

Burndown applications using HAI 882 in no-till soybean

Trial ID: NTS04-24 Study Dir.: Sprague, Stiles
 Conducted: Campus, T-18 Investigator: Christy Sprague

Planting Date: May-14-2024 **Row Spacing:** 30 IN
Variety: AG24XF4 **No. of Reps:** 4
Population: 150000 S/A **% OM:** 2.8
Soil Type: L loam **pH:** 6.3
Plot Size: 10 X 35 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: No-tilled into corn stubble
Fertilizer:

Crop and Weed Description

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

Application Description

Application Timing: A
Date Treated: PRE
Time Treated: May-14-2024
% Cloud Cover: 1:40 PM
Air Temp., Unit: 100
% Relative Humidity: 58 F
Wind Speed/Unit/Dir: 66
Soil Temp, Unit: 8 MPH NE
Leaf Moist/Dew Presence (Y/N): 60 F
Soil Moist: N
 3

Crop Stage at Each Application

Crop 1 Name: A
 GLXMA
Height:
Stage:

Weed Stage at Each Application

Weed 1 Name: A
 POAAN
Height: 4-6 " (5)
Stage: flower
Weed 2 Name: STEME
Height: 5-7 " (6)
Stage: flower
Weed 3 Name: TAROF
Height: 6-12 " (9)
Stage: flower
Weed 4 Name: ERICA
Height: 2-6 " (4)
Stage: 15-20L

Weed Density

Date:	1	2	3	4
	May-14-2024	May-14-2024	May-14-2024	May-14-2024
Weed Name:	POAAN	STEME	TAROF	ERICA
Density:	2 FT2	4 FT2	4 FT2	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	24.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	30 PSI

Comments: Horseweed at this location is Group 2 and 9 resistant.

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Study Director: Sprague, Stiles Sponsor Contact:

Investigator: Christy Sprague

Rating Date	May-21-2024	May-21-2024	May-21-2024	May-21-2024	May-28-2024	May-28-2024
Rating Type	control	control	control	control	injury	control
Rating Unit	%	%	%	%	%	%
Crop Type, Code					C, GLXMA	
Pest Code	POAAN	STEME	TAROF	ERICA		POAAN
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	Unit	Appl Code	Appl Timing	May-21-2024 control %	May-21-2024 control %	May-21-2024 control %	May-21-2024 control %	May-28-2024 injury %	May-28-2024 control %
1	Untreated					0	0	0	0	0	0
2	Roundup PowerMax 3	20 fl oz/a		A	PRE	79	80	40	15	0	100
	AMS	8.5 lb/100 gal	gal	A	PRE						
3	HAI 882	16 fl oz/a		A	PRE	94	95	100	55	0	100
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
4	HAI 882	24 fl oz/a		A	PRE	100	95	96	68	0	100
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
5	HAI 882	32 fl oz/a		A	PRE	100	100	94	76	0	100
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
6	Boundary	32 fl oz/a		A	PRE	100	100	68	93	0	100
	Gramoxone	32 fl oz/a		A	PRE						
	Crop oil concentrate	1 % v/v		A	PRE						
7	Verdict	5 fl oz/a		A	PRE	89	100	90	96	0	100
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
8	Verdict	13 fl oz/a		A	PRE	92	98	91	100	0	100
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
9	HAI 882	16 fl oz/a		A	PRE	100	96	94	64	0	100
	Zone Defense	5 oz/a		A	PRE						
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
10	Sonic	6 oz/a		A	PRE	95	86	79	20	0	100
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
	LSD P=.05					8.3	5.1	11.0	7.4	.	.
	Standard Deviation					5.7	3.5	7.6	5.1	0.0	0.0
	CV					6.75	4.1	10.14	8.68	0.0	0.0

Missing data estimates are included in columns: Average=10,15,18

Could not calculate LSD (% mean diff) or mean separation letters for columns 5,6,7,10,11,12,15,18 because error variance is 0.

