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Winter weed and cotton response to Gramoxone Inteon Programs.

Trial ID: C8-05
Location: Ponder

Study Dir.: Culpepper
Investigator: Stanley Culpepper

Reps: 3 Plots: 6 by 25 feet
Spray vol: 14.8 gal/ac Mix size: 1 liters (min .57876)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep			
									1	2	3	
1	Non-treated control								101	205	304	
2	Gramoxone Inteon NIS	2	L	0.63	lb ai/a	21	DBP	A	21.28 ml/mx	102	209	314
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
3	Gramoxone Inteon NIS	2	L	0.75	lb ai/a	21	DBP	A	25.34 ml/mx	103	218	307
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
4	Gramoxone Inteon NIS	2	L	1.0	lb ai/a	21	DBP	A	33.78 ml/mx	104	207	315
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
5	Gramoxone Inteon NIS Clarity	2	L	0.63	lb ai/a	21	DBP	A	21.28 ml/mx	105	214	311
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
		4	L	0.25	lb ai/a	21	DBP	A	4.223 ml/mx			
6	Gramoxone Inteon NIS Clarity	2	L	0.75	lb ai/a	21	DBP	A	25.34 ml/mx	106	211	309
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
		4	L	0.25	lb ai/a	21	DBP	A	4.223 ml/mx			
7	Gramoxone Inteon NIS Clarity	2	L	1.0	lb ai/a	21	DBP	A	33.78 ml/mx	107	215	301
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
		4	L	0.25	lb ai/a	21	DBP	A	4.223 ml/mx			
8	Gramoxone Inteon NIS Caparol	2	L	0.63	lb ai/a	21	DBP	A	21.28 ml/mx	108	213	310
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
		4	L	1	lb ai/a	21	DBP	A	16.89 ml/mx			
9	Gramoxone Inteon NIS Caparol	2	L	0.75	lb ai/a	21	DBP	A	25.34 ml/mx	109	210	306
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
		4	L	1	lb ai/a	21	DBP	A	16.89 ml/mx			
10	Gramoxone Inteon NIS Caparol	2	L	1.0	lb ai/a	21	DBP	A	33.78 ml/mx	110	202	317
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
		4	L	1.0	lb ai/a	21	DBP	A	16.89 ml/mx			
11	Gramoxone Inteon NIS	2	L	0.5	lb ai/a	21	DBP	A	16.89 ml/mx	111	201	302
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
	Gramoxone Inteon NIS	2	L	0.5	lb ai/a	PRE	B	16.89 ml/mx				
			L	0.125	% v/v	PRE	B	1.25 ml/mx				
12	Gramoxone Inteon NIS	2	L	0.5	lb ai/a	21	DBP	A	16.89 ml/mx	112	206	318
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
	Caparol	4	L	1	lb ai/a	21	DBP	A	16.89 ml/mx			
		4	L	0.25	lb ai/a	21	DBP	A	4.223 ml/mx			
13	Gramoxone Inteon NIS	2	L	0.5	lb ai/a	21	DBP	A	16.89 ml/mx	113	203	308
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
	Clarity	4	L	0.25	lb ai/a	21	DBP	A	4.223 ml/mx			
		2	L	0.5	lb ai/a	PRE	B	16.89 ml/mx				
	Gramoxone Inteon NIS		L	0.125	% v/v	PRE	B	1.25 ml/mx				
		4	L	1	lb ai/a	PRE	B	16.89 ml/mx				
14	Gramoxone Inteon NIS	2	L	0.5	lb ai/a	21	DBP	A	16.89 ml/mx	114	208	312
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
	Touchown HiTech	5	L	0.75	lb ai/a	PRE	B	10.13 ml/mx				
15	Roundup WeatherMax Clarity	4.5	L	0.5	lb ai/a	21	DBP	A	7.507 ml/mx	115	204	303
		4	L	0.25	lb ai/a	21	DBP	A	4.223 ml/mx			
16	Roundup WeatherMax	4.5	L	0.75	lb ai/a	21	DBP	A	11.26 ml/mx	116	212	313
		4	L	1	pt/a	21	DBP	A	8.445 ml/mx			
17	Roundup WeatherMax Weedar	4.5	L	0.75	lb ai/a	21	DBP	A	11.26 ml/mx	117	216	305
		4	L	1	pt/a	21	DBP	A	8.445 ml/mx			
18	Gramoxone Inteon NIS Weedar	2	L	0.75	lb ai/a	21	DBP	A	25.34 ml/mx	118	217	316
			L	0.125	% v/v	21	DBP	A	1.25 ml/mx			
		4	L	1	pt/a	21	DBP	A	8.445 ml/mx			

