

Weed control systems with Rapidilicil in no-till soybean

Trial ID: NTS02-25 Study Dir.: Stiles, Sprague
 Conducted: Campus, C-13 Investigator: Christy Sprague

Planting Date: May-15-2025 **Row Spacing:** 30 "
Variety: P23Z82E **No. of Reps:** 4
Population: 150000 S/A **% OM:** 2.9
Soil Type: CL clay loam **pH:** 6.5
Plot Size: 10 X 30 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: No-tilled into standing corn stubble.

Fertilizer:

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1	ERICA	horseweed (marestail)	Erigeron canadensis
2	STEME	common chickweed	Stellaria media
3	TAROF	dandelion	Taraxacum officinale
4	ANGR	annual grass	mostly foxtail and l. crabgrass
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

	A	B
Application Timing:	7 EPP	POST
Date Treated:	May-9-2025	Jun-30-2025
Time Treated:	2:30 PM	1:00 PM
% Cloud Cover:	2	10
Air Temp., Unit:	63 F	81 F
% Relative Humidity:	32	76
Wind Speed/Unit/Dir:	6 MPH W	6 MPH W
Soil Temp, Unit:	62 F	76 F
Leaf Moist/Dew Presence (Y/N):	N	N
Soil Moist:	3	1

Crop Stage at Each Application

	A	B
Crop 1 Name:	GLXMA	GLXMA
Height:		10 "
Stage:		V6

Weed Stage at Each Application

	A	B
Weed 1 Name:	ERICA	ERICA
Height:	3.5 "	12-20 " (16)
Stage:	8-10L	bolt
Weed 2 Name:	STEME	STEME
Height:	5.5 "	
Stage:	4-8L	
Weed 3 Name:	TAROF	TAROF
Height:	2.5 "	6 "
Stage:	rosett	rosett
Weed 4 Name:	ANGR	ANGR
Height:		4 "
Stage:		3-4L

Weed Density

	1	2	3	4
Date:	May-9-2025	May-9-2025	May-9-2025	May-9-2025
Weed Name:	ERICA	STEME	TAROF	ANGR
Density:	3 FT2	2 FT2	1 FT2	
Date:	Jun-30-2025	Jun-30-2025	Jun-30-2025	Jun-30-2025
Weed Name:	ERICA	STEME	TAROF	ANGR
Density:				3 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	24.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	30 PSI

Comments: Horseweed (marestail) at this location is resistant to glyphosate (Group 9) and ALS-inhibiting (Group 2) herbicides.

Michigan State University

Weed control systems with Rapidilicil in no-till soybean

Trial ID: NTS02-25

Protocol ID: NTS02-25 Location: Campus, C-13 Trial Year: 2025

Study Director: Stiles, Sprague Sponsor Contact:

Investigator: Christy Sprague

Rating Date				May-12-2025	May-12-2025	May-12-2025	May-12-2025	May-16-2025	May-16-2025
Rating Type				temperature	control	control	control	temperature	control
Rating Unit				F	%	%	%	F	%
Crop Type, Code									
Pest Code					STEME	TAROF	ERICA		STEME
Treatment Appl. Interval				3 DA-A	3 DA-A	3 DA-A	3 DA-A	7 DA-A	7 DA-A
Number of Decimals				0	0	0	0	0	0
Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing				
1	Untreated					68	0	0	74
2	V-10488	24 fl oz/a	A	7 EPP		68	70	83	73
	Enlist One	32 fl oz/a	A	7 EPP					
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					
	Crop oil concentrate	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
3	Rapidilicil	5 fl oz/a	A	7 EPP		67	67	81	74
	Fierce MTZ	16 fl oz/a	A	7 EPP					
	Enlist One	32 fl oz/a	A	7 EPP					
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					
	Crop oil concentrate	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
4	Zidua PRO	6 fl oz/a	A	7 EPP		68	45	80	72
	Enlist One	32 fl oz/a	A	7 EPP					
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					
	MSO	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
5	Authority Supreme	8 fl oz/a	A	7 EPP		68	25	64	73
	Enlist One	32 fl oz/a	A	7 EPP					
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					
	MSO	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
LSD P=.05						3.0	5.7	4.0	3.4
Standard Deviation						2.0	3.7	2.6	2.2
CV						2.9	8.89	4.76	3.56

Could not calculate LSD (% mean diff) or mean separation letters for columns 13,17,18 because error variance is 0.
Mean separation letters are 'na' (not applicable) when error variance is 0

Michigan State University

Weed control systems with Rapidilicil in no-till soybean

Trial ID: NTS02-25

Protocol ID: NTS02-25 Location: Campus, C-13 Trial Year: 2025

Study Director: Stiles, Sprague Sponsor Contact:

