

MSU Weed Science Research Program

Evaluation of adjuvants to aid in the activity of glyphosate + Sharpen

Trial ID: NTS05-11 Study Dir.: Sprague, Powell
Conducted: C-27N Crops Investigator: Christy Sprague

Date Planted: 5/31/2011 Row Spacing: 7.5 IN
Variety: Asgrow 2330 No. of Reps: 4
Population: 200,000 % OM: 2.5
Soil Type: SILT Loam pH: 6.5
Plot Size: 10 X 40 FT Design: RANDOMIZED COMPLETE BLOCK

Tillage: No-tilled into standing corn stubble.
Fertilizer: None at planting.

Crop and Weed Description

Table with 4 columns: Weed Code, Common Name, Scientific Name, and Crop Code. Lists weeds like SHEPHERDSPURSE, CHICKWEED, HENBIT, HORSEWEED, BLUEGRASS, and SOYBEAN.

Application Description

Application Timing: EPP
Date Treated: 5/11/2011
Time Treated: 7:00 PM
% Cloud Cover: 75
Air Temp., Unit: 75 F
% Relative Humidity: 40
Wind Speed/Unit/Dir: 4 mph SE
Soil Temp., Unit: 65 F
Soil/Leaf Surface M: 5 5
Soil Moist (1=w 5=d): 3

Crop Stage at Each Application

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

Weed Stage at Each Application

Weed 1 Name: CAPBP Height (In.): 18" Stage (L): many
Weed 2 Name: STEME Height (In.): 2-3" Stage (L): many
Weed 3 Name: LAMAM Height (In.): 8-10" Stage (L): many
Weed 4 Name: ERICA Height (In.): 2-3" Stage (L): 12-16
Weed 5 Name: POAAN Height (In.): 2-3" Stage (L): -

Application Equipment

Table with 11 columns: Appl, Sprayer, Speed, Nozzle, Nozzle, Nozzle, Boom, Width, GPA, Carrier, PSI. Row A: Cub, 3.8, AirMix, 11003, 24", 20", 100", 19, Water, 28

MSU Weed Science Research Program

Evaluation of adjuvants to aid in the activity of glyphosate + Sharpen

Trial ID: NTS05-11
Conducted: C-27N CropsStudy Dir.: Sprague, Powell
Investigator: Christy Sprague

Weed Code	STEME	LAMAM	CAPBP	POAAN	STEME	LAMAM
Crop Code						
Rating Data Type	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent
Rating Date	5/18/2011	5/18/2011	5/18/2011	5/18/2011	5/26/2011	5/26/2011
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	15 DA-A	15 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	11	fl oz/a	EPP	A	62.5	23.3	62.5	10.0	67.5	40.0
1	Sharpen	2.85	L	1	fl oz/a	EPP	A						
1	MSO		L	1	% v/v	EPP	A						
1	N Pak Liquid AMS		L	2.5	% v/v	EPP	A						
2	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	63.8	30.0	68.8	10.0	66.3	50.0
2	Sharpen	2.85	L	1	fl oz/a	EPP	A						
2	Destiny HC		L	0.5	% v/v	EPP	A						
2	Class Act NG		L	2.5	% v/v	EPP	A						
3	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	52.5	20.0	70.0	15.0	66.3	60.0
3	Sharpen	2.85	L	1	fl oz/a	EPP	A						
3	Destiny HC		L	1	pt/a	EPP	A						
3	Class Act NG		L	2.5	% v/v	EPP	A						
4	Untreated							0.0	0.0	0.0	0.0	0.0	0.0
5	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	51.3	33.3	58.8	7.5	60.0	58.3
5	Sharpen	2.85	L	1	fl oz/a	EPP	A						
5	AG 2007		L	0.67	pt/a	EPP	A						
5	Destiny HC		L	1	pt/a	EPP	A						
5	Class Act NG		L	2.5	% v/v	EPP	A						
6	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	37.5	36.7	35.0	12.5	61.3	58.3
6	Sharpen	2.85	L	1	fl oz/a	EPP	A						
6	AG 09008		L	1	pt/a	EPP	A						
6	Destiny HC		L	1	pt/a	EPP	A						
6	Class Act NG		L	2.5	% v/v	EPP	A						
7	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	43.8	35.0	32.5	17.5	66.3	87.5
7	Sharpen	2.85	L	1	fl oz/a	EPP	A						
7	Dimetric (metribuzin)	75	WG	5	oz/a	EPP	A						
7	Destiny HC		L	1	pt/a	EPP	A						
7	Class Act NG		L	2.5	% v/v	EPP	A						
7	AG 02013		L	4	fl oz/a	EPP	A						
8	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	20.0	25.0	17.5	7.5	52.5	90.0
8	AG 2007		L	0.67	pt/a	EPP	A						
8	Dimetric (metribuzin)	75	WG	5	oz/a	EPP	A						
8	Class Act NG		L	2.5	% v/v	EPP	A						
LSD (P=.05)								22.19	18.70	14.71	11.68	15.25	21.39
Standard Deviation								15.09	11.18	10.00	7.94	10.37	12.79
CV								36.43	43.99	23.19	79.43	18.85	23.04

