

## Glyphosate Alternatives for Control of Horseweed in Soybean.

Project Code: 06-Fager-S50 Location: Murphysboro, IL  
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Murphysboro IL 62966 USA  
Trial Status: Final Updated: 11-9-06

**Objective:**

Evaluate the efficacy of preplant herbicides for control of horseweed in no-till soybean.

Weed Code	Common Name	Scientific Name
1.	ERICA horseweed	Conyza canadensis (L.) Crong.
2.	ALLVI garlic, wild	Allium vineale L.
3.	VIORA jumpup, johnny	Viola rafinesquii Greene
4.	ALOCA foxtail, Carolina	Alopecurus carolinianus Walt.
5.	STEME chickweed, common	Stellaria media (L.) Vill.

Crop 1:	GLXMA soybean	Variety:	FS4646
Planting Method:	Seeded	Planting Date:	5-18-06
Rate:	75 lb/A	Depth:	1.0 IN
Row Spacing:	7 IN	Seed Bed:	No-Till
		Soil Moisture:	Moist

Plot Width, Unit:	10 FT	Plot Length, Unit:	28 FT	Reps:	3
Tillage Type:	No-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	GLXMA, 2005				

**APPLICATION DESCRIPTION**

	A	B
Application Date:	4-19-06	4-26-06
Time of Day:	18:00	16:30
Application Method:	Spray	Spray
Application Timing:	EPP21	EPP14
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	77 F	68 F
% Relative Humidity:	62	35
Wind Velocity, Unit:	1-2 MPH	5 MPH
Dew Presence (Y/N):	N	N
Soil Temp., Unit:	72 F	69 F
Soil Moisture:	BELNOR	NORMAL
% Cloud Cover:	5	0

**CROP STAGE AT EACH APPLICATION**

	A	B
Crop 1 Code, Stage:	GLXMA NA	GLXMA NA
Height, Unit:	NA NA	NA NA

**WEED STAGE AT EACH APPLICATION**

	A	B
Weed 1 Code:	ERICA	ERICA
Stage (leaves):	8-14	6-26
Height (inches):	1-3	1-7.5
Density:	High	High
Weed 2 Code:	ALLVI	ALLVI
Stage (leaves):	1-3	1-3
Height (inches):	8-13	8-16
Density:	Medium	Medium
Weed 3 Code:	VIORA	VIORA
Stage (leaves):	4-6	6-14
Height (inches):	3-5	3-5
Density:	Medium	Medium
Weed 4 Code:	ALOCA	ALOCA
Stage (leaves):	1-3	1-4
Height (inches):	4-7	4-7
Density:	High	High
Weed 5 Code:	STEME	STEME
Stage (leaves):	8-14	8-20
Height (inches):	1-3	2-5
Density:	Low	Low

**APPLICATION EQUIPMENT**

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	8002	8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

NOTES:

Glyphosate Alternatives for Control of Horseweed in Soybean.

