROR AOV For COTTON INJURY INJURY PERCENT Aug/11/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	111	7.857143				
R	3	0.142857	0.047619	1.000	0.3972	0.1
A	13	1.857143	0.142857	3.000	0.0012	0.2
B	1	0.142857	0.142857	3.000	0.0871	0.1
AB	13	1.857143	0.142857	3.000	0.0012	0.3
ERROR	81	3.857143	0.047619			

COMPLETE FACTORIAL AOV For COTTON INJURY INJURY PERCENT Aug/24/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	111	0.000000				
R	3	0.000000	0.000000	0.000	1.0000	0.0
A	13	0.000000	0.000000	0.000	1.0000	0.0
RA	39	0.000000	0.000000	0.000	0.0000	0.0
B	1	0.000000	0.000000	0.000	1.0000	0.0
RB	3	0.000000	0.000000	0.000	0.0000	0.0
AB	13	0.000000	0.000000	0.000	0.0000	0.0
RAB	39	0.000000	0.000000			

FACTORIAL/POOLED ERROR AOV For COTTON INJURY INJURY PERCENT Aug/24/2010 14 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	111	0.000000				
R	3	0.000000	0.000000	0.000	1.0000	0.0
A	13	0.000000	0.000000	0.000	1.0000	0.0
B	1	0.000000	0.000000	0.000	1.0000	0.0
AB	13	0.000000	0.000000	0.000	0.0000	0.0
ERROR	81	0.000000	0.000000			

Texas Agricultural Experiment Station

COMPLETE FACTORIAL AOV For COTTON LINT YIELD LB/ACRE Oct/19/2010 83 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	111	3429897.276786				
R	3	580076.526786	193358.842262	12.096	0.0001	68.3
A	13	1144411.151786	88031.627060	4.435	0.0001	142.4
RA	39	774181.098214	19850.797390	1.242	0.2510	255.5
B	1	8109.008929	8109.008929	0.448	0.5510	80.9
RB	3	54243.669643	18081.223214	1.131	0.3484	96.6
AB	13	245472.366071	18882.489698	1.181	0.3283	180.7
RAB	39	623403.455357	15984.703984			

FACTORIAL/POOLED ERROR AOV For COTTON LINT YIELD LB/ACRE Oct/19/2010 83 DA-A

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	111	3429897.276786				
R	3	580076.526786	193358.842262	10.788	0.0001	71.6
A	13	1144411.151786	88031.627060	4.911	0.0001	133.9
B	1	8109.008929	8109.008929	0.452	0.5031	50.6
AB	13	245472.366071	18882.489698	1.053	0.4108	189.3
ERROR	81	1451828.223214	17923.805225			

Texas Agricultural Experiment Station

NICHINO II

Trial ID: 156F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

GENERAL TRIAL INFORMATION

Study Director: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: FM 1740 B2RF