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Reps: 3 Plots: 6 by 25 feet
 Spray vol: 14.8 gal/ac Mix size: 1 liters (min .57876)

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Form Unit	Rate Stg	Grow Code	Appl to Measure	Amt Product 1	Plot No. 2	By Rep 3
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Sort Order: Treatment

Product quantities required for listed treatments and applications in one trial:

Amount*	Unit	Treatment Name	Lot Code
459.833	ml	Gramoxone Inteon 2 L	
24.997	ml	NIS L	
31.669	ml	Clarity 4 L	
105.563	ml	Caparol 4 L	
12.668	ml	Touchdown HiTech 5 L	
37.534	ml	Roundup WeatherMax 4.5 L	
21.113	ml	Weedar 4 L	

- * 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 1 liters (mix size basis).
- * Product amount calculations increased 25 % for overage adjustment.
- * 'Per volume' calculations use spray volume= 14.8 gal/ac, mix size= 1 liters.

Trial Comments

OBJECTIVE: Evaluate winter weed, cotton, and summer weed response to cotton burndown programs.

COTTON RESPONSE:

1. No herbicide treatment caused greater than 2% injury throughout the season.
2. Touchdown plus Dual Magnum caused 10 to 15% leaf "spotting" as usual.

WEED RESPONSE:

Wild Radish:

1. Radish was mature with 60% pod set at time of application.
2. Because radish was mature most Gramoxone mixtures were very effective.
3. At 11 DAT, mixtures of Gramoxone containing at least 0.75 lb ai provided at least 84% control. Gramoxone at less than 0.75 lb as well as glyphosate mixtures were less effective at this time.
4. Although Gramoxone mixtures were initially more effective than glyphosate treatments, by a month after application glyphosate mixtures and sequential treatments were the most effective options.

Carolina Geranium:

1. Gramoxone mixtures provided complete control.
2. Roundup provided poor control.
3. Mixing Clarity or 2,4-D with Roundup did improve control but control was still poor.

Florida Pusley:

1. Pusley started emerging about one week prior to PRE treatments.
2. PRE applications offered some level of control killing those emerged plants however new emergence continued.
3. Caparol provided some suppression.
4. Touchdown plus Dual was applied over the trial area on May 20 and provided complete control.

Texas panicum:

1. Panicum began emerging about one week prior to PRE treatments.
2. PRE applications offered some level of control killing those emerged plants however new emergence continued.
3. Caparol provided fair suppression through mid May.
4. Touchdown plus Dual was applied over the trial area on May 20 and provided complete control.

COTTON RESPONSE:

Injury:

1. Herbicide treatments did not injure crop.

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Yield:

1. Trial will be harvested.

GENERAL COMMENTS:

1. Touchdown plus Dual Magnum were applied over top of the test area on May 20. Touchdown plus Direx were layby directed to the entire test area on June 20.

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Winter weed and cotton response to Gramoxone Inteon Programs.

