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**RR cotton response to WeatherMax mixed with Prowl 3.3 EC, Prowl H20, Surflan,
or Dual Magnum.**

Trial ID: C44-05

Study Dir.: Stanley Culpepper

Location: Sunbelt Expo

Investigator: Stanley Culpepper

Reps: 3

Plots: 12 by 30 feet

Spray vol: 14.8 gal/ac

Mix size: 1.5 liters (min 1.389)

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Form Unit	Growth Stg	Appl Code	Amt Product to Measure	Plot No. By Rep		
									1	2	3
1	Non-treated								101	204	306
2	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	102	215	303
	Prowl H20	3.8	EC	0.75	lb ai/a	1-2	If A	20.0 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
3	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	103	206	312
	Prowl 3.3	3.3	EC	0.75	lb ai/a	1-2	If A	23.03 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
4	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	104	207	305
	Surflan	4	AS	1	lb ai/a	1-2	If A	25.34 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
5	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	105	203	308
	Dual Magnum	7.62	L	1	pt/a	1-2	If A	12.67 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
6	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	106	201	316
	Prowl H20	3.8	EC	0.75	lb ai/a	6-8	If B	20.0 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
7	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	107	211	307
	Prowl 3.3	3.3	EC	0.75	lb ai/a	6-8	If B	23.03 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
8	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	108	213	301
	Surflan	4	AS	1	lb ai/a	6-8	If B	25.34 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
9	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	109	212	302
	Dual Magnum	7.62	L	1	pt/a	6-8	If B	12.67 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
10	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	110	208	313
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
	Prowl H20	3.8	EC	0.75	lb ai/a	12-14	If C	20.0 ml/mx			
11	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	111	209	311
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
	Prowl 3.3	3.3	EC	0.75	lb ai/a	12-14	If C	23.03 ml/mx			
12	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	112	210	309
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
	Surflan	4	AS	1	lb ai/a	12-14	If C	25.34 ml/mx			
13	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	113	214	304
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
	Dual Magnum	7.62	L	1	pt/a	12-14	If C	12.67 ml/mx			

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Reps: 3 Plots: 12 by 30 feet
 Spray vol: 14.8 gal/ac Mix size: 1.5 liters (min 1.389)

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
14	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	114	216	310
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
	Direx	4	L	1.25	pt/a	12-14	If C	15.83 ml/mx			
15	Roundup WeatherMax	4.5	L	22	oz/a	1-2	If A	17.42 ml/mx	115	205	315
	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx			
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			
16	Roundup WeatherMax	4.5	L	22	oz/a	6-8	If B	17.42 ml/mx	116	202	314
	Roundup WeatherMax	4.5	L	22	oz/a	12-14	If C	17.42 ml/mx			

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Lot Code
958.090	ml	Roundup WeatherMax 4.5 L	
75.005	ml	Prowl H20 3.8 EC	
86.370	ml	Prowl 3.3 3.3 EC	
95.007	ml	Surflan 4 AS	
47.503	ml	Dual Magnum 7.62 L	
19.793	ml	Direx 4 L	

* 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 1.5 liters (mix size basis).
 * Product amount calculations increased 25 % for overage adjustment.

Trial Comments

OBJECTIVE: Evaluate cotton and grass response to glyphosate mixed with Prowl H20, Prowl 3.3 EC, Surflan, or Dual Magnum.

VISUAL COTTON RESPONSE:

1. Cotton was generally more tolerant to Surflan and Prowl at the 12-leaf stage as compared to the 1- or 7-leaf stage. Injury from Dual Magnum mixtures was minimal regardless of cotton size when treated.
2. Injury from the Surflan mixture was generally greater than the Prowl 3.3 mixture initially but later in the season the trend had reversed.
3. Prowl H20 caused less injury than Prowl 3.3 EC but injury was still evident with the H20 formulation.
4. Mixing Direx with glyphosate and applying topically caused 32% injury at 6 DAT. Cotton did actually recover quickly.
4. At late-season, no injury was visually detectable.

LARGE CRABGRASS RESPONSE:

1. Late-season control noted that the residual product used was not important but rather that the residual herbicide was more effective when included in the 12-leaf application as compared to an earlier application. Compared to the glyphosate alone program, the addition of one of the residual herbicides at the 12-leaf stage improved control at least 16%.

