

Comparison of Group 15 residual herbicides in soybean

Trial ID: SOY10-24 Study Dir.: Sprague, Stiles
 Conducted: Campus, T-12 Investigator: Christy Sprague

Planting Date: May-15-2024 **Row Spacing:** 30 IN
Variety: P25A16E **No. of Reps:** 4
Population: 150000 S/A **% OM:** 3.1
Soil Type: L loam **pH:** 6.3
Plot Size: 10 X 35 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: Fall chisel plow; spring soil finish (3-times)
Fertilizer:

Crop and Weed Description			
Weed	Code	Common Name	Scientific Name
1	ANGR	annual grass	mostly giant foxtail and barnyardgrass
2	CHEAL	common lambsquarters	Chenopodium album
3	AMAPO	Powell amaranth	Amaranthus powellii
4	AMBEL	common ragweed	Ambrosia artemisiifolia
5	ABUTH	velvetleaf	Abutilon theophrasti
6	SINAR	wild mustard	Sinapis arvensis
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

A
Application Timing: PRE
Date Treated: May-15-2024
Time Treated: 11:00 AM
% Cloud Cover: 10
Air Temp., Unit: 66 F
% Relative Humidity: 66
Wind Speed/Unit/Dir: 9 MPH E
Soil Temp, Unit: 60.7 F
Leaf Moist/Dew Presence (Y/N): N
Soil Moist: 5

Crop Stage at Each Application

A
Crop 1 Name: GLXMA
Height:
Stage:

Weed Stage at Each Application

A
Weed 1 Name: ANGR
Height:
Stage:
Weed 2 Name: CHEAL
Height:
Stage:
Weed 3 Name: AMAPO
Height:
Stage:
Weed 4 Name: AMBEL
Height:
Stage:
Weed 5 Name: ABUTH
Height:
Stage:
Weed 6 Name: SINAR
Height:
Stage:

Date:	Weed Density					
	1	2	3	4	5	6
May-15-2024	May-15-2024	May-15-2024	May-15-2024	May-15-2024	May-15-2024	May-15-2024
Weed Name:	ANGR	CHEAL	AMAPO	AMBEL	ABUTH	SINAR
Density:	9 FT2	7 FT2	9 FT2	4 FT2	1 FT2	1 FT2

Application Equipment										
Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	Spray Volume	Carrier	Operation Pressure
A	CUB	3.8 MPH	AIXR	11003	16.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	30 PSI

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Comments: Common ragweed is Group 2 (ALS) resistant.

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Rating Date	May-25-2024	May-25-2024	May-25-2024	May-25-2024	May-25-2024	May-25-2024	Jun-4-2024		
Rating Type	injury	control	control	control	control	control	injury		
Rating Unit	%	%	%	%	%	%	%		
Crop Type, Code	C, GLXMA						C, GLXMA		
Pest Code		ANGR	CHEAL	AMAPO	AMBEL	ABUTH			
Trt-Eval Interval	10 DA-A	10 DA-A	10 DA-A	10 DA-A	10 DA-A	10 DA-A	20 DA-A		
Number of Decimals	0	0	0	0	0	0	0		
Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing				
1	Untreated					0	0	0	0
2	Zidua SC	3.25 fl oz/a	A	PRE		0	75	59	89
3	Zidua SC	4 fl oz/a	A	PRE		0	79	58	96
4	Dual Magnum	1.33 pt/a	A	PRE		0	85	70	90
5	Dual Magnum	2 pt/a	A	PRE		0	90	69	100
6	Outlook	14 fl oz/a	A	PRE		0	85	70	100
7	Outlook	18 fl oz/a	A	PRE		0	79	58	95
8	Warrant	3 pt/a	A	PRE		0	81	56	99
9	Harness	1.28 pt/a	A	PRE		0	91	81	100
10	Harness	2.25 pt/a	A	PRE		0	94	75	100
11	Prowl H2O	2 pt/a	A	PRE		0	80	98	96
	LSD P=.05					.	8.6	18.9	9.0
	Standard Deviation					0.0	6.0	13.1	6.2
	CV					0.0	7.86	20.83	7.09
									22.38
									13.13
									28.42

Could not calculate LSD (% mean diff) or mean separation letters for columns 1 because error variance is 0.
 Mean separation letters are 'na' (not applicable) when error variance is 0

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Rating Date	Jun-4-2024	Jun-4-2024	Jun-4-2024	Jun-4-2024	Jun-4-2024	Jun-4-2024	Jun-4-2024	Jun-14-2024	Jun-14-2024
Rating Type	control	control	control	control	control	control	control	injury	control
Rating Unit	%	%	%	%	%	%	%	%	%
Crop Type, Code								C, GLXMA	
Pest Code	ANGR	CHEAL	AMAPO	AMBEL	ABUTH	SINAR			ANGR
Trt-Eval Interval	20 DA-A	20 DA-A	20 DA-A	20 DA-A	20 DA-A	20 DA-A	30 DA-A	30 DA-A	30 DA-A
Number of Decimals	0	0	0	0	0	0	0	0	0
Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing				
1	Untreated					0	0	0	0
2	Zidua SC	3.25 fl oz/a	A	PRE		73	48	83	51
3	Zidua SC	4 fl oz/a	A	PRE		75	45	86	68
4	Dual Magnum	1.33 pt/a	A	PRE		89	50	88	60
5	Dual Magnum	2 pt/a	A	PRE		89	65	96	56
6	Outlook	14 fl oz/a	A	PRE		87	59	95	60
7	Outlook	18 fl oz/a	A	PRE		88	51	95	66
8	Warrant	3 pt/a	A	PRE		85	58	98	67
9	Harness	1.28 pt/a	A	PRE		93	66	99	72
10	Harness	2.25 pt/a	A	PRE		95	72	100	80
11	Prowl H2O	2 pt/a	A	PRE		73	95	91	44
	LSD P=.05					5.3	17.2	10.3	20.4
	Standard Deviation					3.6	11.9	7.1	14.2
	CV					4.72	21.57	8.4	25.0

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Rating Date	Jun-14-2024	Jun-14-2024	Jun-14-2024	Jun-14-2024	Jun-14-2024
Rating Type	control	control	control	control	control
Rating Unit	%	%	%	%	%
Crop Type, Code					
Pest Code	CHEAL	AMAPO	AMBEL	ABUTH	SINAR
Trt-Eval Interval	30 DA-A	30 DA-A	30 DA-A	30 DA-A	30 DA-A
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing					
1	Untreated					0	0	0	0	0
2	Zidua SC	3.25 fl oz/a	A		PRE	61	80	66	100	93
3	Zidua SC	4 fl oz/a	A		PRE	56	91	73	96	100
4	Dual Magnum	1.33 pt/a	A		PRE	59	88	69	83	70
5	Dual Magnum	2 pt/a	A		PRE	65	97	69	84	83
6	Outlook	14 fl oz/a	A		PRE	62	91	76	86	90
7	Outlook	18 fl oz/a	A		PRE	64	94	70	75	88
8	Warrant	3 pt/a	A		PRE	61	99	73	90	93
9	Harness	1.28 pt/a	A		PRE	69	100	75	83	91
10	Harness	2.25 pt/a	A		PRE	68	99	77	86	86
11	Prowl H2O	2 pt/a	A		PRE	93	88	61	94	76
	LSD P=.05					14.8	11.7	8.4	14.7	17.9
	Standard Deviation					10.2	8.1	5.8	10.2	12.4
	CV					17.18	9.64	9.07	12.77	15.68