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Study Director: Sprague, Stiles Sponsor Contact:

Investigator: Christy Sprague

Rating Date					May-28-2024	May-28-2024	May-28-2024	Jun-4-2024	Jun-4-2024	Jun-4-2024
Rating Type					control	control	control	injury	control	control
Rating Unit					%	%	%	%	%	%
Crop Type, Code								C, GLXMA		
Pest Code					STEME	TAROF	ERICA		POAAN	STEME
Trt-Eval 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	0
2	Roundup PowerMax 3	20 fl oz/a	A	PRE		100	88	10	0	100
	AMS	8.5 lb/100 gal	A	PRE						
3	HAI 882	16 fl oz/a	A	PRE		100	96	43	0	100
	Roundup PowerMax 3	20 fl oz/a	A	PRE						
	MSO	1 % v/v	A	PRE						
	AMS	8.5 lb/100 gal	A	PRE						
4	HAI 882	24 fl oz/a	A	PRE		100	93	53	0	100
	Roundup PowerMax 3	20 fl oz/a	A	PRE						
	MSO	1 % v/v	A	PRE						
	AMS	8.5 lb/100 gal	A	PRE						
5	HAI 882	32 fl oz/a	A	PRE		100	93	72	0	100
	Roundup PowerMax 3	20 fl oz/a	A	PRE						
	MSO	1 % v/v	A	PRE						
	AMS	8.5 lb/100 gal	A	PRE						
6	Boundary	32 fl oz/a	A	PRE		100	63	99	0	100
	Gramoxone	32 fl oz/a	A	PRE						
	Crop oil concentrate	1 % v/v	A	PRE						
7	Verdict	5 fl oz/a	A	PRE		100	95	100	0	100
	Roundup PowerMax 3	20 fl oz/a	A	PRE						
	MSO	1 % v/v	A	PRE						
	AMS	8.5 lb/100 gal	A	PRE						
8	Verdict	13 fl oz/a	A	PRE		100	96	100	0	100
	Roundup PowerMax 3	20 fl oz/a	A	PRE						
	MSO	1 % v/v	A	PRE						
	AMS	8.5 lb/100 gal	A	PRE						
9	HAI 882	16 fl oz/a	A	PRE		100	98	56	0	100
	Zone Defense	5 oz/a	A	PRE						
	Roundup PowerMax 3	20 fl oz/a	A	PRE						
	MSO	1 % v/v	A	PRE						
	AMS	8.5 lb/100 gal	A	PRE						
10	Sonic	6 oz/a	A	PRE		100	95	20	0	100
	Roundup PowerMax 3	20 fl oz/a	A	PRE						
	MSO	1 % v/v	A	PRE						
	AMS	8.5 lb/100 gal	A	PRE						
	LSD P=.05					.	6.4	8.9	.	.
	Standard Deviation					0.0	4.4	6.1	0.0	0.0
	CV					0.0	5.41	11.1	0.0	0.0

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Investigator: Christy Sprague

