

MSU Weed Science Research Program

Glyphosate-resistant horseweed management in no-till soybean

Trial ID: NTS06-11 Study Dir.: Sprague, Powell
Conducted: Tonia Co. Investigator: Christy Sprague

Date Planted: Variety: Population: Soil Type: Plot Size: Row Spacing: No. of Reps: % OM: pH: Design: IN 3 RANDOMIZED COMPLETE BLOCK

Tillage: Treatments were applied to no-till soybean ground. The trial ended up being non-crop.

Crop and Weed Description

Table with 4 columns: Weed, Code, Common Name, Scientific Name. Row 1: ERICA, HORSEWEED, CONYZA CANADENSIS L.

Application Description

A
Application Timing: EPP
Date Treated: 5/12/2011
Time Treated: 5:15 pm
% Cloud Cover: 80
Air Temp., Unit: 88 F
% Relative Humidity: 65
Wind Speed/Unit/Dir: 1 mph S
Soil Temp., Unit: - F
Soil/Leaf Surface M: 3 5
Soil Moist (1=w 5=d): 3

Crop Stage at Each Application

A
Crop Name: GLXMA
Height (In.): -
Stage (L): -

Weed Stage at Each Application

A
Weed 1 Name: ERICA
Height (In.): 3/4-2"
Stage (L): 8-20

Weed Density (plants/sq. ft.)

1
Weed Name: ERICA
Density: 3

Application Equipment

Table with 11 columns: Appl, Sprayer, Speed, Nozzle, Nozzle, Nozzle, Nozzle, Boom, Width, GPA, Carrier, PSI. Row 1: Backpack, 3.8, AirMix, 11003, 20", 20", 100", 19, Water, 28

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Weed Code	ERICA	ERICA	ERICA
Crop Code			
Rating Data Type	control	control	control
Rating Unit	percent	percent	percent
Rating Date	6/1/2011	6/15/2011	7/7/2011
Trt-Eval Interval	20 DA-A	34 DA-A	56 DA-A
# Subsamples, Dec.			

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code			
1	Roundup PowerMax	4.5	SL	44	fl oz/a	EPP	A	47.5	60.0	51.7
1	AMS		WG	17	lb/100 gal	EPP	A			
2	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A	63.3	81.7	85.0
2	2,4-D Ester	3.8	L	1	pt/a	EPP	A			
2	AMS		WG	17	lb/100 gal	EPP	A			
3	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A	97.7	87.3	84.0
3	Sharpen	2.85	L	1	fl oz/a	EPP	A			
3	MSO		L	1	% v/v	EPP	A			
3	AMS		WG	17	lb/100 gal	EPP	A			
4	Ignite	2.34	L	36	fl oz/a	EPP	A	71.7	61.7	55.0
4	AMS		WG	17	lb/100 gal	EPP	A			
5	Ignite	2.34	L	22	fl oz/a	EPP	A	99.0	99.0	99.0
5	Sharpen	2.85	L	1	fl oz/a	EPP	A			
5	MSO		L	1	% v/v	EPP	A			
5	AMS		WG	17	lb/100 gal	EPP	A			
6	Gramoxone Inteon	2	L	3	pt/a	EPP	A	99.0	99.0	99.0
6	Metribuzin	75	WG	8	oz/a	EPP	A			
6	Herbimax (COC)		L	1	% v/v	EPP	A			
7	FirstRate	84	WG	0.6	oz/a	EPP	A	99.0	99.0	99.0
7	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A			
7	Sharpen	2.85	L	1	fl oz/a	EPP	A			
7	MSO		L	1	% v/v	EPP	A			
7	AMS		WG	17	lb/100 gal	EPP	A			
8	Canopy	75	WG	3	oz/a	EPP	A	99.0	99.0	99.0
8	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A			
8	Sharpen	2.85	L	1	fl oz/a	EPP	A			
8	MSO		L	1	% v/v	EPP	A			
8	AMS		WG	17	lb/100 gal	EPP	A			
9	Metribuzin	75	WG	8	oz/a	EPP	A	99.0	99.0	99.0
9	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A			
9	Sharpen	2.85	L	1	fl oz/a	EPP	A			
9	MSO		L	1	% v/v	EPP	A			
9	AMS		WG	17	lb/100 gal	EPP	A			
11	Valor XLT	40.3	WG	3.5	oz/a	EPP	A	99.0	99.0	98.3
11	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A			
11	2,4-D Ester	3.8	L	1	pt/a	EPP	A			
11	AMS		WG	17	lb/100 gal	EPP	A			
12	Gangster 3.6 oz (co-pack)							99.0	99.0	99.0
12	Gangster V (Valor)	51	WG	3	oz/a	EPP	A			
12	Gangster FR (FirstRate)	84	WG	0.6	oz/a	EPP	A			
12	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A			
12	2,4-D Ester	3.8	L	1	pt/a	EPP	A			
12	AMS		WG	17	lb/100 gal	EPP	A			
13	Authority First	70	WG	6.45	oz/a	EPP	A	99.0	99.0	99.0
13	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A			
13	2,4-D Ester	3.8	L	1	pt/a	EPP	A			
13	AMS		WG	17	lb/100 gal	EPP	A			

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# Subsamples, Dec.			

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code			
14	Authority MTZ	45	WG	14	oz/a	EPP	A	97.7	96.0	97.0
14	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A			
14	2,4-D Ester	3.8	L	1	pt/a	EPP	A			
14	AMS		WG	17	lb/100 gal	EPP	A			
15	Authority XL	70	WG	4	oz/a	EPP	A	97.7	99.0	99.0
15	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A			
15	2,4-D Ester	3.8	L	1	pt/a	EPP	A			
15	AMS		WG	17	lb/100 gal	EPP	A			
16	Metribuzin	75	WG	5.33	oz/a	EPP	A	97.0	92.0	97.7
16	Valor	51	WG	2	oz/a	EPP	A			
16	Roundup PowerMax	4.5	SL	22	fl oz/a	EPP	A			
16	2,4-D Ester	3.8	L	1	pt/a	EPP	A			
16	Sharpen	2.85	L	1	fl oz/a	EPP	A			
16	MSO		L	1	% v/v	EPP	A			
16	AMS		WG	17	lb/100 gal	EPP	A			
LSD (P=.05)								15.76	14.85	19.23
Standard Deviation								9.39	8.84	11.50
CV								10.32	9.69	12.68

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Summary includes 15 of 16 treatments.