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3. Mixing V-10142 or Envoke with Roundup and applying at 15-leaf caused 16 to 20% injury at 5 DAT; 20 d later injury was only 2% with the Envoke mixture but still 17% with the V-10142 mixture.
4. Directed applications of V-10142 caused less than 10% injury.

WEED CONTROL:

Large crabgrass:

1. POST 3 and LPD applications of Roundup plus V-10142 were slower in controlling large crabgrass (rating date of July 11) than with Roundup alone or Roundup mixed with Envoke. Grass was up to 6 inches at this time. Eventually the grass did die from the application.

Pitted morningglory:

1. Six days after the second POST application, sequential Roundup alone treatments provided 72% control or less. Mixing V-10142 with Roundup improved control at least 9% while mixing Envoke with Roundup improved control at least 21% when compared to Roundup alone.
2. When three applications of Roundup were applied, control was excellent regardless of tank mix partner.

Doveweed:

1. Populations were late emerging and emerged after the POST 2 applications.
2. Roundup provided very poor control and mixing Envoke or V-10142 with Roundup was of little help.

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Cotton response to V-10142 applied topically or directed with Roundup.

Trial ID: C32-05

Study Dir.: Stanley Culpepper

Location: Sunbelt Expo

Investigator: Stanley Culpepper

Weed Code		GOSHI	GOSHI	GOSHI	GOSHI	DIGSA	DIGSA	DIGSA	
Crop Code		injury	injury	injury	injury	control	control	control	
Rating Data Type		percent	percent	percent	percent	percent	percent	percent	
Rating Unit									
Rating Date		Jun-13-05	Jun-27-05	Jul-11-05	Aug-02-05	Jun-13-05	Jun-27-05	Jul-11-05	
Trt-Eval Interval		25 DA-A	39 DA-A	53 DA-A	75 DA-A	25 DA-A	39 DA-A	53 DA-A	
Trt No.	Treatment Name	Rate							
		Rate Unit	1	2	3	4	5	6	7
1	Untreated check		0	0	0	0	0	0	0
2	Roundup Weathermax	16 fl oz/a	0	0	0	0	94	97	96
	Roundup Weathermax	16 fl oz/a							
	Roundup Weathermax	16 fl oz/a							
3	Roundup Weathermax	16 fl oz/a	20	20	8	2	94	99	99
	Roundup Weathermax	16 fl oz/a							
	V-10142	0.2 lb ai/a							
	Roundup Weathermax	16 fl oz/a							
4	Roundup Weathermax	16 fl oz/a	21	0	0	0	95	99	99
	Roundup Weathermax	16 fl oz/a							
	Envoke	0.1 oz wt/a							
	Roundup Weathermax	16 fl oz/a							
5	Roundup Weathermax	16 fl oz/a	0	0	20	17	95	94	85
	Roundup Weathermax	16 fl oz/a							
	Roundup Weathermax	16 fl oz/a							
	V-10142	0.2 lb ai/a							
6	Roundup Weathermax	16 fl oz/a	0	0	16	2	94	96	93
	Roundup Weathermax	16 fl oz/a							
	Roundup Weathermax	16 fl oz/a							
	Envoke	0.1 oz wt/a							
7	Roundup Weathermax	16 fl oz/a	0	0	4	9	94	93	80
	Roundup Weathermax	16 fl oz/a							
	Roundup Weathermax	16 fl oz/a							
	V-10142	0.2 lb ai/a							
8	Roundup Weathermax	16 fl oz/a	0	0	0	3	94	94	80
	Roundup Weathermax	16 fl oz/a							
	Roundup Weathermax	16 fl oz/a							
	V-10142	0.4 lb ai/a							
LSD (P=.05)			2.5	3.1	5.8	4.0	1.1	4.8	5.7
Standard Deviation			1.4	1.8	3.3	2.3	0.6	2.7	3.3
CV			28.11	70.71	56.19	54.46	0.77	3.27	4.15