Planting Date: May/11/2010

SITE AND DESIGN

Plot Width, Unit: 6.666 FT

Plot Length, Unit: 30 FT

Reps: 3

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

Texture: CLAY LOAM

Soil Name: PULLMAN

APPLICATION DESCRIPTION

A

Application Date: Sep/29/2010

Time of Day: 2:00PM

Application Method: SPRAY

Application Timing: PREHAR

Applic. Placement: BROADCAST

Air Temp., Unit: 87 F

% Relative Humidity: 27

Wind Velocity, Unit: 5 MPH

Soil Temp., Unit: 72 F

Soil Moisture: ADEQUATE

% Cloud Cover: 0

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI

Stage Scale: 43%PBOLL

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK

Operating Pressure: 25 PSI

Nozzle Type: TURBO TEE

Nozzle Size: 110015

Nozzle Spacing, Unit: 20 IN

Ground Speed, Unit: 3 MPH

Carrier: WATER

Spray Volume, Unit: 10 GPA

Propellant: CO2

Texas Agricultural Experiment Station

NICHINO II

Trial ID: 156F-10
Location: HALFWAY

Study Dir.: WAYNE KEELING
Investigator: Dr. Wayne Keeling

Crop Code			COTTON	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Part Rated			PLANT	PLANT	PLANT	BOLL	PLANT	PLANT	PLANT
Rating Data Type			DEFOLIATION	DESICCATION	GREENLEAVES	OPEN BOLL	DEFOLIATION	DESICCATION	GREENLEAVES
Rating Unit			%	%	%	%	%	%	%
Rating Date			Oct/04/2010	Oct/04/2010	Oct/04/2010	Oct/07/2010	Oct/07/2010	Oct/07/2010	Oct/07/2010
Trt No.	Treatment Name	Rate Unit							
1	UNTREATED		35.0 b	6.7 b	58.3 a	82.7 b	36.7 c	6.7 a	56.7 a
2	NAI-1296	1.0 fl oz/a	48.3 ab	23.3 a	28.3 b	96.0 a	61.7 ab	20.0 a	20.0 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
3	NAI-1296	1.5 fl oz/a	51.7 a	23.3 a	25.0 b	93.7 a	61.7 ab	20.0 a	18.3 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
4	NAI-1296	2 fl oz/a	51.7 a	20.0 ab	28.3 b	94.0 a	65.0 ab	21.7 a	13.3 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
5	NAI-1297	0.5 fl oz/a	50.0 ab	15.0 ab	35.0 b	96.0 a	58.3 b	21.7 a	20.0 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
6	NAI-1297	0.75 fl oz/a	48.3 ab	21.7 ab	31.7 b	94.7 a	58.3 b	18.3 a	23.3 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
7	NAI-1297	1 fl oz/a	55.0 a	15.0 ab	30.0 b	94.0 a	65.0 ab	16.7 a	18.3 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
8	NAI-1295 EW	1 fl oz/a	51.7 a	20.0 ab	28.3 b	94.3 a	61.7 ab	16.7 a	21.7 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
9	NAI-1295 EW	1.5 fl oz/a	50.0 ab	18.3 ab	31.7 b	93.0 a	65.0 ab	18.3 a	16.7 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
10	NAI-1295 EW	2 fl oz/a	55.0 a	18.3 ab	26.7 b	95.0 a	68.3 ab	13.3 a	18.3 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
11	ET	1 fl oz/a	48.3 ab	25.0 a	30.0 b	94.3 a	60.0 ab	20.0 a	20.0 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
12	ET	1.5 fl oz/a	51.7 a	21.7 ab	30.0 b	94.3 a	63.3 ab	18.3 a	18.3 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
13	ET	2 fl oz/a	55.0 a	16.7 ab	28.3 b	96.0 a	63.3 ab	18.3 a	18.3 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
14	DEF	16 fl oz/a	55.0 a	15.0 ab	30.0 b	94.3 a	71.7 a	16.7 a	11.7 b
	ETHEPHON	32 fl oz/a							
15	AIM	1 fl oz/a	43.3 ab	20.0 ab	33.3 b	94.0 a	60.0 ab	20.0 a	20.0 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
16	NAI-1299	4.8 fl oz/a	55.0 a	15.0 ab	30.0 b	93.3 a	65.0 ab	16.7 a	18.3 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
17	NAI-1298	1.3 fl oz/a	43.3 ab	21.7 ab	35.0 b	93.3 a	60.0 ab	20.0 a	20.0 b
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
LSD (P=.05)			9.51	8.63	8.04	3.51	7.20	8.84	6.87
Standard Deviation			5.70	5.18	4.82	2.10	4.32	5.30	4.12
CV			11.43	27.8	15.18	2.25	7.02	29.71	19.82
Bartlett's X2			12.975	5.756	6.372	12.008	7.29	15.632	6.67
P(Bartlett's X2)			0.528	0.984	0.956	0.743	0.923	0.407	0.966
Replicate F			1.689	4.517	1.202	1.847	0.553	0.907	0.202
Replicate Prob(F)			0.2008	0.0187	0.3139	0.1741	0.5808	0.4137	0.8180
Treatment F			2.643	2.224	6.964	6.051	8.549	1.363	16.455
Treatment Prob(F)			0.0094	0.0265	0.0001	0.0001	0.0001	0.2215	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Texas Agricultural Experiment Station