Trial ID: C8-05
 Location: Ponder

Study Dir.: Culpepper
 Investigator: Stanley Culpepper

Weed Code		RAPRA	RAPRA	RAPRA	GERCA	GERCA	GOSHI	GOSHI
Crop Code								
Rating Data Type		control	control	control	control	control	injury	injury
Rating Unit		percent	percent	percent	percent	percent	percent	percent
Rating Date		Apr-15-05	Apr-19-05	May-05-05	Apr-15-05	Apr-19-05	May-17-05	Jun-02-05
Trt-Eval Interval		11 DA-A	15 DA-A	31 DA-A	11 DA-A	15 DA-A	43 DA-A	59 DA-A
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit						
			1	2	3	4	5	6
			7					
1	Non-treated control		0	0	0	0	0	0
2	Gramoxone Inteon NIS	0.63 lb ai/a 0.125 % v/v	76	73	71	100	100	0
3	Gramoxone Inteon NIS	0.75 lb ai/a 0.125 % v/v	84	82	82	100	100	0
4	Gramoxone Inteon NIS	1.0 lb ai/a 0.125 % v/v	88	87	85	100	100	2
5	Gramoxone Inteon NIS Clarity	0.63 lb ai/a 0.125 % v/v 0.25 lb ai/a	93	96	78	100	100	0
6	Gramoxone Inteon NIS Clarity	0.75 lb ai/a 0.125 % v/v 0.25 lb ai/a	92	94	75	100	100	0
7	Gramoxone Inteon NIS Clarity	1.0 lb ai/a 0.125 % v/v 0.25 lb ai/a	89	91	83	100	100	0
8	Gramoxone Inteon NIS Caparol	0.63 lb ai/a 0.125 % v/v 1 lb ai/a	87	84	78	100	100	0
9	Gramoxone Inteon NIS Caparol	0.75 lb ai/a 0.125 % v/v 1 lb ai/a	89	87	79	100	100	0
10	Gramoxone Inteon NIS Caparol	1.0 lb ai/a 0.125 % v/v 1.0 lb ai/a	88	92	80	100	100	0
11	Gramoxone Inteon NIS Gramoxone Inteon NIS	0.5 lb ai/a 0.125 % v/v 0.5 lb ai/a 0.125 % v/v	72	69	88	100	100	0
12	Gramoxone Inteon NIS Caparol Clarity	0.5 lb ai/a 0.125 % v/v 1 lb ai/a 0.25 lb ai/a	89	90	74	100	100	0
13	Gramoxone Inteon NIS Clarity Gramoxone Inteon NIS Caparol	0.5 lb ai/a 0.125 % v/v 0.25 lb ai/a 0.5 lb ai/a 0.125 % v/v 1 lb ai/a	91	91	90	100	100	0
14	Gramoxone Inteon NIS Touchown HiTech	0.5 lb ai/a 0.125 % v/v 0.75 lb ai/a	77	75	75	100	100	0
15	Roundup WeatherMax Clarity	0.5 lb ai/a 0.25 lb ai/a	53	68	90	32	40	0
16	Roundup WeatherMax	0.75 lb ai/a	51	66	90	23	43	0

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Weed Code										
Crop Code										
Rating Data Type										
Rating Unit										
Rating Date										
Trt-Eval Interval										
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7
17	Roundup WeatherMax Weedar	0.75	lb ai/a 1 pt/a	58	72	96	48	75	0	0
18	Gramoxone Inteon NIS Weedar	0.75	lb ai/a 0.125 % v/v 1 pt/a	88	89	76	100	100	0	0
LSD (P=.05)				10.5	11.2	13.4	6.1	9.3	1.4	0.0
Standard Deviation				6.3	6.7	8.0	3.6	5.6	0.8	0.0
CV				8.3	8.57	10.38	4.35	6.45	734.85	0.0

