

Weed control with Tendovo in no-till soybean

Trial ID: NTS05-22 Study Dir.: Sprague, Stiles, Powell
 Conducted: Campus, T-18 Investigator:

Planting Date: May-23-2022 **Row Spacing:** 30 IN
Variety: AG24XF1 **No. of Reps:** 4
Population: 150000 seeds/A **% OM:** 2.8
Soil Type: L loam **pH:** 5.7
Plot Size: 10 X 30 FT **Study Design:** Randomized Complete Block (RCB)

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

Fertilizer:

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1	ERICA	horseweed (marestail)	Conyza canadensis
2	TAROF	dandelion	Taraxacum officinale
3	POANN	annual bluegrass	Poa annua
4	STEME	common chickweed	Stellaria media
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

Application Timing: A
 7 EPP
Date Treated: May-17-2022
Time Treated: 11:00 AM
% Cloud Cover: 0
Air Temp., Unit: 57 F
% Relative Humidity: 49
Wind Speed/Unit/Dir: 1.5 MPH N
Soil Temp, Unit: 59 F
Leaf Moist/Dew Presence (Y/N): N
Soil Moist: 5

Crop Stage at Each Application

A
Crop 1 Name: GLXMA
Height:
Stage:

Weed Stage at Each Application

A
Weed 1 Name: ERICA
Height: 1-3 " (2)
Stage: 8 L-16 L (12 L)
Weed 2 Name: TAROF
Height: 4-6 "
Stage: flower
Weed 3 Name: POANN
Height: 2-4 "
Stage: flower
Weed 4 Name: STEME
Height: 2 "
Stage: flower

Weed Density

	1	2	3	4
Date:	May-17-2022	May-17-2022	May-17-2022	May-17-2022
Weed Name:	ERICA	TAROF	POANN	STEME
Density:	5 FT2	2 FT2	3 FT2	4 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	TT1	11003	18.0 "	20 "	100 "	19 GAL/AC	WATER	25 PSI

Comments: The GPS coordinates for this trial were 42°41'17"N; 84°29'27"W. The horseweed population at this location is glyphosate (Group 9) resistant.

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 Project ID: Study Director: Sprague, Stiles, Powell
 Sponsor Contact:

Pest Code	POANN	STEME	ERICA	TAROF	POANN	STEME
Crop Type, Code						
Rating Date	May-24-2022	May-24-2022	May-24-2022	May-24-2022	May-31-2022	May-31-2022
Rating Type	control	control	control	control	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 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 Timing	Code					
1	Untreated					0	0	0	0	0
2	Tendovo	2.1 qt/a	7 EPP	A		100	100	73	90	100
	Gramoxone SL 3.0	2 pt/a	7 EPP	A						
	Surfactant	0.25 % v/v	7 EPP	A						
3	Tendovo	2.1 qt/a	7 EPP	A		10	10	0	17	100
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A						
	AMSOL	2.5 % v/v	7 EPP	A						
4	Tendovo	2.1 qt/a	7 EPP	A		10	10	73	10	100
	XtendiMax	22 fl oz/a	7 EPP	A						
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A						
	Volt-Edge	20 fl oz/a	7 EPP	A						
	Cognitive 1	0.5 % v/v	7 EPP	A						
	Class Act Ridion	1 % v/v	7 EPP	A						
5	Boundary	2 pt/a	7 EPP	A		100	100	71	75	100
	Gramoxone SL 3.0	2 pt/a	7 EPP	A						
	Surfactant	0.25 % v/v	7 EPP	A						
6	Boundary	2 pt/a	7 EPP	A		10	10	0	10	100
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A						
	AMSOL	2.5 % v/v	7 EPP	A						
7	Boundary	2 pt/a	7 EPP	A		10	10	70	13	100
	XtendiMax	22 fl oz/a	7 EPP	A						
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A						
	Volt-Edge	20 fl oz/a	7 EPP	A						
	Cognitive 1	0.5 % v/v	7 EPP	A						
	Class Act Ridion	1 % v/v	7 EPP	A						
8	Zidua PRO	4.5 fl oz/a	7 EPP	A		99	100	100	98	100
	Gramoxone SL 3.0	2 pt/a	7 EPP	A						
	MSO	1 % v/v	7 EPP	A						
	AMSOL	2.5 % v/v	7 EPP	A						
9	Zidua PRO	4.5 fl oz/a	7 EPP	A		31	31	100	48	100
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A						
	MSO	1 % v/v	7 EPP	A						
	AMSOL	2.5 % v/v	7 EPP	A						
10	Zidua PRO	4.5 fl oz/a	7 EPP	A		28	28	93	65	99
	XtendiMax	22 fl oz/a	7 EPP	A						
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A						
	Volt-Edge	20 fl oz/a	7 EPP	A						
	Cognitive 1	0.5 % v/v	7 EPP	A						
	Class Act Ridion	1 % v/v	7 EPP	A						
11	Liberty	32 fl oz/a	7 EPP	A		29	29	55	53	98
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A						
	AMSOL	2.5 % v/v	7 EPP	A						
12	Roundup PowerMax 3	30 fl oz/a	7 EPP	A		10	20	7	20	98
	AMSOL	2.5 % v/v	7 EPP	A						
	LSD P=.05					8.4	10.9	11.6	17.4	3.2
	Standard Deviation					5.8	7.6	6.8	10.3	0.0
	CV					15.95	20.29	12.77	24.62	0.0