Rating Date	Jun-4-2024	Jun-4-2024	Jun-11-2024	Jun-11-2024	Jun-11-2024	Jun-18-2024
Rating Type	control	control	injury	control	control	injury
Rating Unit	%	%	%	%	%	%
Crop Type, Code	C, GLXMA			C, GLXMA		
Pest Code	TAROF	ERICA		TAROF	ERICA	
Trt-Eval Interval	21 DA-A	21 DA-A	28 DA-A	28 DA-A	28 DA-A	35 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	Jun-4-2024 control %	Jun-4-2024 control %	Jun-11-2024 injury %	Jun-11-2024 control %	Jun-11-2024 control %	Jun-18-2024 injury %
1	Untreated					0	0	0	0	0	0
2	Roundup PowerMax 3	20 fl oz/a		A	PRE	86	20	0	85	23	0
	AMS	8.5 lb/100 gal	gal	A	PRE						
3	HAI 882	16 fl oz/a		A	PRE	93	45	0	88	41	0
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
4	HAI 882	24 fl oz/a		A	PRE	85	58	0	87	48	0
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
5	HAI 882	32 fl oz/a		A	PRE	86	66	0	86	69	0
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
6	Boundary	32 fl oz/a		A	PRE	61	95	0	53	95	0
	Gramoxone	32 fl oz/a		A	PRE						
	Crop oil concentrate	1 % v/v		A	PRE						
7	Verdict	5 fl oz/a		A	PRE	87	99	0	86	96	0
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
8	Verdict	13 fl oz/a		A	PRE	93	100	0	91	99	0
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
9	HAI 882	16 fl oz/a		A	PRE	93	48	0	86	48	0
	Zone Defense	5 oz/a		A	PRE						
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
10	Sonic	6 oz/a		A	PRE	88	21	0	91	30	0
	Roundup PowerMax 3	20 fl oz/a		A	PRE						
	MSO	1 % v/v		A	PRE						
	AMS	8.5 lb/100 gal	gal	A	PRE						
	LSD P=.05					7.6	16.8	.	8.1	13.8	.
	Standard Deviation					5.3	11.6	0.0	5.6	9.5	0.0
	CV					6.83	21.1	0.0	7.42	17.42	0.0

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Investigator: Christy Sprague

Rating Date	Jun-18-2024	Jun-18-2024
Rating Type	control	control
Rating Unit	%	%
Crop Type, Code		
Pest Code	TAROF	ERICA
Trt-Eval Interval	35 DA-A	35 DA-A
Number of Decimals	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	Jun-18-2024 control %	Jun-18-2024 control %
1	Untreated					0	0
2	Roundup PowerMax 3	20 fl oz/a		A	PRE	90	25
	AMS	8.5 lb/100 gal		A	PRE		
3	HAI 882	16 fl oz/a		A	PRE	79	48
	Roundup PowerMax 3	20 fl oz/a		A	PRE		
	MSO	1 % v/v		A	PRE		
	AMS	8.5 lb/100 gal		A	PRE		
4	HAI 882	24 fl oz/a		A	PRE	71	50
	Roundup PowerMax 3	20 fl oz/a		A	PRE		
	MSO	1 % v/v		A	PRE		
	AMS	8.5 lb/100 gal		A	PRE		
5	HAI 882	32 fl oz/a		A	PRE	74	58
	Roundup PowerMax 3	20 fl oz/a		A	PRE		
	MSO	1 % v/v		A	PRE		
	AMS	8.5 lb/100 gal		A	PRE		
6	Boundary	32 fl oz/a		A	PRE	30	91
	Gramoxone	32 fl oz/a		A	PRE		
	Crop oil concentrate	1 % v/v		A	PRE		
7	Verdict	5 fl oz/a		A	PRE	80	94
	Roundup PowerMax 3	20 fl oz/a		A	PRE		
	MSO	1 % v/v		A	PRE		
	AMS	8.5 lb/100 gal		A	PRE		
8	Verdict	13 fl oz/a		A	PRE	84	100
	Roundup PowerMax 3	20 fl oz/a		A	PRE		
	MSO	1 % v/v		A	PRE		
	AMS	8.5 lb/100 gal		A	PRE		
9	HAI 882	16 fl oz/a		A	PRE	81	48
	Zone Defense	5 oz/a		A	PRE		
	Roundup PowerMax 3	20 fl oz/a		A	PRE		
	MSO	1 % v/v		A	PRE		
	AMS	8.5 lb/100 gal		A	PRE		
10	Sonic	6 oz/a		A	PRE	86	38
	Roundup PowerMax 3	20 fl oz/a		A	PRE		
	MSO	1 % v/v		A	PRE		
	AMS	8.5 lb/100 gal		A	PRE		
	LSD P=.05					10.5	15.3
	Standard Deviation					7.3	10.5
	CV					10.75	19.13

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