

Comparing Enversa with other Group 15 herbicides for extended waterhemp control in Enlist E3 soybean

Trial ID: SOY19-25
 Conducted: Shiawassee Co. (Morrice)

Study Dir.: Stiles, Sprague
 Investigator: Christy Sprague

Planting Date: May-20-2025
Variety: P23Z82E
Population: 150000 S/A
Soil Type: SCL sandy clay loam
Plot Size: 10 X 25 FT

Row Spacing: 30 "
No. of Reps: 4
% OM: 2.6
pH: 6.1
Study Design: Randomized Complete Block (RCB)

Tillage/Previous Crops: Spring disk followed by a soil finisher and cultipacker.

Fertilizer:

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1	AMATU	tall waterhemp	Amaranthus tuberculatus
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

	A	B
Application Timing:	PRE	POST
Date Treated:	May-20-2025	Jul-2-2025
Time Treated:	11:30 AM	9:50 AM
% Cloud Cover:	91	0
Air Temp., Unit:	51 F	76 F
% Relative Humidity:	65	62
Wind Speed/Unit/Dir:	5 MPH E	4 MPH WSW
Soil Temp, Unit:	55 F	80 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:		10-12 " (11)
Stage:		V5

Weed Stage at Each Application

	A	B
Weed 1 Name:	AMATU	AMATU
Height:		2-14 " (8)
Stage:		4-18L

Weed Density

	1
Date:	Jul-2-2025
Weed Name:	AMATU
Density:	8 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	18.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	30 PSI
B	CUB	3.8 MPH	AIXR	11003	30.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	30 PSI

Comments: Waterhemp is glyphosate (Group 9) and ALS (Group 2) resistant.

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Rating Date					Jun-23-2025	Jun-23-2025	Jul-1-2025	Jul-1-2025	Jul-5-2025	Jul-9-2025	Jul-16-2025	Jul-16-2025
Rating Type					injury	control	injury	control	injury	injury	injury	control
Rating Unit					%	%	%	%	%	%	%	%
Crop Type, Code					C, GLXMA		C, GLXMA		C, GLXMA	C, GLXMA	C, GLXMA	
Pest Code						AMATU		AMATU				AMATU
Treatment Appl. Interval					34 DA-A	34 DA-A	42 DA-A	42 DA-A	3 DA-B	7 DA-B	14 DA-B	14 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	Kyber Pro	0.5 pt/a	A	PRE		0	97	0	89	0	0	84
2	Kyber Pro	0.5 pt/a	A	PRE		0	96	0	89	0	0	100
	Enlist One	32 fl oz/a	B	POST								
	Liberty Ultra	24 fl oz/a	B	POST								
	Optify HSCOC	0.5 % v/v	B	POST								
	AMS (liquid)	2.5 % v/v	B	POST								
3	Kyber Pro	0.5 pt/a	A	PRE		0	98	0	90	0	0	100
	Enversa	3 pt/a	B	POST								
	Enlist One	32 fl oz/a	B	POST								
	Liberty Ultra	24 fl oz/a	B	POST								
	Optify HSCOC	0.5 % v/v	B	POST								
	AMS (liquid)	2.5 % v/v	B	POST								
4	Kyber Pro	0.5 pt/a	A	PRE		0	100	0	96	0	0	100
	EverrpreX	1 pt/a	B	POST								
	Enlist One	32 fl oz/a	B	POST								
	Liberty Ultra	24 fl oz/a	B	POST								
	Optify HSCOC	0.5 % v/v	B	POST								
	AMS (liquid)	2.5 % v/v	B	POST								
5	Kyber Pro	0.5 pt/a	A	PRE		0	96	0	93	0	0	100
	Warrant	3 pt/a	B	POST								
	Enlist One	32 fl oz/a	B	POST								
	Liberty Ultra	24 fl oz/a	B	POST								
	Optify HSCOC	0.5 % v/v	B	POST								
	AMS (liquid)	2.5 % v/v	B	POST								
6	Kyber Pro	0.5 pt/a	A	PRE		0	97	0	94	0	0	100
	Zidua SC	2.5 fl oz/a	B	POST								
	Enlist One	32 fl oz/a	B	POST								
	Liberty Ultra	24 fl oz/a	B	POST								
	Optify HSCOC	0.5 % v/v	B	POST								
	AMS (liquid)	2.5 % v/v	B	POST								
7	Untreated					0	0	0	0	0	0	0
8	Enlist One	32 fl oz/a	B	POST		0	0	0	0	0	0	99
	Liberty Ultra	24 fl oz/a	B	POST								
	Optify HSCOC	0.5 % v/v	B	POST								
	AMS (liquid)	2.5 % v/v	B	POST								
LSD P=.05						.	2.7	.	8.2	.	.	1.4
Standard Deviation						0.0	1.9	0.0	5.6	0.0	0.0	0.9
CV						0.0	2.55	0.0	8.11	0.0	0.0	1.1