Investigator: Christy Sprague

Rating Date				May-16-2025	May-16-2025	May-23-2025	May-23-2025	May-23-2025	May-23-2025
Rating Type				control	control	temperature	control	control	control
Rating Unit				%	%	F	%	%	%
Crop Type, Code									
Pest Code				TAROF	ERICA		STEME	TAROF	ERICA
Treatment Appl. Interval				7 DA-A	7 DA-A	14 DA-A	14 DA-A	14 DA-A	14 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	52	0
2	V-10488	24 fl oz/a	A	7 EPP		99	81	51	100
	Enlist One	32 fl oz/a	A	7 EPP					100
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					100
	Crop oil concentrate	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
3	Rapidilicil	5 fl oz/a	A	7 EPP		100	89	53	100
	Fierce MTZ	16 fl oz/a	A	7 EPP					91
	Enlist One	32 fl oz/a	A	7 EPP					
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					
	Crop oil concentrate	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
4	Zidua PRO	6 fl oz/a	A	7 EPP		99	100	51	99
	Enlist One	32 fl oz/a	A	7 EPP					99
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					100
	MSO	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
5	Authority Supreme	8 fl oz/a	A	7 EPP		71	71	52	100
	Enlist One	32 fl oz/a	A	7 EPP					93
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					71
	MSO	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
LSD P=.05						2.5	5.3	1.4	1.7
Standard Deviation						1.6	3.4	0.9	1.1
CV						2.23	5.05	1.73	1.4
									5.64
									4.39

Could not calculate LSD (% mean diff) or mean separation letters for columns 13,17,18 because error variance is 0.
Mean separation letters are 'na' (not applicable) when error variance is 0

Michigan State University

Weed control systems with Rapidilicil in no-till soybean

Trial ID: NTS02-25

Protocol ID: NTS02-25 Location: Campus, C-13 Trial Year: 2025

Study Director: Stiles, Sprague Sponsor Contact:

Investigator: Christy Sprague

Rating Date				May-30-2025	May-30-2025	May-30-2025	Jun-6-2025	Jun-6-2025	Jun-6-2025	Jun-6-2025
Rating Type				control	control	control	temperature	injury	control	control
Rating Unit				%	%	%	F	%	%	%
Crop Type, Code								C, GLXMA		
Pest Code				STEME	TAROF	ERICA			STEME	TAROF
Treatment Appl. Interval				21 DA-A	21 DA-A	21 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A
Number of Decimals				0	0	0	0	0	0	0
Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing					
1	Untreated					0			0	0
2	V-10488	24 fl oz/a	A	7 EPP		100			100	100
	Enlist One	32 fl oz/a	A	7 EPP						
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP						
	Crop oil concentrate	1 % v/v	A	7 EPP						
	Liquid AMS	3 qt/a	A	7 EPP						
	Liberty Ultra	24 fl oz/a	B	POST						
	Liquid AMS	3 qt/a	B	POST						
3	Rapidilicil	5 fl oz/a	A	7 EPP		100			100	99
	Fierce MTZ	16 fl oz/a	A	7 EPP						
	Enlist One	32 fl oz/a	A	7 EPP						
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP						
	Crop oil concentrate	1 % v/v	A	7 EPP						
	Liquid AMS	3 qt/a	A	7 EPP						
	Liberty Ultra	24 fl oz/a	B	POST						
	Liquid AMS	3 qt/a	B	POST						
4	Zidua PRO	6 fl oz/a	A	7 EPP		100			100	100
	Enlist One	32 fl oz/a	A	7 EPP						
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP						
	MSO	1 % v/v	A	7 EPP						
	Liquid AMS	3 qt/a	A	7 EPP						
	Liberty Ultra	24 fl oz/a	B	POST						
	Liquid AMS	3 qt/a	B	POST						
5	Authority Supreme	8 fl oz/a	A	7 EPP		100			100	96
	Enlist One	32 fl oz/a	A	7 EPP						
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP						
	MSO	1 % v/v	A	7 EPP						
	Liquid AMS	3 qt/a	A	7 EPP						
	Liberty Ultra	24 fl oz/a	B	POST						
	Liquid AMS	3 qt/a	B	POST						
LSD P=.05						.	5.4	5.8	1.4	4.4
Standard Deviation						0.0	3.5	3.8	0.9	2.9
CV						0.0	4.41	5.04	1.35	3.65

Could not calculate LSD (% mean diff) or mean separation letters for columns 13,17,18 because error variance is 0.
Mean separation letters are 'na' (not applicable) when error variance is 0

Michigan State University

Weed control systems with Rapidicil in no-till soybean

Trial ID: NTS02-25

Protocol ID: NTS02-25 Location: Campus, C-13 Trial Year: 2025

Study Director: Stiles, Sprague Sponsor Contact:

Investigator: Christy Sprague

Rating Date				Jun-6-2025	Jun-13-2025	Jun-13-2025	Jun-13-2025	Jun-30-2025	Jun-30-2025
Rating Type				control	injury	control	control	injury	control
Rating Unit				%	%	%	%	%	%
Crop Type, Code				C, GLXMA				C, GLXMA	
Pest Code				ERICA		TAROF	ERICA		TAROF
Treatment Appl. Interval				28 DA-A	35 DA-A	35 DA-A	35 DA-A	52 DA-A	52 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
2	V-10488	24 fl oz/a	A	7 EPP		99	6	99	95
	Enlist One	32 fl oz/a	A	7 EPP				11	99
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					
	Crop oil concentrate	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
3	Rapidicil	5 fl oz/a	A	7 EPP		97	3	94	98
	Fierce MTZ	16 fl oz/a	A	7 EPP				8	89
	Enlist One	32 fl oz/a	A	7 EPP					
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					
	Crop oil concentrate	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
4	Zidua PRO	6 fl oz/a	A	7 EPP		100	0	94	100
	Enlist One	32 fl oz/a	A	7 EPP				0	83
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					
	MSO	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
5	Authority Supreme	8 fl oz/a	A	7 EPP		90	1	94	91
	Enlist One	32 fl oz/a	A	7 EPP				0	82
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP					
	MSO	1 % v/v	A	7 EPP					
	Liquid AMS	3 qt/a	A	7 EPP					
	Liberty Ultra	24 fl oz/a	B	POST					
	Liquid AMS	3 qt/a	B	POST					
LSD P=.05						6.1	4.5	8.3	5.9
Standard Deviation						3.9	2.9	5.4	3.8
CV						5.09	146.13	7.08	4.97
								64.41	7.53

Could not calculate LSD (% mean diff) or mean separation letters for columns 13,17,18 because error variance is 0.
Mean separation letters are 'na' (not applicable) when error variance is 0

Michigan State University

Weed control systems with Rapidicil in no-till soybean

Trial ID: NTS02-25

Protocol ID: NTS02-25 Location: Campus, C-13 Trial Year: 2025

Study Director: Stiles, Sprague Sponsor Contact:

Investigator: Christy Sprague

Rating Date				Jun-30-2025	Jun-30-2025	Oct-1-2025	Oct-1-2025	Oct-1-2025	Oct-2-2025	Oct-2-2025
Rating Type				control	control	control	control	control	moisture	yield
Rating Unit				%	%	%	%	%	%	bu/A
Crop Type, Code									C, GLXMA	C, GLXMA
Pest Code				ERICA	ANGR	TAROF	ERICA	ANGR		
Treatment Appl. Interval				52 DA-A	52 DA-A	93 DA-B	93 DA-B	93 DA-B	94 DA-B	@13% M
Number of Decimals				0	0	0	0	0	1	1
Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing					
1	Untreated					0	0	0	10.4	29.3
2	V-10488	24 fl oz/a	A	7 EPP		83	100	94	10.5	48.3
	Enlist One	32 fl oz/a	A	7 EPP						
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP						
	Crop oil concentrate	1 % v/v	A	7 EPP						
	Liquid AMS	3 qt/a	A	7 EPP						
	Liberty Ultra	24 fl oz/a	B	POST						
	Liquid AMS	3 qt/a	B	POST						
3	Rapidicil	5 fl oz/a	A	7 EPP		91	100	86	10.6	47.8
	Fierce MTZ	16 fl oz/a	A	7 EPP						
	Enlist One	32 fl oz/a	A	7 EPP						
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP						
	Crop oil concentrate	1 % v/v	A	7 EPP						
	Liquid AMS	3 qt/a	A	7 EPP						
	Liberty Ultra	24 fl oz/a	B	POST						
	Liquid AMS	3 qt/a	B	POST						
4	Zidua PRO	6 fl oz/a	A	7 EPP		98	94	89	10.5	52.9
	Enlist One	32 fl oz/a	A	7 EPP						
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP						
	MSO	1 % v/v	A	7 EPP						
	Liquid AMS	3 qt/a	A	7 EPP						
	Liberty Ultra	24 fl oz/a	B	POST						
	Liquid AMS	3 qt/a	B	POST						
5	Authority Supreme	8 fl oz/a	A	7 EPP		78	98	81	10.5	48.7
	Enlist One	32 fl oz/a	A	7 EPP						
	Roundup PowerMax 3	30 fl oz/a	A	7 EPP						
	MSO	1 % v/v	A	7 EPP						
	Liquid AMS	3 qt/a	A	7 EPP						
	Liberty Ultra	24 fl oz/a	B	POST						
	Liquid AMS	3 qt/a	B	POST						
LSD P=.05						9.7	5.0	10.2	8.3	6.88
Standard Deviation						6.3	3.3	6.6	5.4	4.47
CV						9.02	4.16	9.42	7.35	9.84

Could not calculate LSD (% mean diff) or mean separation letters for columns 13,17,18 because error variance is 0.
Mean separation letters are 'na' (not applicable) when error variance is 0