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Weed Code			GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI
Crop Code			injury	injury	injury	injury	injury	injury	injury
Rating Data Type			percent	percent	percent	percent	percent	percent	percent
Rating Unit									
Rating Date			May-23-05	May-30-05	Jun-07-05	Jun-13-05	Jun-27-05	Jul-06-05	Aug-02-05
Trt-Eval Interval			4 DA-A		19 DA-A	25 DA-A	39 DA-A	48 DA-A	75 DA-A
Trt No.	Treatment Name	Rate Rate Unit	1	2	3	4	5	6	7
13	Roundup WeatherMax	22 oz/a	0	0	0	0	8	7	0
	Roundup WeatherMax	22 oz/a							
	Roundup WeatherMax	22 oz/a							
	Dual Magnum	1 pt/a							
14	Roundup WeatherMax	22 oz/a	0	0	0	0	32	17	4
	Roundup WeatherMax	22 oz/a							
	Roundup WeatherMax	22 oz/a							
	Direx	1.25 pt/a							
15	Roundup WeatherMax	22 oz/a	0	0	0	0	3	2	0
	Roundup WeatherMax	22 oz/a							
	Roundup WeatherMax	22 oz/a							
16	Roundup WeatherMax	22 oz/a	0	0	0	0	0	0	0
	Roundup WeatherMax	22 oz/a							
LSD (P=.05)			2.3	3.3	2.0	5.0	4.6	8.9	0.7
Standard Deviation			1.4	2.0	1.2	3.0	2.8	5.3	0.4
CV			89.59	62.29	46.06	55.68	30.84	74.61	173.21

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

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Weed Code			DIGSA	DIGSA	DIGSA
Crop Code			cotton	cotton	cotton
Rating Data Type			control	control	control
Rating Unit			percent	percent	percent
Rating Date			Jun-07-05	Jun-27-05	Aug-02-05
Trt-Eval Interval			19 DA-A	39 DA-A	75 DA-A
Trt No.	Treatment Name	Rate Unit	8	9	10
1	Non-treated		0	0	0
2	Roundup WeatherMax Prowl H20 Roundup WeatherMax Roundup WeatherMax	22 oz/a 0.75 lb ai/a 22 oz/a 22 oz/a	88	99	86
3	Roundup WeatherMax Prowl 3.3 Roundup WeatherMax Roundup WeatherMax	22 oz/a 0.75 lb ai/a 22 oz/a 22 oz/a	88	99	88
4	Roundup WeatherMax Surflan Roundup WeatherMax Roundup WeatherMax	22 oz/a 1 lb ai/a 22 oz/a 22 oz/a	94	99	79
5	Roundup WeatherMax Dual Magnum Roundup WeatherMax Roundup WeatherMax	22 oz/a 1 pt/a 22 oz/a 22 oz/a	88	99	80
6	Roundup WeatherMax Prowl H20 Roundup WeatherMax Roundup WeatherMax	22 oz/a 0.75 lb ai/a 22 oz/a 22 oz/a	40	99	86
7	Roundup WeatherMax Prowl 3.3 Roundup WeatherMax Roundup WeatherMax	22 oz/a 0.75 lb ai/a 22 oz/a 22 oz/a	45	99	78
8	Roundup WeatherMax Surflan Roundup WeatherMax Roundup WeatherMax	22 oz/a 1 lb ai/a 22 oz/a 22 oz/a	44	99	77
9	Roundup WeatherMax Dual Magnum Roundup WeatherMax Roundup WeatherMax	22 oz/a 1 pt/a 22 oz/a 22 oz/a	44	99	82
10	Roundup WeatherMax Roundup WeatherMax Roundup WeatherMax Prowl H20	22 oz/a 22 oz/a 22 oz/a 0.75 lb ai/a	44	99	97
11	Roundup WeatherMax Roundup WeatherMax Roundup WeatherMax Prowl 3.3	22 oz/a 22 oz/a 22 oz/a 0.75 lb ai/a	44	99	96
12	Roundup WeatherMax Roundup WeatherMax Roundup WeatherMax Surflan	22 oz/a 22 oz/a 22 oz/a 1 lb ai/a	44	99	97
13	Roundup WeatherMax Roundup WeatherMax Roundup WeatherMax Dual Magnum	22 oz/a 22 oz/a 22 oz/a 1 pt/a	44	99	96

