

Weed control with preemergence BAS842 in Enlist E3 soybean

Trial ID: SOY08-24 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:** 3.2
Soil Type: CL clay loam **pH:** 6.2
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	SINAR	wild mustard	Sinapis arvensis
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description		
	A	B
Application Timing:	PRE	EPOS
Date Treated:	May-15-2024	Jun-3-2024
Time Treated:	11:00 AM	10:45 AM
% Cloud Cover:	10	20
Air Temp., Unit:	66 F	68 F
% Relative Humidity:	53	72
Wind Speed/Unit/Dir:	9 MPH E	1 MPH SW
Soil Temp, Unit:	60.7 F	60.7 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:		4-5 " (4.5)
Stage:		V1-V2

Weed Stage at Each Application		
	A	B
Weed 1 Name:	ANGR	ANGR
Height:		3-5 " (4)
Stage:		3-4L
Weed 2 Name:	CHEAL	CHEAL
Height:		4-5 " (4)
Stage:		4-8L
Weed 3 Name:	AMAPO	AMAPO
Height:		
Stage:		4-8L
Weed 4 Name:	AMBEL	AMBEL
Height:		2-3 " (3)
Stage:		4-6L
Weed 5 Name:	SINAR	SINAR
Height:		4 "
Stage:		8L

Weed Density					
	1	2	3	4	5
Date:	Jun-3-2024	Jun-3-2024	Jun-3-2024	Jun-3-2024	Jun-3-2024
Weed Name:	ANGR	CHEAL	AMAPO	AMBEL	SINAR
Density:	6 FT2	4 FT2	2 FT2	3 FT2	1 FT2

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

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

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Investigator: Christy Sprague

Rating Date	May-29-2024	Jun-5-2024	Jun-5-2024	Jun-5-2024	Jun-5-2024	Jun-5-2024	Jun-5-2024
Rating Type	injury	injury	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%
Crop Type, Code	C, GLXMA	C, GLXMA					
Pest Code			ANGR	CHEAL	AMAPO	AMBEL	SINAR
Trt-Eval Interval	14 DA-A	21 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 Treatment No. Name	Rate	Appl	Appl				
	Rate Unit	Code	Timing				
1 Untreated				0	0	0	0
2 Zidua SC	3.25 fl oz/a A	PRE		0	0	83	77
3 Enlist One	32 fl oz/a A	PRE		0	0	86	79
Zidua SC	3.25 fl oz/a A	PRE					
4 BAS 842	6 fl oz/a A	PRE		0	0	84	88
5 Enlist One	32 fl oz/a A	PRE		0	0	80	82
BAS 842	6 fl oz/a A	PRE					
6 Verdict	5 fl oz/a A	PRE		0	0	87	87
BAS 842	6 fl oz/a A	PRE					
7 Metribuzin	4 oz/a A	PRE		0	0	85	85
BAS 842	6 fl oz/a A	PRE					
8 BAS 842	6 fl oz/a B	EPOS		0	20	40	64
Enlist One	32 fl oz/a B	EPOS					
Roundup PowerMax 3	30 fl oz/a B	EPOS					
AMSOL	2.5 % v/v B	EPOS					
LSD P=.05				.	0.5	4.5	8.6
Standard Deviation				0.0	0.4	3.0	5.8
CV				0.0	14.86	4.46	8.33
							8.55
							7.14
							5.63

Missing data estimates are included in columns: Average=1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19
 Could not calculate LSD (% mean diff) or mean separation letters for columns 1,14,20 because error variance is 0.
 Mean separation letters are 'na' (not applicable) when error variance is 0

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Investigator: Christy Sprague

Rating Date	Jun-12-2024	Jun-12-2024	Jun-12-2024	Jun-12-2024	Jun-12-2024	Jun-12-2024
Rating Type	injury	control	control	control	control	control
Rating Unit	%	%	%	%	%	%
Crop Type, Code	C, GLXMA					
Pest Code		ANGR	CHEAL	AMAPO	AMBEL	SINAR
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing						
1	Untreated					0	0	0	0	0	0
2	Zidua SC	3.25 fl oz/a	A	PRE		0	82	73	91	76	95
3	Enlist One	32 fl oz/a	A	PRE		0	85	78	92	76	100
	Zidua SC	3.25 fl oz/a	A	PRE							
4	BAS 842	6 fl oz/a	A	PRE		0	84	88	93	76	100
5	Enlist One	32 fl oz/a	A	PRE		0	83	79	90	77	100
	BAS 842	6 fl oz/a	A	PRE							
6	Verdict	5 fl oz/a	A	PRE		0	84	83	96	77	100
	BAS 842	6 fl oz/a	A	PRE							
7	Metribuzin	4 oz/a	A	PRE		0	82	81	95	76	98
	BAS 842	6 fl oz/a	A	PRE							
8	BAS 842	6 fl oz/a	B	EPOS		9	100	100	100	100	100
	Enlist One	32 fl oz/a	B	EPOS							
	Roundup PowerMax 3	30 fl oz/a	B	EPOS							
	AMSOL	2.5 % v/v	B	EPOS							
	LSD P=.05					0.5	4.2	7.8	7.3	5.5	4.5
	Standard Deviation					0.4	2.9	5.3	5.0	3.8	3.1
	CV					34.1	3.83	7.29	6.05	5.38	3.54

Missing data estimates are included in columns: Average=1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19
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Rating Date	Jun-26-2024	Jun-26-2024	Jun-26-2024	Jun-26-2024	Jun-26-2024	Jun-26-2024				
Rating Type	injury	control	control	control	control	control				
Rating Unit	%	%	%	%	%	%				
Crop Type, Code	C, GLXMA									
Pest Code		ANGR	CHEAL	AMAPO	AMBEL	SINAR				
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A				
Number of Decimals	0	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		0	67	70	88	64
3	Enlist One	32 fl oz/a	A	PRE		0	71	75	94	68
	Zidua SC	3.25 fl oz/a	A	PRE						100
4	BAS 842	6 fl oz/a	A	PRE		0	77	82	93	64
5	Enlist One	32 fl oz/a	A	PRE		0	79	80	89	68
	BAS 842	6 fl oz/a	A	PRE						100
6	Verdict	5 fl oz/a	A	PRE		0	79	82	94	72
	BAS 842	6 fl oz/a	A	PRE						96
7	Metribuzin	4 oz/a	A	PRE		0	77	84	95	70
	BAS 842	6 fl oz/a	A	PRE						100
8	BAS 842	6 fl oz/a	B	EPOS		0	99	100	100	100
	Enlist One	32 fl oz/a	B	EPOS						
	Roundup PowerMax 3	30 fl oz/a	B	EPOS						
	AMSOL	2.5 % v/v	B	EPOS						
	LSD P=.05					.	7.6	7.1	10.4	7.9
	Standard Deviation					0.0	5.1	4.8	7.1	5.3
	CV					0.0	7.5	6.7	8.67	8.43

Missing data estimates are included in columns: Average=1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19
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