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.

MSU Weed Science Research Program

Evaluation of adjuvants to aid in the activity of glyphosate + Sharpen

Trial ID: NTS05-11
Conducted: C-27N Crops

Study Dir.: Sprague, Powell
Investigator: Christy Sprague

Weed Code	CAPBP	POAAN	STEME	LAMAM	CAPBP	POAAN	ERICA
Crop Code							
Rating Data Type	control	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Rating Date	5/26/2011	5/26/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011
Trt-Eval Interval	15 DA-A	15 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 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	11	fl oz/a	EPP	A	70.0	40.0	66.3	30.0	69.8	22.5	77.5
1	Sharpen	2.85	L	1	fl oz/a	EPP	A							
1	MSO		L	1	% v/v	EPP	A							
1	N Pak Liquid AMS		L	2.5	% v/v	EPP	A							
2	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	80.0	42.5	77.3	50.0	83.5	30.0	99.0
2	Sharpen	2.85	L	1	fl oz/a	EPP	A							
2	Destiny HC		L	0.5	% v/v	EPP	A							
2	Class Act NG		L	2.5	% v/v	EPP	A							
3	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	78.8	40.0	71.3	50.0	78.8	42.5	99.0
3	Sharpen	2.85	L	1	fl oz/a	EPP	A							
3	Destiny HC		L	1	pt/a	EPP	A							
3	Class Act NG		L	2.5	% v/v	EPP	A							
4	Untreated							0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	67.5	30.0	94.3	50.0	87.5	15.0	99.0
5	Sharpen	2.85	L	1	fl oz/a	EPP	A							
5	AG 2007		L	0.67	pt/a	EPP	A							
5	Destiny HC		L	1	pt/a	EPP	A							
5	Class Act NG		L	2.5	% v/v	EPP	A							
6	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	56.3	32.5	99.0	50.0	74.3	27.5	99.0
6	Sharpen	2.85	L	1	fl oz/a	EPP	A							
6	AG 09008		L	1	pt/a	EPP	A							
6	Destiny HC		L	1	pt/a	EPP	A							
6	Class Act NG		L	2.5	% v/v	EPP	A							
7	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	63.8	37.5	97.0	99.0	89.8	25.0	98.0
7	Sharpen	2.85	L	1	fl oz/a	EPP	A							
7	Dimetric (metribuzin)	75	WG	5	oz/a	EPP	A							
7	Destiny HC		L	1	pt/a	EPP	A							
7	Class Act NG		L	2.5	% v/v	EPP	A							
7	AG 02013		L	4	fl oz/a	EPP	A							
8	Roundup PowerMax	4.5	SL	11	fl oz/a	EPP	A	37.5	27.5	98.0	99.0	92.3	37.5	99.0
8	AG 2007		L	0.67	pt/a	EPP	A							
8	Dimetric (metribuzin)	75	WG	5	oz/a	EPP	A							
8	Class Act NG		L	2.5	% v/v	EPP	A							
LSD (P=.05)								15.70	17.06	10.03	0.00	16.48	17.51	2.85
Standard Deviation								10.67	11.60	6.82	0.00	11.20	11.90	1.93
CV								18.81	37.12	9.05	0.0	15.57	47.61	2.31

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.