

Postemergence combinations with Liberty in Enlist E3 soybean

Trial ID: SOY03-23 Study Dir.: Sprague, Stiles
 Conducted: Campus, C-12 Investigator: Christy Sprague

Planting Date: May-10-2023 **Row Spacing:** 30 IN
Variety: P25A16E **No. of Reps:** 4
Population: 150000 seeds/A **% OM:** 3
Soil Type: CL clay loam **pH:** 7.4
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
4	ABUTH	velvetleaf	Abutilon theophrasti
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

Application Timing: POST
Date Treated: Jun-9-2023
Time Treated: 10:15 AM
% Cloud Cover: 0
Air Temp., Unit: 69 F
% Relative Humidity: 44
Wind Speed/Unit/Dir: 9 MPH NNW
Soil Temp, Unit: 69 F
Leaf Moist/Dew Presence (Y/N): N
Soil Moist: 5

Crop Stage at Each Application

A
Crop 1 Name: GLXMA
Height: 3 "
Stage: V1

Weed Stage at Each Application

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

Weed Density

	1	2	3	4
Date:	Jun-9-2023	Jun-9-2023	Jun-9-2023	Jun-9-2023
Weed Name:	ANGR	CHEAL	AMBEL	ABUTH
Density:	2 FT2	4 FT2	2 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	18 "	20 "	100 "	19 GAL/AC	WATER	30 PSI

Comments: 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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Protocol ID: SOY03-23 Location: Campus, C-12 Trial Year: 2023

Study Director: Sprague, Stiles Sponsor Contact:

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Rating Date	Jun-16-2023	Jun-16-2023	Jun-16-2023	Jun-16-2023	Jun-23-2023	Jun-23-2023	Jun-23-2023
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-A	14 DA-A	14 DA-A
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Appl Timing	Jun-16-2023 injury	Jun-16-2023 control	Jun-16-2023 control	Jun-16-2023 control	Jun-23-2023 injury	Jun-23-2023 control	Jun-23-2023 control
1	Untreated					0	0	0	0	0	0	0
2	BAS 100002H	14.9 fl oz/a	A		POST	0	81	0	78	0	93	0
3	Liberty	32 fl oz/a	A		POST	5	81	96	78	4	100	93
	AMS	1.5 lb/a	A		POST							
4	Liberty Ultra	24 fl oz/a	A		POST	0	80	95	83	1	100	88
	AMS	1.5 lb/a	A		POST							
5	Raptor	4 fl oz/a	A		POST	22	81	98	81	14	100	100
	Zidua SC	2.5 fl oz/a	A		POST							
	Liberty Ultra	24 fl oz/a	A		POST							
	AMS	1.5 lb/a	A		POST							
6	SelectMax	12 fl oz/a	A		POST	7	81	93	83	4	100	87
	Liberty	32 fl oz/a	A		POST							
	AMS	1.5 lb/a	A		POST							
7	SelectMax	12 fl oz/a	A		POST	3	60	83	85	3	66	88
	Enlist One	32 fl oz/a	A		POST							
	AMS	1.5 lb/a	A		POST							
8	SelectMax	12 fl oz/a	A		POST	10	84	95	83	5	100	100
	Liberty	32 fl oz/a	A		POST							
	Enlist One	32 fl oz/a	A		POST							
	AMS	1.5 lb/a	A		POST							
9	Zidua SC	2.5 fl oz/a	A		POST	14	80	97	83	15	100	100
	SelectMax	12 fl oz/a	A		POST							
	Liberty	32 fl oz/a	A		POST							
	Enlist One	32 fl oz/a	A		POST							
	AMS	1.5 lb/a	A		POST							
	LSD P=.05					2.8	2.2	3.7	7.2	1.9	2.8	3.3
	Standard Deviation					2.0	1.5	2.5	4.9	1.3	1.9	2.2
	CV					28.8	2.12	3.45	6.8	26.6	2.26	3.08

