

Weed control comparison of glufosinate products in soybean

Trial ID: SOY10-23 Study Dir.: Sprague, Stiles
 Conducted: Campus, C-14 Investigator: Christy Sprague

Planting Date: May-10-2023 **Row Spacing:** 30 IN
Variety: AG26XF3 **No. of Reps:** 4
Population: 150000 seeds/A **% OM:** 1.6
Soil Type: CL clay loam **pH:** 7.2
Plot Size: 10 X 30 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: Fall chisel plowed, fall soil finished twice, spring soil finished twice.
Fertilizer:

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1	ANGR	annual grass	mainly foxtail species
2	CHEAL	common lambsquarters	Chenopodium album
3	AMBEL	common ragweed	Ambrosia artemisiifolia
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

	A	B
Application Timing:	EPOS	POST
Date Treated:	Jun-6-2023	Jun-16-2023
Time Treated:	8:35 AM	10:00 AM
% Cloud Cover:	100	100
Air Temp., Unit:	62 F	59 F
% Relative Humidity:	74	85
Wind Speed/Unit/Dir:	7 MPH NE	7 MPH N
Soil Temp, Unit:	67 F	64 F
Leaf Moist/Dew Presence (Y/N):	N	N
Soil Moist:	5	5

Crop Stage at Each Application

	A	B
Crop 1 Name:	GLXMA	GLXMA
Height:	5 "	6 "
Stage:	V2	V2-V3 (V3)

Weed Stage at Each Application

	A	B
Weed 1 Name:	ANGR	ANGR
Height:	1-5 " (2)	3-7 " (4)
Stage:	2-4L	3-7L
Weed 2 Name:	CHEAL	CHEAL
Height:	1-4 " (2)	2-5 " (3)
Stage:	2-6L	8-14L
Weed 3 Name:	AMBEL	AMBEL
Height:	1-4 " (2)	1-5 " (4)
Stage:	2-6L	3-7L

Weed Density

	1	2	3
Date:	Jun-16-2023	Jun-16-2023	Jun-16-2023
Weed Name:	ANGR	CHEAL	AMBEL
Density:	8 FT2	1 FT2	2 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	20.0 "	20 "	100 "	19 GAL/AC	WATER	30 PSI
B	CUB	3.8 MPH	AIXR	11003	22.0 "	20 "	100 "	19 GAL/AC	WATER	30 PSI

Comments: 5/10/23: A blanket application of Dual II Magnum at 0.67 pt/A was applied immediately after planting. Common ragweed (AMBEL) at this location is resistant to the Group 2 (ALS-inhibiting) herbicides.

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Trial ID: SOY10-23
 Protocol ID: SOY10-23 Location: Campus, C-14 Trial Year: 2023
 Study Director: Sprague, Stiles Sponsor Contact:
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Rating Date	Jun-13-2023	Jun-13-2023	Jun-13-2023	Jun-13-2023	Jun-30-2023	Jun-30-2023	Jun-30-2023
Rating Type	injury	control	control	control	injury	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Crop Type, Code	C, GLXMA				C, GLXMA		
Pest Code		ANGR	CHEAL	AMBEL		ANGR	CHEAL
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-B	14 DA-B	14 DA-B
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing	Jun-13-2023 injury	Jun-13-2023 control	Jun-13-2023 control	Jun-13-2023 control	Jun-30-2023 injury	Jun-30-2023 control	Jun-30-2023 control
1	Liberty Ultra	24 fl oz/a	A	EPOS		8	85	100	98	1	96	97
	Zidua SC	2.5 fl oz/a	A	EPOS								
	AMS	1.5 lb/a	A	EPOS								
2	Liberty Ultra	24 fl oz/a	B	POST						0	99	97
3	Surmise 5	16.4 fl oz/a	B	POST						0	94	65
4	Interline	32 fl oz/a	B	POST						0	97	75
5	Untreated									0	0	0
6	Liberty Ultra	24 fl oz/a	B	POST						0	98	91
	AMS	1.5 lb/a	B	POST								
7	Surmise 5	16.4 fl oz/a	B	POST						0	98	58
	AMS	1.5 lb/a	B	POST								
8	Interline	32 fl oz/a	B	POST						0	96	63
	AMS	1.5 lb/a	B	POST								
	LSD P=.05					.	.	.	.	0.8	4.1	10.3
	Standard Deviation					.	.	.	.	0.5	2.8	7.0
	CV					.	.	.	.	565.69	3.33	10.34