Excluded replicate 1 in column 3
 Could not calculate LSD (% mean diff) for columns 6,9,10,13 because error mean square = 0.

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 Project ID: Study Director: Sprague, Stiles, Powell
 Sponsor Contact:

Pest Code				ERICA	TAROF	C, GLXMA	STEME	ERICA	TAROF
Crop Type, Code									
Rating Date				May-31-2022	May-31-2022	Jun-14-2022	Jun-14-2022	Jun-14-2022	Jun-14-2022
Rating Type				control	control	injury	control	control	control
Rating Unit/Min/Max				%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Trt-Eval Interval				14 DA-A	14 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 Timing	Code				
1	Untreated					0	0	0	0
2	Tendovo	2.1 qt/a	7 EPP	A		96	85	0	100
	Gramoxone SL 3.0	2 pt/a	7 EPP	A					99
	Surfactant	0.25 % v/v	7 EPP	A					87
3	Tendovo	2.1 qt/a	7 EPP	A		28	27	0	100
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A					55
	AMSOL	2.5 % v/v	7 EPP	A					73
4	Tendovo	2.1 qt/a	7 EPP	A		84	82	0	100
	XtendiMax	22 fl oz/a	7 EPP	A					94
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A					82
	Volt-Edge	20 fl oz/a	7 EPP	A					
	Cognitive 1	0.5 % v/v	7 EPP	A					
	Class Act Ridion	1 % v/v	7 EPP	A					
5	Boundary	2 pt/a	7 EPP	A		97	74	0	100
	Gramoxone SL 3.0	2 pt/a	7 EPP	A					98
	Surfactant	0.25 % v/v	7 EPP	A					53
6	Boundary	2 pt/a	7 EPP	A		18	58	0	100
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A					0
	AMSOL	2.5 % v/v	7 EPP	A					86
7	Boundary	2 pt/a	7 EPP	A		73	68	0	100
	XtendiMax	22 fl oz/a	7 EPP	A					86
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A					83
	Volt-Edge	20 fl oz/a	7 EPP	A					
	Cognitive 1	0.5 % v/v	7 EPP	A					
	Class Act Ridion	1 % v/v	7 EPP	A					
8	Zidua PRO	4.5 fl oz/a	7 EPP	A		78	80	0	100
	Gramoxone SL 3.0	2 pt/a	7 EPP	A					76
	MSO	1 % v/v	7 EPP	A					62
	AMSOL	2.5 % v/v	7 EPP	A					
9	Zidua PRO	4.5 fl oz/a	7 EPP	A		99	88	0	100
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A					90
	MSO	1 % v/v	7 EPP	A					98
	AMSOL	2.5 % v/v	7 EPP	A					
10	Zidua PRO	4.5 fl oz/a	7 EPP	A		100	83	0	100
	XtendiMax	22 fl oz/a	7 EPP	A					100
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A					88
	Volt-Edge	20 fl oz/a	7 EPP	A					
	Cognitive 1	0.5 % v/v	7 EPP	A					
	Class Act Ridion	1 % v/v	7 EPP	A					
11	Liberty	32 fl oz/a	7 EPP	A		86	100	0	100
	Roundup PowerMax 3	30 fl oz/a	7 EPP	A					73
	AMSOL	2.5 % v/v	7 EPP	A					93
12	Roundup PowerMax 3	30 fl oz/a	7 EPP	A		8	88	0	100
	AMSOL	2.5 % v/v	7 EPP	A					0
	LSD P=.05					9.5	16.2	.	.
	Standard Deviation					6.6	9.6	0.0	0.0
	CV					10.41	13.76	0.0	0.0
									11.06
									9.68