Project Code: 06-Fager-S50 Location: Murphysboro, IL  
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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	GLXMA Yield bu/A 10-21-06	GLXMA Injury Percent 6-1-06 14 DAP	GLXMA Injury Percent 6-14-06 0 DAPO	GLXMA Injury Percent 7-31-06 47 DAPO	ERICA Control Percent 7 DAT	ERICA Control Percent 21 DAT	ERICA Control Percent 6-14-06 0 DAPO	ERICA Control Percent 7-31-06 47 DAPO
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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	GLXMA Yield bu/A	GLXMA Injury Percent	GLXMA Injury Percent	GLXMA Injury Percent	ERICA Control Percent	ERICA Control Percent	ERICA Control Percent	ERICA Control Percent
1	NONTREATED									1	0	0	0	0	0	0	0
2	LANDMASTER BW	2.4	L	1.2	lb ae/a	64	fl oz/a	EPP14	B	8	0	0	0	47	75	73	67
2	AMS	100	DRY	2.5	lb/a	2.5	lb/a	EPP14	B								
3	COSTARR	1.6	L	0.8	lb ae/a	64	fl oz/a	EPP14	B	13	0	0	0	55	80	96	91
3	AMS	100	DRY	2.5	lb/a	2.5	lb/a	EPP14	B								
4	THUNDERMASTER	2.5	L	1.25	lb ai/a	64	fl oz/a	EPP14	B	6	0	0	0	55	86	96	90
4	AMS	100	DRY	2.5	lb/a	2.5	lb/a	EPP14	B								
5	VISION	3.8	L	0.237	lb ae/a	8	fl oz/a	EPP14	B	11	0	0	0	52	77	98	95
5	ACTIVATOR 90	100	LIQ	1.0	pt/a	1	pt/a	EPP14	B								
5	AMS	100	DRY	2.5	lb/a	2.5	lb/a	EPP14	B								
6	CLASSIC	25	WG	0.1025	lb ai/a	6.56	oz/a	EPP21	A	17	0	7	0	67	93	97	99
6	SENCOR	75	WG	0.0615	lb ai/a	1.31	oz/a	EPP21	A								
6	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP21	A								
6	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP21	A								
7	VALOR SX	51	WG	0.056	lb ai/a	1.75	oz/a	EPP21	A	12	0	3	0	33	94	93	88
7	CLASSIC	25	WG	0.0205	lb ai/a	1.31	oz/a	EPP21	A								
7	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	EPP21	A								
7	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	EPP21	A								
8	GANGSTER (MULTI-PACK)							EPP21	A	15	0	0	0	35	91	80	69
8	->GANGSTER V	51	WG	0.048	lb ai/a	1.5	oz/a	EPP21	A								
8	->GANGSTER FR	84	WG	0.0157	lb ai/a	0.3	oz/a	EPP21	A								
8	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	EPP21	A								
8	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	EPP21	A								
9	VALOR SX	51	WG	0.056	lb ai/a	1.75	oz/a	EPP21	A	15	0	0	0	68	94	97	94
9	CANOPY EX	29.5	WG			1	oz/a	EPP21	A								
9	->CLASSIC	25	WG	0.0142	lb ai/a			EPP21	A								
9	->EXPRESS	75	WG	0.0042	lb ai/a			EPP21	A								
9	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP21	A								
9	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP21	A								
10	VALOR SX	51	WG	0.048	lb ai/a	1.5	oz/a	EPP21	A	10	0	0	0	70	78	52	43
10	SCEPTER	70	WG	0.0656	lb ai/a	1.5	oz/a	EPP21	A								
10	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP21	A								
10	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP21	A								
11	VALOR SX	51	WG	0.048	lb ai/a	1.5	oz/a	EPP21	A	12	0	0	0	77	96	98	96
11	CLASSIC	25	WG	0.0588	lb ai/a	3.76	oz/a	EPP21	A								
11	SENCOR	75	WG	0.0352	lb ai/a	0.75	oz/a	EPP21	A								
11	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP21	A								
11	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP21	A								
12	VALOR SX	51	WG	0.048	lb ai/a	1.5	oz/a	EPP21	A	14	0	0	0	80	98	97	97
12	CLASSIC	25	WG	0.0438	lb ai/a	2.8	oz/a	EPP21	A								
12	SENCOR	75	WG	0.0262	lb ai/a	0.56	oz/a	EPP21	A								
12	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP21	A								
12	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP21	A								
13	SPARTAN	4	L	0.167	lb ai/a	5.33	fl oz/a	EPP21	A	18	0	0	0	72	91	99	97
13	FIRSTRATE	84	WG	0.021	lb ai/a	0.4	oz/a	EPP21	A								
13	2,4-D LV4	3.8	EC	0.475	lb ae/a	16	fl oz/a	EPP21	A								
13	CORNERSTONE	3	SL	0.375	lb ae/a	16	fl oz/a	EPP21	A								
13	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	EPP21	A								
14	SPARTAN	4	L	0.167	lb ai/a	5.33	fl oz/a	EPP21	A	3	0	0	0	77	90	63	53
14	SENCOR	75	WG	0.098	lb ai/a	2.1	oz/a	EPP21	A								
14	2,4-D LV4	3.8	EC	0.475	lb ae/a	16	fl oz/a	EPP21	A								
14	CORNERSTONE	3	SL	0.375	lb ae/a	16	fl oz/a	EPP21	A								
14	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	EPP21	A								
15	AIM	2	EW	0.0117	lb ai/a	0.75	fl oz/a	EPP21	A	3	0	0	0	67	78	53	45
15	2,4-D LV4	3.8	EC	0.356	lb ae/a	12	fl oz/a	EPP21	A								
15	CORNERSTONE	3	SL	0.375	lb ae/a	16	fl oz/a	EPP21	A								
15	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	EPP21	A								