Crop Code	COTTON	COTTON	COTTON	COTTON	COTTON	COTTON
Part Rated	BOLL	PLANT	PLANT	PLANT	LINT	LINT
Rating Data Type	OPEN BOLL	DEFOLIATION	DESICCATION	GREENLEAVES	YIELD	TURNOUT
Rating Unit	%	%	%	%	LBS/AC	%
Rating Date	Oct/13/2010	Oct/13/2010	Oct/13/2010	Oct/13/2010	Nov/03/2010	Nov/03/2010

Trt No.	Treatment Name	Rate	Rate Unit						
1	UNTREATED			90.0 b	35.0 c	13.3 a	51.7 a	886.0 a	0.33287 a
2	NAI-1296	1.0 fl oz/a		99.7 a	70.0 ab	13.3 a	16.7 bc	1034.0 a	0.33457 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
3	NAI-1296	1.5 fl oz/a		99.0 a	75.0 ab	8.3 a	16.7 bc	1012.7 a	0.33863 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
4	NAI-1296	2 fl oz/a		99.0 a	76.7 ab	13.3 a	10.0 c	876.7 a	0.32437 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
5	NAI-1297	0.5 fl oz/a		99.7 a	70.0 ab	10.0 a	20.0 bc	949.3 a	0.33773 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
6	NAI-1297	0.75 fl oz/a		100.0 a	70.0 ab	11.7 a	18.3 bc	925.0 a	0.33997 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
7	NAI-1297	1 fl oz/a		99.7 a	73.3 ab	10.0 a	16.7 bc	941.0 a	0.34773 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
8	NAI-1295 EW	1 fl oz/a		99.3 a	70.0 ab	11.7 a	18.3 bc	957.7 a	0.33463 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
9	NAI-1295 EW	1.5 fl oz/a		99.3 a	76.7 ab	10.0 a	13.3 bc	912.3 a	0.34080 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
10	NAI-1295 EW	2 fl oz/a		100.0 a	76.7 ab	10.0 a	13.3 bc	907.0 a	0.34893 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
11	ET	1 fl oz/a		100.0 a	66.7 b	10.0 a	21.7 b	1142.3 a	0.34370 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
12	ET	1.5 fl oz/a		100.0 a	71.7 ab	11.7 a	16.7 bc	894.7 a	0.31677 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
13	ET	2 fl oz/a		99.7 a	75.0 ab	10.0 a	15.0 bc	971.0 a	0.33763 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
14	DEF	16 fl oz/a		100.0 a	80.0 a	8.3 a	11.7 bc	927.0 a	0.33543 a
	ETHEPHON	32 fl oz/a							
15	AIM	1 fl oz/a		100.0 a	68.3 ab	10.0 a	21.7 b	1008.3 a	0.33680 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
16	NAI-1299	4.8 fl oz/a		100.0 a	71.7 ab	8.3 a	20.0 bc	942.7 a	0.33740 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
17	NAI-1298	1.3 fl oz/a		99.7 a	71.7 ab	11.7 a	16.7 bc	976.7 a	0.33850 a
	ETHEPHON	32 fl oz/a							
	COC	1 % v/v							
LSD (P=.05)				1.21	6.81	4.36	5.73	185.41	0.018462
Standard Deviation				0.72	4.09	2.61	3.43	111.20	0.011073
CV				0.73	5.8	24.46	18.34	11.62	3.29
Bartlett's X2				7.099	6.335	2.957	6.687	8.001	20.975
P(Bartlett's X2)				0.526	0.898	0.982	0.946	0.949	0.179
Replicate F				1.794	1.967	3.516	3.782	8.984	0.392
Replicate Prob(F)				0.1826	0.1564	0.0417	0.0335	0.0008	0.6787
Treatment F				32.248	17.266	1.229	21.065	1.045	1.425
Treatment Prob(F)				0.0001	0.0001	0.3002	0.0001	0.4408	0.1919

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

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