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Location: Campus, T-18

Trial Year: 2022

Protocol ID: NTS05-22

Investigator (Creator): Christy Sprague

Project ID:

Study Director: Sprague, Stiles, Powell

Sponsor Contact:

Pest Code		ERICA	TAROF	ANGR
Crop Type, Code	C, GLXMA			
Rating Date	Jun-28-2022	Jun-28-2022	Jun-28-2022	Jun-28-2022
Rating Type	injury	control	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Appl Unit	Appl Timing	Code				
1	Untreated					0	0	0	0
2	Tendovo	2.1 qt/a	7	EPP	A	0	95	82	100
	Gramoxone SL 3.0	2 pt/a	7	EPP	A				
	Surfactant	0.25 % v/v	7	EPP	A				
3	Tendovo	2.1 qt/a	7	EPP	A	0	56	76	100
	Roundup PowerMax 3	30 fl oz/a	7	EPP	A				
	AMSOL	2.5 % v/v	7	EPP	A				
4	Tendovo	2.1 qt/a	7	EPP	A	0	97	75	100
	XtendiMax	22 fl oz/a	7	EPP	A				
	Roundup PowerMax 3	30 fl oz/a	7	EPP	A				
	Volt-Edge	20 fl oz/a	7	EPP	A				
	Cognitive 1	0.5 % v/v	7	EPP	A				
	Class Act Ridion	1 % v/v	7	EPP	A				
5	Boundary	2 pt/a	7	EPP	A	0	91	53	100
	Gramoxone SL 3.0	2 pt/a	7	EPP	A				
	Surfactant	0.25 % v/v	7	EPP	A				
6	Boundary	2 pt/a	7	EPP	A	0	35	78	100
	Roundup PowerMax 3	30 fl oz/a	7	EPP	A				
	AMSOL	2.5 % v/v	7	EPP	A				
7	Boundary	2 pt/a	7	EPP	A	0	86	74	100
	XtendiMax	22 fl oz/a	7	EPP	A				
	Roundup PowerMax 3	30 fl oz/a	7	EPP	A				
	Volt-Edge	20 fl oz/a	7	EPP	A				
	Cognitive 1	0.5 % v/v	7	EPP	A				
	Class Act Ridion	1 % v/v	7	EPP	A				
8	Zidua PRO	4.5 fl oz/a	7	EPP	A	0	70	59	98
	Gramoxone SL 3.0	2 pt/a	7	EPP	A				
	MSO	1 % v/v	7	EPP	A				
	AMSOL	2.5 % v/v	7	EPP	A				
9	Zidua PRO	4.5 fl oz/a	7	EPP	A	0	84	82	98
	Roundup PowerMax 3	30 fl oz/a	7	EPP	A				
	MSO	1 % v/v	7	EPP	A				
	AMSOL	2.5 % v/v	7	EPP	A				
10	Zidua PRO	4.5 fl oz/a	7	EPP	A	0	97	73	100
	XtendiMax	22 fl oz/a	7	EPP	A				
	Roundup PowerMax 3	30 fl oz/a	7	EPP	A				
	Volt-Edge	20 fl oz/a	7	EPP	A				
	Cognitive 1	0.5 % v/v	7	EPP	A				
	Class Act Ridion	1 % v/v	7	EPP	A				
11	Liberty	32 fl oz/a	7	EPP	A	0	68	72	5
	Roundup PowerMax 3	30 fl oz/a	7	EPP	A				
	AMSOL	2.5 % v/v	7	EPP	A				
12	Roundup PowerMax 3	30 fl oz/a	7	EPP	A	0	0	80	5
	AMSOL	2.5 % v/v	7	EPP	A				
	LSD P=.05						8.3	14.5	6.3
	Standard Deviation					0.0	5.8	8.5	4.4
	CV					0.0	8.91	12.75	5.78

Excluded replicate 1 in column 3

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