

Impact of AMS rate on Liberty Ultra activity

Trial ID: SOY09-25 Study Dir.: Sprague, Stiles
 Conducted: Campus, C-14 Investigator: Christy Sprague

Planting Date: May-14-2025 **Row Spacing:** 30 "
Variety: AG24XF4 **No. of Reps:** 4
Population: 150000 S/A **% OM:** 2.2
Soil Type: L loam **pH:** 6.4
Plot Size: 10 X 30 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops:**Fertilizer:****Crop and Weed Description**

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

Application Description

Application Timing: POST
Date Treated: Jun-27-2025
Time Treated: 10:15 AM
% Cloud Cover: 45
Air Temp., Unit: 76 F
% Relative Humidity: 90
Wind Speed/Unit/Dir: 5 MPH SSW
Soil Temp, Unit: 80 F
Leaf Moist/Dew Presence (Y/N): N
Soil Moist: 2

Crop Stage at Each Application

A
Crop 1 Name: GLXMA
Height: 4-5 " (4.5)
Stage: V3

Weed Stage at Each Application

A
Weed 1 Name: ANGR
Height: 4-14 " (10)
Stage: 5L
Weed 2 Name: CHEAL
Height: 2-8 " (5)
Stage: 25L
Weed 3 Name: AMBEL
Height: 6-8 " (7)
Stage: 6L-14L (10L)

Weed Density

	1	2	3
Date:	Jun-27-2025	Jun-27-2025	Jun-27-2025
Weed Name:	ANGR	CHEAL	AMBEL
Density:	6 FT2	3 FT2	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	30.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	30 PSI

Comments: 6/27/25 - Light intensity was 1100 umol @ canopy beginning of treatment. Light intensity was 1300 umol @ canopy end of application.

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Rating Date	Jul-3-2025	Jul-3-2025	Jul-3-2025	Jul-3-2025	Jul-11-2025	Jul-11-2025	Jul-11-2025	Jul-11-2025
Rating Type	injury	control	control	control	injury	control	control	control
Rating Unit	%	%	%	%	%	%	%	%
Crop Type, Code	C, GLXMA				C, GLXMA			
Pest Code		ANGR	CHEAL	AMBEL		ANGR	CHEAL	AMBEL
Treatment Appl. Interval	6 DA-A	6 DA-A	6 DA-A	6 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A
Number of Decimals	0	0	0	0	0	0	0	0
Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Timing			
1	Untreated					0	0	0
2	Liberty Ultra	19 fl oz/a	A	POST		0	53	50
3	Liberty Ultra	19 fl oz/a	A	POST		0	51	91
	AMS	0.75 lb/a	A	POST				
4	Liberty Ultra	19 fl oz/a	A	POST		0	50	90
	AMS	1.5 lb/a	A	POST				
5	Liberty Ultra	19 fl oz/a	A	POST		0	50	90
	AMS	3 lb/a	A	POST				
6	Liberty Ultra	19 fl oz/a	A	POST		0	50	58
	Request	0.5 % v/v	A	POST				
	LSD P=.05					.	3.2	8.1
	Standard Deviation					0.0	2.1	5.4
	CV					0.0	4.95	8.56
						0.0	7.8	5.9
						0.0	7.3	6.23
						0.0	5.2	6.23
						0.0	4.9	6.23
						0.0	9.8	5.43

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

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Rating Date					Jul-18-2025	Jul-18-2025	Jul-18-2025	Jul-18-2025
Rating Type					injury	control	control	control
Rating Unit					%	%	%	%
Crop Type, Code					C, GLXMA			
Pest Code						ANGR	CHEAL	AMBEL
Treatment Appl. Interval					21 DA-A	21 DA-A	21 DA-A	21 DA-A
Number of Decimals					0	0	0	0
Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing			
1	Untreated					0	0	0
2	Liberty Ultra	19 fl oz/a	A		POST	0	65	39
3	Liberty Ultra	19 fl oz/a	A		POST	0	79	68
	AMS	0.75 lb/a	A		POST			
4	Liberty Ultra	19 fl oz/a	A		POST	0	74	69
	AMS	1.5 lb/a	A		POST			
5	Liberty Ultra	19 fl oz/a	A		POST	0	84	75
	AMS	3 lb/a	A		POST			
6	Liberty Ultra	19 fl oz/a	A		POST	0	57	28
	Request	0.5 % v/v	A		POST			
LSD P=.05						.	9.4	9.7
Standard Deviation						0.0	6.3	6.4
CV						0.0	10.45	13.83

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