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

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Weed Code			RCHSC	RCHSC	RCHSC	RCHSC	PANTE	PANTE	PANTE
Crop Code									
Rating Data Type			control	control	control	control	control	control	control
Rating Unit			percent	percent	percent	percent	percent	percent	percent
Rating Date			May-17-05	May-31-05	Jul-01-05	Aug-24-05	May-17-05	May-31-05	Jul-01-05
Trt-Eval Interval			43 DA-A	57 DA-A	88 DA-A	142 DA-A	43 DA-A	57 DA-A	88 DA-A
Trt No.	Treatment Name	Rate Rate Unit	8	9	10	11	12	13	14
1	Non-treated control		0	0	0	0	0	0	0
2	Gramoxone Inteon NIS	0.63 lb ai/a 0.125 % v/v	0	100	100	100	0	100	100
3	Gramoxone Inteon NIS	0.75 lb ai/a 0.125 % v/v	0	100	100	100	0	100	100
4	Gramoxone Inteon NIS	1.0 lb ai/a 0.125 % v/v	0	100	100	100	0	100	100
5	Gramoxone Inteon NIS Clarity	0.63 lb ai/a 0.125 % v/v 0.25 lb ai/a	0	100	100	100	0	100	100
6	Gramoxone Inteon NIS Clarity	0.75 lb ai/a 0.125 % v/v 0.25 lb ai/a	0	100	100	100	0	100	100
7	Gramoxone Inteon NIS Clarity	1.0 lb ai/a 0.125 % v/v 0.25 lb ai/a	0	100	100	100	0	100	100
8	Gramoxone Inteon NIS Caparol	0.63 lb ai/a 0.125 % v/v 1 lb ai/a	44	100	100	100	77	100	100
9	Gramoxone Inteon NIS Caparol	0.75 lb ai/a 0.125 % v/v 1 lb ai/a	32	100	100	100	73	100	100
10	Gramoxone Inteon NIS Caparol	1.0 lb ai/a 0.125 % v/v 1.0 lb ai/a	30	100	100	100	75	100	100
11	Gramoxone Inteon NIS Gramoxone Inteon NIS	0.5 lb ai/a 0.125 % v/v 0.5 lb ai/a 0.125 % v/v	73	100	100	100	88	100	100
12	Gramoxone Inteon NIS Caparol Clarity	0.5 lb ai/a 0.125 % v/v 1 lb ai/a 0.25 lb ai/a	43	100	100	100	73	100	100
13	Gramoxone Inteon NIS Clarity Gramoxone Inteon NIS Caparol	0.5 lb ai/a 0.125 % v/v 0.25 lb ai/a 0.5 lb ai/a 0.125 % v/v 1 lb ai/a	83	100	100	100	93	100	100
14	Gramoxone Inteon NIS Touchdown HiTech	0.5 lb ai/a 0.125 % v/v 0.75 lb ai/a	67	100	100	100	80	100	100
15	Roundup WeatherMax Clarity	0.5 lb ai/a 0.25 lb ai/a	0	100	100	100	0	100	100
16	Roundup WeatherMax	0.75 lb ai/a	0	100	100	100	0	100	100
17	Roundup WeatherMax Weedar	0.75 lb ai/a 1 pt/a	0	100	100	100	0	100	100

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Weed Code	RCHSC	RCHSC	RCHSC	RCHSC	PANTE	PANTE	PANTE
Crop Code							
Rating Data Type	control	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Rating Date	May-17-05	May-31-05	Jul-01-05	Aug-24-05	May-17-05	May-31-05	Jul-01-05
Trt-Eval Interval	43 DA-A	57 DA-A	88 DA-A	142 DA-A	43 DA-A	57 DA-A	88 DA-A
Trt No.	8	9	10	11	12	13	14
Treatment Name							
Rate							
Unit							
18 Gramoxone Inteon	0	100	100	100	0	100	100
NIS							
Weedar							
LSD (P=.05)	10.1	0.0	0.0	0.0	7.2	0.0	0.0
Standard Deviation	6.1	0.0	0.0	0.0	4.3	0.0	0.0
CV	29.38	0.0	0.0	0.0	13.94	0.0	0.0

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

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Weed Code			PANTE
Crop Code			
Rating Data Type			control
Rating Unit			percent
Rating Date			Aug-24-05
Trt-Eval Interval			142 DA-A
Trt No.	Treatment Name	Rate	Unit
			15
1	Non-treated control		0
2	Gramoxone Inteon NIS	0.63 0.125	lb ai/a % v/v
3	Gramoxone Inteon NIS	0.75 0.125	lb ai/a % v/v
4	Gramoxone Inteon NIS	1.0 0.125	lb ai/a % v/v
5	Gramoxone Inteon NIS Clarity	0.63 0.125 0.25	lb ai/a % v/v lb ai/a
6	Gramoxone Inteon NIS Clarity	0.75 0.125 0.25	lb ai/a % v/v lb ai/a
7	Gramoxone Inteon NIS Clarity	1.0 0.125 0.25	lb ai/a % v/v lb ai/a
8	Gramoxone Inteon NIS Caparol	0.63 0.125 1	lb ai/a % v/v lb ai/a
9	Gramoxone Inteon NIS Caparol	0.75 0.125 1	lb ai/a % v/v lb ai/a
10	Gramoxone Inteon NIS Caparol	1.0 0.125 1.0	lb ai/a % v/v lb ai/a
11	Gramoxone Inteon NIS Gramoxone Inteon NIS	0.5 0.125 0.5 0.125	lb ai/a % v/v lb ai/a % v/v
12	Gramoxone Inteon NIS Caparol Clarity	0.5 0.125 1 0.25	lb ai/a % v/v lb ai/a lb ai/a
13	Gramoxone Inteon NIS Clarity Gramoxone Inteon NIS Caparol	0.5 0.125 0.25 0.5 0.125 1	lb ai/a % v/v lb ai/a lb ai/a % v/v lb ai/a
14	Gramoxone Inteon NIS Touchdown HiTech	0.5 0.125 0.75	lb ai/a % v/v lb ai/a
15	Roundup WeatherMax Clarity	0.5 0.25	lb ai/a lb ai/a
16	Roundup WeatherMax	0.75	lb ai/a
17	Roundup WeatherMax Weedar	0.75 1	lb ai/a pt/a