Could not calculate LSD (% mean diff) or mean separation letters for columns 1,3,5,6,7,9 because error variance is 0.
Mean separation letters are 'na' (not applicable) when error variance is 0

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Rating Date	Jul-30-2025	Jul-30-2025	Oct-10-2025
Rating Type	injury	control	control
Rating Unit	%	%	%
Crop Type, Code	C, GLXMA		
Pest Code		AMATU	AMATU
Treatment Appl. Interval	28 DA-B	28 DA-B	100 DA-B
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Appl Timing			
1	Kyber Pro	0.5 pt/a	A	PRE		0	66	50
2	Kyber Pro	0.5 pt/a	A	PRE		0	100	100
	Enlist One	32 fl oz/a	B	POST				
	Liberty Ultra	24 fl oz/a	B	POST				
	Optify HSCOC	0.5 % v/v	B	POST				
	AMS (liquid)	2.5 % v/v	B	POST				
3	Kyber Pro	0.5 pt/a	A	PRE		0	100	100
	Enversa	3 pt/a	B	POST				
	Enlist One	32 fl oz/a	B	POST				
	Liberty Ultra	24 fl oz/a	B	POST				
	Optify HSCOC	0.5 % v/v	B	POST				
	AMS (liquid)	2.5 % v/v	B	POST				
4	Kyber Pro	0.5 pt/a	A	PRE		0	100	100
	EverpreX	1 pt/a	B	POST				
	Enlist One	32 fl oz/a	B	POST				
	Liberty Ultra	24 fl oz/a	B	POST				
	Optify HSCOC	0.5 % v/v	B	POST				
	AMS (liquid)	2.5 % v/v	B	POST				
5	Kyber Pro	0.5 pt/a	A	PRE		0	100	100
	Warrant	3 pt/a	B	POST				
	Enlist One	32 fl oz/a	B	POST				
	Liberty Ultra	24 fl oz/a	B	POST				
	Optify HSCOC	0.5 % v/v	B	POST				
	AMS (liquid)	2.5 % v/v	B	POST				
6	Kyber Pro	0.5 pt/a	A	PRE		0	100	100
	Zidua SC	2.5 fl oz/a	B	POST				
	Enlist One	32 fl oz/a	B	POST				
	Liberty Ultra	24 fl oz/a	B	POST				
	Optify HSCOC	0.5 % v/v	B	POST				
	AMS (liquid)	2.5 % v/v	B	POST				
7	Untreated					0	0	0
8	Enlist One	32 fl oz/a	B	POST		0	94	90
	Liberty Ultra	24 fl oz/a	B	POST				
	Optify HSCOC	0.5 % v/v	B	POST				
	AMS (liquid)	2.5 % v/v	B	POST				
LSD P=.05						.	4.6	6.5
Standard Deviation						0.0	3.1	4.4
CV						0.0	3.8	5.51

Could not calculate LSD (% mean diff) or mean separation letters for columns 1,3,5,6,7,9 because error variance is 0.
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