LSD (P=.05)				9.4	0.0	5.4	0.0	7.8	7.5	12.4	11.4
Replicate F				6.950	0.000	1.909	0.000	4.495	8.153	2.413	1.000
Replicate Prob(F)				0.0035	1.0000	0.1670	1.0000	0.0203	0.0016	0.1080	0.3806
Treatment F				2.675	0.000	1.000	0.000	63.791	85.434	41.932	53.574
Treatment Prob(F)				0.0130	1.0000	0.4793	1.0000	0.0001	0.0001	0.0001	0.0001

Glyphosate Alternatives for Control of Horseweed in Soybean.

Project Code: 06-Fager-S50 Location: Murphysboro, IL  
 Investigator: Bryan Young

Weed Code	ERICA	ALLVI	ALLVI	VIORA	VIORA	ALOCA	ALOCA	STEME
Crop Code								
Rating Data Type	Plants	Control	Control	Control	Control	Control	Control	Control
Rating Unit	1.0 m2	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Date	10-26-06							
Trt-Eval Interval	EOS	7 DAT	21 DAT	7 DAT	21 DAT	7 DAT	21 DAT	7 DAT

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	ERICA	ALLVI	ALLVI	VIORA	VIORA	ALOCA	ALOCA	STEME
1	NONTREATED									69.3	0	0	0	0	0	0	0
2	LANDMASTER BW	2.4 L		1.2 lb ae/a	64 fl oz/a			EPP14 B		22.7	25	43	43	99	73	99	99
2	AMS	100 DRY		2.5 lb/a	2.5 lb/a			EPP14 B									
3	COSTARR	1.6 L		0.8 lb ae/a	64 fl oz/a			EPP14 B		2.7	22	57	40	99	80	99	99
3	AMS	100 DRY		2.5 lb/a	2.5 lb/a			EPP14 B									
4	THUNDERMASTER	2.5 L		1.25 lb ai/a	64 fl oz/a			EPP14 B		2.0	38	88	48	99	87	99	99
4	AMS	100 DRY		2.5 lb/a	2.5 lb/a			EPP14 B									
5	VISION	3.8 L		0.237 lb ae/a	8 fl oz/a			EPP14 B		0.0	30	72	30	99	28	99	99
5	ACTIVATOR 90	100 LIQ		1.0 pt/a	1 pt/a			EPP14 B									
5	AMS	100 DRY		2.5 lb/a	2.5 lb/a			EPP14 B									
6	CLASSIC	25 WG		0.1025 lb ai/a	6.56 oz/a			EPP21 A		0.0	35	91	57	99	57	99	99
6	SENCOR	75 WG		0.0615 lb ai/a	1.31 oz/a			EPP21 A									
6	2,4-D LV4	3.8 EC		0.95 lb ae/a	1 qt/a			EPP21 A									
6	PRIME OIL COC	100 LIQ		1.0 pt/a	1 pt/a			EPP21 A									
7	VALOR SX	51 WG		0.056 lb ai/a	1.75 oz/a			EPP21 A		5.3	17	92	30	99	70	99	99
7	CLASSIC	25 WG		0.0205 lb ai/a	1.31 oz/a			EPP21 A									
7	ROUNDUP ORIG MAX	4.5 SL		0.77 lb ae/a	22 fl oz/a			EPP21 A									
7	AMS	100 DRY		2.0 % w/w	17 lb/100 gal			EPP21 A									
8	GANGSTER (MULTI-PACK)							EPP21 A		22.7	10	93	33	99	60	99	99
8	->GANGSTER V	51 WG		0.048 lb ai/a	1.5 oz/a			EPP21 A									
8	->GANGSTER FR	84 WG		0.0157 lb ai/a	0.3 oz/a			EPP21 A									
8	ROUNDUP ORIG MAX	4.5 SL		0.77 lb ae/a	22 fl oz/a			EPP21 A									
8	AMS	100 DRY		2.0 % w/w	17 lb/100 gal			EPP21 A									
9	VALOR SX	51 WG		0.056 lb ai/a	1.75 oz/a			EPP21 A		1.3	48	92	55	99	87	96	99