Could not calculate LSD (% mean diff) for columns 1,2,3,4,9,13 because error mean square = 0.

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Protocol ID: SOY10-23 Location: Campus, C-14 Trial Year: 2023

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Investigator: Christy Sprague

Rating Date	Jun-30-2023	Jul-7-2023	Jul-7-2023	Jul-7-2023	Jul-7-2023	Jul-14-2023	Jul-14-2023	Jul-14-2023					
Rating Type	control	injury	control	control	control	injury	control	control					
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100					
Crop Type, Code	C, GLXMA					C, GLXMA							
Pest Code	AMBEL		ANGR	CHEAL	AMBEL		ANGR	CHEAL					
Trt-Eval Interval	14 DA-B	21 DA-B	21 DA-B	21 DA-B	21 DA-B	28 DA-B	28 DA-B	28 DA-B					
Number of Decimals	0	0	0	0	0	0	0	0					
Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing								
1	Liberty Ultra	24 fl oz/a	A	EPOS		100	0	96	97	100	0	94	94
	Zidua SC	2.5 fl oz/a	A	EPOS									
	AMS	1.5 lb/a	A	EPOS									
2	Liberty Ultra	24 fl oz/a	B	POST		98	0	98	97	99	0	96	94
3	Surmise 5	16.4 fl oz/a	B	POST		93	0	95	65	96	0	90	61
4	Interline	32 fl oz/a	B	POST		96	0	95	65	97	0	91	65
5	Untreated					0	0	0	0	0	0	0	0
6	Liberty Ultra	24 fl oz/a	B	POST		98	0	97	92	99	0	95	86
	AMS	1.5 lb/a	B	POST									
7	Surmise 5	16.4 fl oz/a	B	POST		100	0	96	60	100	0	93	60
	AMS	1.5 lb/a	B	POST									
8	Interline	32 fl oz/a	B	POST		100	0	98	64	90	0	97	62
	AMS	1.5 lb/a	B	POST									
	LSD P=.05					5.0	.	3.8	10.3	11.2	.	4.9	10.8
	Standard Deviation					3.4	0.0	2.6	7.0	7.6	0.0	3.3	7.3
	CV					4.0	0.0	3.04	10.43	9.0	0.0	4.04	11.28

Could not calculate LSD (% mean diff) for columns 1,2,3,4,9,13 because error mean square = 0.

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Rating Date	Jul-14-2023
Rating Type	control
Rating Unit/Min/Max	%, 0, 100
Crop Type, Code	
Pest Code	AMBEL
Trt-Eval Interval	28 DA-B
Number of Decimals	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	
1	Liberty Ultra	24 fl oz/a	A	EPOS		97
	Zidua SC	2.5 fl oz/a	A	EPOS		
	AMS	1.5 lb/a	A	EPOS		
2	Liberty Ultra	24 fl oz/a	B	POST		95
3	Surmise 5	16.4 fl oz/a	B	POST		92
4	Interline	32 fl oz/a	B	POST		96
5	Untreated					0
6	Liberty Ultra	24 fl oz/a	B	POST		98
	AMS	1.5 lb/a	B	POST		
7	Surmise 5	16.4 fl oz/a	B	POST		96
	AMS	1.5 lb/a	B	POST		
8	Interline	32 fl oz/a	B	POST		98
	AMS	1.5 lb/a	B	POST		
	LSD P=.05					6.6
	Standard Deviation					4.5
	CV					5.39