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Weed Code			DIGSA	DIGSA	DIGSA	
Crop Code			cotton	cotton	cotton	
Rating Data Type			control	control	control	
Rating Unit			percent	percent	percent	
Rating Date			Jun-07-05	Jun-27-05	Aug-02-05	
Trt-Eval Interval			19 DA-A	39 DA-A	75 DA-A	
Trt No.	Treatment Name	Rate	Unit	8	9	10
14	Roundup WeatherMax	22	oz/a	43	99	99
	Roundup WeatherMax	22	oz/a			
	Roundup WeatherMax	22	oz/a			
	Direx	1.25	pt/a			
15	Roundup WeatherMax	22	oz/a	42	99	82
	Roundup WeatherMax	22	oz/a			
	Roundup WeatherMax	22	oz/a			
16	Roundup WeatherMax	22	oz/a	42	99	73
	Roundup WeatherMax	22	oz/a			
LSD (P=.05)			5.6	0.0	16.5	
Standard Deviation			3.3	0.0	9.9	
CV			6.42	0.0	12.19	

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

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RR cotton response to WeatherMax mixed with Prowl 3.3 EC, Prowl H20, Surflan,
or Dual Magnum.

Trial ID: C44-05

Study Dir.: Stanley Culpepper

Location: Sunbelt Expo

Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Stanley Culpepper
Affiliation: Univ. of Georgia
Postal Code: 31794

Title: Ext. Weed Science

Investigator: Stanley Culpepper
Affiliation: Univ. of Georgia
Postal Code: 31794

Title: Ext. Weed Science

TRIAL LOCATION

City: Moultrie

Trial Status: completed

State/Prov.: GA

Trial Reliability: good

Postal Code: _____

Initiation Date: May-04-05

Country: USA

Planned Completion Date: _____

E-Longitude of LL Corner °: _____

N-Latitude of LL Corner °: _____

Altitude of LL Corner: _____ Unit: _____ Angle y-axis to North °: _____

Directions: _____

COOPERATOR/LANDOWNER

Cooperator: _____

Country: _____

Org: _____

Phone No: _____

Address 1: _____

Fax No: _____

Address 2: _____

City: _____

State/Prov: _____

Postal Code: _____

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Guidelines: _____ Guideline Description: _____

Objective: _____

Conclusions: _____

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	DIGSA	large crabgrass	

Crop 1: GOSHI cotton

Variety: DP 444 B/RR

Planting Date: May-04-05

Planting Method: strip tillage

Rate: 2 8 in

Depth: 0.5 in

Perennial Age: _____

Row Spacing: 36 inch

Spacing Within Row: _____

Seed Bed: flat

Soil Temperature: 76 F

Soil Moisture: moist

Emergence Date: May-10-05

SITE AND DESIGN

Plot Width, Unit: 12 FT

Plot Length, Unit: 30 FT Reps: 3

Site Type: Sunbelt expo

Tillage Type: strip tillage

Study Design: RANDOMIZED COMPLETE BLOCK

Trial Initiation Comments: _____

	Previous Crops	Previous Pesticides	Year
1.			

MAINTENANCE

Field Prep./Maintenance: _____

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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: wet

Closest Weather Station: _____ Distance: _____ Unit: ____

APPLICATION DESCRIPTION

	A	B	C
Application Date:	May-19-05	Jun-07-05	Jun-20-05
Time of Day:	11 am	10 am	9 am
Application Method:	broadcast	broadcast	broadcast
Application Timing:	1-2 leaf	6-8 leaf	12-14leaf
Applic. Placement:	overtop	overtop	overtop
Air Temp., Unit:	83 F	78 F	78 F
% Relative Humidity:	40	67	62
Wind Velocity, Unit:	2 mph	0 mph	2 mph
Dew Presence (Y/N):	n	n	n
Water Hardness:			
Soil Temp., Unit:	85 F	77 F	81 F
Soil Moisture:	fair	wet	moist
% Cloud Cover:	25	0	0

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GOSHI 1-2 leaf	GOSHI 6-8 leaf	GOSHI 12-14 lf
Stage Scale:	1 leaf	7 leaf	11-12 lf
Height, Unit:	1.5 inch	9 inch	11 inch

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	DIGSA 1-2 leaf	DIGSA 6-8 leaf	DIGSA 12-14 lf
Stage Scale:	< 1 inch	< 5 inch	< 4 inch
Density, Unit:	25 ydsq	15 ydsq	4 ydsq

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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:	3	3	3
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