

Comparison of glufosinate formulations for weed control

Trial ID: SOY14-25 Study Dir.: Stiles, Sprague
 Conducted: Campus, B-8 Investigator: Christy Sprague

Planting Date: May-27-2025 **Row Spacing:** 30 "
Variety: P23Z82E **No. of Reps:** 4
Population: 150000 S/A **% OM:** 2.3
Soil Type: SCL sandy clay loam **pH:** 6.8
Plot Size: 10 X 35 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: Spring chisel plow followed by soil finisher twice.

Fertilizer:

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1	ANGR	annual grass	mostly foxtail and barnyardgrass
2	CHEAL	common lambsquarters	Chenopodium album
3	AMAPO	Powell amaranth	Amaranthus powellii
4	AMBEL	common ragweed	Ambrosia artemisiifolia
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

Application Timing: A
Date Treated: POST
Time Treated: Jul-1-2025
% Cloud Cover: 9:15 AM
Air Temp., Unit: 0
% Relative Humidity: 74 F
Wind Speed/Unit/Dir: 67
Soil Temp, Unit: 5 MPH W
Leaf Moist/Dew Presence (Y/N): 72 F
Soil Moist: N
 5

Crop Stage at Each Application

Crop 1 Name: A
 GLXMA
Height: 6-10 " (8)
Stage: V3/V4

Weed Stage at Each Application

Weed 1 Name: A
 ANGR
Height: 2-10 " (6)
Stage: 2-6L
Weed 2 Name: CHEAL
Height: 1-8 " (5)
Stage: 4-38L
Weed 3 Name: AMAPO
Height: 1-3 " (3)
Stage: 4-8L
Weed 4 Name: AMBEL
Height: 4-6 " (5)
Stage: 4-10L

Weed Density

	1	2	3	4
Date:	Jul-1-2025	Jul-1-2025	Jul-1-2025	Jul-1-2025
Weed Name:	ANGR	CHEAL	AMAPO	AMBEL
Density:	6 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	30.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	30 PSI

Comments:

Michigan State University

Comparison of glufosinate formulations for weed control

Trial ID: S0Y14-25

Protocol ID: S0Y14-25 Location: Campus, B-8 Trial Year: 2025

Study Director: Stiles, Sprague Sponsor Contact:

Investigator: Christy Sprague

Rating Date				Jul-15-2025	Jul-15-2025	Jul-15-2025	Jul-22-2025	Jul-22-2025	Jul-22-2025
Rating Type				control	control	control	injury	control	control
Rating Unit				%	%	%	%	%	%
Crop Type, Code							C, GLXMA		
Pest Code				CHEAL	AMAPO	AMBEL		ANGR	CHEAL
Treatment Appl. Interval				14 DA-A	14 DA-A	14 DA-A	21 DA-A	21 DA-A	21 DA-A
Number of Decimals				0	0	0	0	0	0
Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing				
1	Untreated					0	0	0	0
2	Technical (BAS 100002H)	16.9 fl oz/a	A	POST		18	97	100	0
3	Surmise 5 (BAS 909023)	18.4 fl oz/a	A	POST		52	97	100	0
4	Surmise 5 (BAS 909023)	18.4 fl oz/a	A	POST		60	100	100	0
	Surfactant	0.25 % v/v	A	POST					
5	Interline (BAS 90906)	36 fl oz/a	A	POST		92	100	100	0
6	Liberty Ultra	24 fl oz/a	A	POST		97	100	100	0
7	Liberty Ultra	24 fl oz/a	A	POST		100	100	100	0
	AMS	8.5 lb/100 gal	A	POST					
	LSD P=.05					9.6	4.9	.	.
	Standard Deviation					6.5	3.3	0.0	0.0
	CV					10.84	3.88	0.0	0.0
								7.6	11.2
								5.1	7.6
								6.31	11.06

Could not calculate LSD (% mean diff) or mean separation letters for columns 6,10,11,15 because error variance is 0.
Mean separation letters are 'na' (not applicable) when error variance is 0

Comparison of glufosinate formulations for weed control

Trial ID: S0Y14-25

Protocol ID: S0Y14-25 Location: Campus, B-8 Trial Year: 2025

Study Director: Stiles, Sprague Sponsor Contact:

Investigator: Christy Sprague

Rating Date					Jul-22-2025	Jul-22-2025
Rating Type					control	control
Rating Unit					%	%
Crop Type, Code						
Pest Code					AMAPO	AMBEL
Treatment Appl. Interval					21 DA-A	21 DA-A
Number of Decimals					0	0
Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	
1	Untreated					0
2	Technical (BAS 100002H)	16.9 fl oz/a	A	POST		98
3	Surmise 5 (BAS 909023)	18.4 fl oz/a	A	POST		100
4	Surmise 5 (BAS 909023)	18.4 fl oz/a	A	POST		100
	Surfactant	0.25 % v/v	A	POST		
5	Interline (BAS 90906)	36 fl oz/a	A	POST		100
6	Liberty Ultra	24 fl oz/a	A	POST		100
7	Liberty Ultra	24 fl oz/a	A	POST		99
	AMS	8.5 lb/100 gal	A	POST		
	LSD P=.05					3.2
	Standard Deviation					2.2
	CV					2.54

Could not calculate LSD (% mean diff) or mean separation letters for columns 6,10,11,15 because error variance is 0.
Mean separation letters are 'na' (not applicable) when error variance is 0