9	CANOPY EX	29.5 WG			1 oz/a			EPP21 A									
9	->CLASSIC	25 WG		0.0142 lb ai/a				EPP21 A									
9	->EXPRESS	75 WG		0.0042 lb ai/a				EPP21 A									
9	2,4-D LV4	3.8 EC		0.95 lb ae/a	1 qt/a			EPP21 A									
9	PRIME OIL COC	100 LIQ		1.0 pt/a	1 pt/a			EPP21 A									
10	VALOR SX	51 WG		0.048 lb ai/a	1.5 oz/a			EPP21 A		32.0	48	87	58	99	83	96	99
10	SCEPTER	70 WG		0.0656 lb ai/a	1.5 oz/a			EPP21 A									
10	2,4-D LV4	3.8 EC		0.95 lb ae/a	1 qt/a			EPP21 A									
10	PRIME OIL COC	100 LIQ		1.0 pt/a	1 pt/a			EPP21 A									
11	VALOR SX	51 WG		0.048 lb ai/a	1.5 oz/a			EPP21 A		0.0	43	95	68	99	87	98	99
11	CLASSIC	25 WG		0.0588 lb ai/a	3.76 oz/a			EPP21 A									
11	SENCOR	75 WG		0.0352 lb ai/a	0.75 oz/a			EPP21 A									
11	2,4-D LV4	3.8 EC		0.95 lb ae/a	1 qt/a			EPP21 A									
11	PRIME OIL COC	100 LIQ		1.0 pt/a	1 pt/a			EPP21 A									
12	VALOR SX	51 WG		0.048 lb ai/a	1.5 oz/a			EPP21 A		1.3	30	95	63	99	85	97	99
12	CLASSIC	25 WG		0.0438 lb ai/a	2.8 oz/a			EPP21 A									
12	SENCOR	75 WG		0.0262 lb ai/a	0.56 oz/a			EPP21 A									
12	2,4-D LV4	3.8 EC		0.95 lb ae/a	1 qt/a			EPP21 A									
12	PRIME OIL COC	100 LIQ		1.0 pt/a	1 pt/a			EPP21 A									
13	SPARTAN	4 L		0.167 lb ai/a	5.33 fl oz/a			EPP21 A		1.3	28	89	38	99	70	99	99
13	FIRSTRATE	84 WG		0.021 lb ai/a	0.4 oz/a			EPP21 A									
13	2,4-D LV4	3.8 EC		0.475 lb ae/a	16 fl oz/a			EPP21 A									
13	CORNERSTONE	3 SL		0.375 lb ae/a	16 fl oz/a			EPP21 A									
13	PRIME OIL COC	100 LIQ		1.0 % v/v	1 % v/v			EPP21 A									
14	SPARTAN	4 L		0.167 lb ai/a	5.33 fl oz/a			EPP21 A		31.3	10	87	65	99	77	99	99
14	SENCOR	75 WG		0.098 lb ai/a	2.1 oz/a			EPP21 A									
14	2,4-D LV4	3.8 EC		0.475 lb ae/a	16 fl oz/a			EPP21 A									
14	CORNERSTONE	3 SL		0.375 lb ae/a	16 fl oz/a			EPP21 A									
14	PRIME OIL COC	100 LIQ		1.0 % v/v	1 % v/v			EPP21 A									
15	AIM	2 EW		0.0117 lb ai/a	0.75 fl oz/a			EPP21 A		44.7	18	87	52	99	72	96	99
15	2,4-D LV4	3.8 EC		0.356 lb ae/a	12 fl oz/a			EPP21 A									
15	CORNERSTONE	3 SL		0.375 lb ae/a	16 fl oz/a			EPP21 A									
15	PRIME OIL COC	100 LIQ		1.0 % v/v	1 % v/v			EPP21 A									

LSD (P=.05)	16.33	15.6	14.0	19.9	0.0	20.7	3.6	0.0
Replicate F	2.253	2.551	1.454	6.073	0.000	0.303	5.772	0.000
Replicate Prob(F)	0.1238	0.0960	0.2508	0.0064	1.0000	0.7407	0.0080	1.0000
Treatment F	13.816	7.160	29.395	6.686	0.000	11.461	421.082	0.000
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	1.0000

Glyphosate Alternatives for Control of Horseweed in Soybean.