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Rating Date	Jun-23-2023	Jun-23-2023	Jun-30-2023	Jun-30-2023	Jun-30-2023	Jun-30-2023	Jun-30-2023
Rating Type	control	control	injury	control	control	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				
Pest Code	AMBEL	ABUTH		ANGR	CHEAL	AMBEL	ABUTH
Trt-Eval Interval	14 DA-A	14 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Appl Timing	Jun-23-2023 control	Jun-23-2023 control	Jun-30-2023 injury	Jun-30-2023 control	Jun-30-2023 control	Jun-30-2023 control	Jun-30-2023 control
1	Untreated					0	0	0	0	0	0	0
2	BAS 100002H	14.9 fl oz/a	A		POST	100	99	0	93	0	96	100
3	Liberty	32 fl oz/a	A		POST	100	100	0	100	89	99	100
	AMS	1.5 lb/a	A		POST							
4	Liberty Ultra	24 fl oz/a	A		POST	98	99	0	100	82	97	100
	AMS	1.5 lb/a	A		POST							
5	Raptor	4 fl oz/a	A		POST	100	100	16	99	97	98	100
	Zidua SC	2.5 fl oz/a	A		POST							
	Liberty Ultra	24 fl oz/a	A		POST							
	AMS	1.5 lb/a	A		POST							
6	SelectMax	12 fl oz/a	A		POST	100	100	0	99	83	100	100
	Liberty	32 fl oz/a	A		POST							
	AMS	1.5 lb/a	A		POST							
7	SelectMax	12 fl oz/a	A		POST	88	87	0	85	100	98	100
	Enlist One	32 fl oz/a	A		POST							
	AMS	1.5 lb/a	A		POST							
8	SelectMax	12 fl oz/a	A		POST	100	100	0	99	100	99	100
	Liberty	32 fl oz/a	A		POST							
	Enlist One	32 fl oz/a	A		POST							
	AMS	1.5 lb/a	A		POST							
9	Zidua SC	2.5 fl oz/a	A		POST	100	100	9	100	100	100	100
	SelectMax	12 fl oz/a	A		POST							
	Liberty	32 fl oz/a	A		POST							
	Enlist One	32 fl oz/a	A		POST							
	AMS	1.5 lb/a	A		POST							
	LSD P=.05					2.6	1.6	1.4	3.8	3.6	3.8	.
	Standard Deviation					1.8	1.1	1.0	2.6	2.5	2.6	0.0
	CV					2.07	1.26	35.15	3.03	3.42	2.94	0.0

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Rating Date	Jul-7-2023	Jul-7-2023	Jul-7-2023	Jul-7-2023	Jul-7-2023
Rating Type	injury	control	control	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Crop Type, Code	C, GLXMA				
Pest Code		ANGR	CHEAL	AMBEL	ABUTH
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Appl Timing					
1	Untreated					0	0	0	0	0
2	BAS 100002H	14.9 fl oz/a	A		POST	0	91	5	96	99
3	Liberty	32 fl oz/a	A		POST	0	98	83	98	100
	AMS	1.5 lb/a	A		POST					
4	Liberty Ultra	24 fl oz/a	A		POST	0	98	80	100	100
	AMS	1.5 lb/a	A		POST					
5	Raptor	4 fl oz/a	A		POST	0	99	94	98	100
	Zidua SC	2.5 fl oz/a	A		POST					
	Liberty Ultra	24 fl oz/a	A		POST					
	AMS	1.5 lb/a	A		POST					
6	SelectMax	12 fl oz/a	A		POST	0	96	77	98	100
	Liberty	32 fl oz/a	A		POST					
	AMS	1.5 lb/a	A		POST					
7	SelectMax	12 fl oz/a	A		POST	0	83	100	100	100
	Enlist One	32 fl oz/a	A		POST					
	AMS	1.5 lb/a	A		POST					
8	SelectMax	12 fl oz/a	A		POST	0	99	99	100	100
	Liberty	32 fl oz/a	A		POST					
	Enlist One	32 fl oz/a	A		POST					
	AMS	1.5 lb/a	A		POST					
9	Zidua SC	2.5 fl oz/a	A		POST	3	100	100	100	100
	SelectMax	12 fl oz/a	A		POST					
	Liberty	32 fl oz/a	A		POST					
	Enlist One	32 fl oz/a	A		POST					
	AMS	1.5 lb/a	A		POST					
	LSD P=.05					0.6	4.1	5.6	5.1	1.2
	Standard Deviation					0.4	2.8	3.8	3.5	0.8
	CV					116.15	3.3	5.38	4.02	0.94

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