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

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Weed Code	DIGSA	IPOLA	IPOLA	IPOLA	IPOLA	MUDNU	MUDNU			
Crop Code										
Rating Data Type	control	control	control	control	control	control	control			
Rating Unit	percent	percent	percent	percent	percent	percent	percent			
Rating Date	Aug-02-05	Jun-13-05	Jun-27-05	Jul-11-05	Aug-02-05	Jun-27-05	Jul-11-05			
Trt-Eval Interval	75 DA-A	25 DA-A	39 DA-A	53 DA-A	75 DA-A	39 DA-A	53 DA-A			
Trt No.	Treatment Name	Rate	Unit	8	9	10	11	12	13	14
1	Untreated check			0	0	0	0	0	0	0
2	Roundup Weathermax	16 fl oz/a		99	70	99	87	98	28	17
	Roundup Weathermax	16 fl oz/a								
	Roundup Weathermax	16 fl oz/a								
3	Roundup Weathermax	16 fl oz/a		99	81	99	91	95	48	18
	Roundup Weathermax	16 fl oz/a								
	V-10142	0.2 lb ai/a								
	Roundup Weathermax	16 fl oz/a								
4	Roundup Weathermax	16 fl oz/a		97	93	99	94	96	69	35
	Roundup Weathermax	16 fl oz/a								
	Envoke	0.1 oz wt/a								
	Roundup Weathermax	16 fl oz/a								
5	Roundup Weathermax	16 fl oz/a		98	72	99	85	98	28	17
	Roundup Weathermax	16 fl oz/a								
	Roundup Weathermax	16 fl oz/a								
	V-10142	0.2 lb ai/a								
6	Roundup Weathermax	16 fl oz/a		99	70	99	87	99	10	17
	Roundup Weathermax	16 fl oz/a								
	Roundup Weathermax	16 fl oz/a								
	Envoke	0.1 oz wt/a								
7	Roundup Weathermax	16 fl oz/a		98	70	99	80	97	20	28
	Roundup Weathermax	16 fl oz/a								
	Roundup Weathermax	16 fl oz/a								
	V-10142	0.2 lb ai/a								
8	Roundup Weathermax	16 fl oz/a		98	70	99	79	95	18	20
	Roundup Weathermax	16 fl oz/a								
	Roundup Weathermax	16 fl oz/a								
	V-10142	0.4 lb ai/a								
LSD (P=.05)				2.8	7.8	0.0	10.1	4.3	19.6	18.6
Standard Deviation				1.6	4.4	0.0	5.8	2.4	11.2	10.6
CV				1.84	6.74	0.0	7.64	2.89	40.45	56.06

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

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Weed Code	MUDNU	
Crop Code		
Rating Data Type	control	
Rating Unit	percent	
Rating Date	Aug-02-05	
Trt-Eval Interval	75 DA-A	
Trt No.	Treatment Name	Rate Unit
		Rate Unit
		15
1	Untreated check	0
2	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
3	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	V-10142	0.2 lb ai/a
	Roundup Weathermax	16 fl oz/a
4	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	Envoke	0.1 oz wt/a
	Roundup Weathermax	16 fl oz/a
5	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	V-10142	0.2 lb ai/a
6	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	Envoke	0.1 oz wt/a
7	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	V-10142	0.2 lb ai/a
8	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	Roundup Weathermax	16 fl oz/a
	V-10142	0.4 lb ai/a
LSD (P=.05)	12.2	
Standard Deviation	7.0	
CV	29.53	

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: 88	% OM: 1.2	Texture: loamy sand
% Silt: 12	pH: 6	Soil Name: _____
% Clay: 0	CEC: _____	Fert. Level: _____

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

No.	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: irrigated

Closest Weather Station: _____ Distance: _____ Unit: ____

APPLICATION DESCRIPTION

	A	B	C
Application Date:	May-19-05	Jun-07-05	Jul-06-05
Time of Day:	11 am	10 am	9 am
Application Method:	broadcast	broadcast	broadcast
Application Timing:	POST 1	POST 2	LPD
Applic. Placement:	overtop	overtop	directed
Air Temp., Unit:	83 F	78 F	77 F
% Relative Humidity:	40	67	74
Wind Velocity, Unit:	3 mph	0 mph	0 mph
Dew Presence (Y/N):	n	n	n
Water Hardness:			
Soil Temp., Unit:	84 F	77 F	73 F
Soil Moisture:	fair	wet	moist
% Cloud Cover:	25	0	0

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GOSHI POST 1	GOSHI POST 2	GOSHI LPD
Stage Scale:	cot.-1 lf	7 leaf	15 leaf
Height, Unit:	1.5 inch	9 inch	22 inch

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WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	DIGSA POST 1	DIGSA POST 2	DIGSA POST 3
Stage Scale:	< 1 inch	< 5 inch	< 6 inch
Density, Unit:	15 ydsq	22 ydsq	22 ydsq
Weed 2 Code, Stage:	IPOLA POST 1	IPOLA POST 2	IPOLA POST 3
Stage Scale:	< 1 inch	< 5 inch	< 6 inch
Density, Unit:	1 ydsq	3 ydsq	22 ydsq
Weed 3 Code, Stage:	MUDNU POST 1	MUDNU POST 2	MUDNU POST 3
Stage Scale:	none up	none up	< 3 inch
Density, Unit:	0 ydsq	0 ydsq	150 ydsq

APPLICATION EQUIPMENT

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

Trt No	Treatment Application Comment