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 Investigator: Bryan Young

								STEME	PANDI
								Control	Control
								Percent	Percent
								6-14-06	
								21 DAT	0 DAPO
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code
1	NONTREATED								0 0
2	LANDMASTER BW	2.4 L		1.2 lb ae/a	64 fl oz/a			EPP14 B	99 0
2	AMS	100 DRY		2.5 lb/a	2.5 lb/a			EPP14 B	
3	COSTARR	1.6 L		0.8 lb ae/a	64 fl oz/a			EPP14 B	99 0
3	AMS	100 DRY		2.5 lb/a	2.5 lb/a			EPP14 B	
4	THUNDERMASTER	2.5 L		1.25 lb ai/a	64 fl oz/a			EPP14 B	99 0
4	AMS	100 DRY		2.5 lb/a	2.5 lb/a			EPP14 B	
5	VISION	3.8 L		0.237 lb ae/a	8 fl oz/a			EPP14 B	99 0
5	ACTIVATOR 90	100 LIQ		1.0 pt/a	1 pt/a			EPP14 B	
5	AMS	100 DRY		2.5 lb/a	2.5 lb/a			EPP14 B	
6	CLASSIC	25 WG		0.1025 lb ai/a	6.56 oz/a			EPP21 A	99 73
6	SENCOR	75 WG		0.0615 lb ai/a	1.31 oz/a			EPP21 A	
6	2,4-D LV4	3.8 EC		0.95 lb ae/a	1 qt/a			EPP21 A	
6	PRIME OIL COC	100 LIQ		1.0 pt/a	1 pt/a			EPP21 A	
7	VALOR SX	51 WG		0.056 lb ai/a	1.75 oz/a			EPP21 A	99 98
7	CLASSIC	25 WG		0.0205 lb ai/a	1.31 oz/a			EPP21 A	
7	ROUNDUP ORIG MAX	4.5 SL		0.77 lb ae/a	22 fl oz/a			EPP21 A	
7	AMS	100 DRY		2.0 % w/w	17 lb/100 gal			EPP21 A	
8	GANGSTER (MULTI-PACK)							EPP21 A	99 87
8	->GANGSTER V	51 WG		0.048 lb ai/a	1.5 oz/a			EPP21 A	
8	->GANGSTER FR	84 WG		0.0157 lb ai/a	0.3 oz/a			EPP21 A	
8	ROUNDUP ORIG MAX	4.5 SL		0.77 lb ae/a	22 fl oz/a			EPP21 A	
8	AMS	100 DRY		2.0 % w/w	17 lb/100 gal			EPP21 A	
9	VALOR SX	51 WG		0.056 lb ai/a	1.75 oz/a			EPP21 A	99 86
9	CANOPY EX	29.5 WG			1 oz/a			EPP21 A	
9	->CLASSIC	25 WG		0.0142 lb ai/a				EPP21 A	
9	->EXPRESS	75 WG		0.0042 lb ai/a				EPP21 A	
9	2,4-D LV4	3.8 EC		0.95 lb ae/a	1 qt/a			EPP21 A	
9	PRIME OIL COC	100 LIQ		1.0 pt/a	1 pt/a			EPP21 A	
10	VALOR SX	51 WG		0.048 lb ai/a	1.5 oz/a			EPP21 A	99 90
10	SCEPTER	70 WG		0.0656 lb ai/a	1.5 oz/a			EPP21 A	
10	2,4-D LV4	3.8 EC		0.95 lb ae/a	1 qt/a			EPP21 A	
10	PRIME OIL COC	100 LIQ		1.0 pt/a	1 pt/a			EPP21 A	
11	VALOR SX	51 WG		0.048 lb ai/a	1.5 oz/a			EPP21 A	99 99
11	CLASSIC	25 WG		0.0588 lb ai/a	3.76 oz/a			EPP21 A	
11	SENCOR	75 WG		0.0352 lb ai/a	0.75 oz/a			EPP21 A	
11	2,4-D LV4	3.8 EC		0.95 lb ae/a	1 qt/a			EPP21 A	
11	PRIME OIL COC	100 LIQ		1.0 pt/a	1 pt/a			EPP21 A	