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Weed Code	PANTE		
Crop Code			
Rating Data Type	control		
Rating Unit	percent		
Rating Date	Aug-24-05		
Trt-Eval Interval	142 DA-A		
Trt No.	Treatment Name	Rate	Unit
18	Gramoxone Inteon	0.75 lb ai/a	100
	NIS	0.125 % v/v	
	Weedar	1 pt/a	
LSD (P=.05)	0.0		
Standard Deviation	0.0		
CV	0.0		

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

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MAINTENANCE

Field Prep./Maintenance:

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.							

SOIL DESCRIPTION

% Sand: 94	% OM: 1.3	Texture: sand	
% Silt: 2	pH: 5.9	Soil Name: Tifton sandy loam	
% Clay: 4	CEC: _____	Fert. Level: _____	

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: irrigated

Closest Weather Station: _____ Distance: _____ Unit: ____

APPLICATION DESCRIPTION

	A	B
Application Date:	Apr-04-05	Apr-29-05
Time of Day:	9 am	8 am
Application Method:	broadcast	broadcast
Application Timing:	21 DBP	PRE
Applic. Placement:	overtop	overtop
Air Temp., Unit:	71 F	70 F
% Relative Humidity:	58	46
Wind Velocity, Unit:	2 mph	0 mph
Dew Presence (Y/N):	n	n
Water Hardness:		
Soil Temp., Unit:	72 F	68 F
Soil Moisture:	wet	wet
% Cloud Cover:	0	0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GOSHI 21 DBP	GOSHI PRE
Stage Scale:	not up	not up
Height, Unit:	0 inch	0 inch

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WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	RAPRA 21 DBP	RAPRA PRE
Stage Scale:	18-24inch	18-24inch
Density, Unit:	6 ydsq	6 ydsq
Weed 2 Code, Stage:	GERCA 21 DBP	GERCA PRE
Stage Scale:	8-12 inch	8-12 inch
Density, Unit:	3 ydsq	3 ydsq
Weed 3 Code, Stage:	RCHSC 21 DBP	RCHSC 21 DBP
Stage Scale:	not up	not up
Density, Unit:	5 ydsq	5 ydsq
Weed 4 Code, Stage:	PANTE 21 DBP	PANTE 21 DBP
Stage Scale:	not up	not up
Density, Unit:	10 ydsq	10 ydsq

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	backpack	backpack
Operating Pressure:	23	23
Nozzle Type:	flat fan	flat fan
Nozzle Size:	11002	11002
Nozzle Spacing, Unit:	18 inch	18 inch
Nozzles/Row:	2	2
Band Width, Unit:		
Boom Length, Unit:	4.5 feet	4.5 feet
Boom Height, Unit:	15 inch	15 inch
Ground Speed, Unit:	3 mph	3 mph
Incorporation Equip.:		
Hours to Incorp.:		
Incorp. Depth, Unit:		
Carrier:	water	water
Spray Volume, Unit:	14.8 GPA	14.8 GPA
Spray pH:		
Propellant:	CO2	CO2
Tank Mix (Y/N):	Y	Y

Trt No	Treatment Application Comment