12	VALOR SX	51 WG		0.048 lb ai/a	1.5 oz/a			EPP21 A	99 99
12	CLASSIC	25 WG		0.0438 lb ai/a	2.8 oz/a			EPP21 A	
12	SENCOR	75 WG		0.0262 lb ai/a	0.56 oz/a			EPP21 A	
12	2,4-D LV4	3.8 EC		0.95 lb ae/a	1 qt/a			EPP21 A	
12	PRIME OIL COC	100 LIQ		1.0 pt/a	1 pt/a			EPP21 A	
13	SPARTAN	4 L		0.167 lb ai/a	5.33 fl oz/a			EPP21 A	99 80
13	FIRSTRATE	84 WG		0.021 lb ai/a	0.4 oz/a			EPP21 A	
13	2,4-D LV4	3.8 EC		0.475 lb ae/a	16 fl oz/a			EPP21 A	
13	CORNERSTONE	3 SL		0.375 lb ae/a	16 fl oz/a			EPP21 A	
13	PRIME OIL COC	100 LIQ		1.0 % v/v	1 % v/v			EPP21 A	
14	SPARTAN	4 L		0.167 lb ai/a	5.33 fl oz/a			EPP21 A	99 17
14	SENCOR	75 WG		0.098 lb ai/a	2.1 oz/a			EPP21 A	
14	2,4-D LV4	3.8 EC		0.475 lb ae/a	16 fl oz/a			EPP21 A	
14	CORNERSTONE	3 SL		0.375 lb ae/a	16 fl oz/a			EPP21 A	
14	PRIME OIL COC	100 LIQ		1.0 % v/v	1 % v/v			EPP21 A	
15	AIM	2 EW		0.0117 lb ai/a	0.75 fl oz/a			EPP21 A	99 13
15	2,4-D LV4	3.8 EC		0.356 lb ae/a	12 fl oz/a			EPP21 A	
15	CORNERSTONE	3 SL		0.375 lb ae/a	16 fl oz/a			EPP21 A	
15	PRIME OIL COC	100 LIQ		1.0 % v/v	1 % v/v			EPP21 A	
LSD (P=.05)								0.0	22.5
Replicate F								0.000	0.662
Replicate Prob(F)								1.0000	0.5236
Treatment F								0.000	32.983
Treatment Prob(F)								1.0000	0.0001

Glyphosate Alternatives for Control of Horseweed in Soybean.

Project Code: 06-Fager-S50      Location: Murphysboro, IL  
Investigator: Bryan Young

Trial Comments

1. Protocol: Albaugh Chemical (Biological Research Service), Valent, FMC.
2. Ratings: CI 14+28 DAP; WC 7, 21+56 DAT.
3. Blanket application of Roundup Original Max (22 floz/A) plus AMS (17 lb/100 gal) was applied 7.5 ft wide to all plots except the nontreated on 6-14-06.
4. DAT = Days after burndown application. DAP = Days after planting.  
DAPO = Days after postemergence application. 0 DAPO = At the postemergence application.  
Ratings at 7 DAT were on 4-26-06 and 5-3-06 for the EPP21 and EPP14 applications, respectively.  
Ratings at 21 DAT were on 5-10-06 and 5-17-06 for the EPP21 and EPP14 applications, respectively.  
Ratings at 0 DAPO were also 56 and 49 days after the EPP21 and EPP14 applications, respectively.  
1.0 m<sup>2</sup> = One square meter. EOS = End of season.
5. Harvested 10-21-06, (2) 30 inch rows by 24 ft.
6. Soybean yield was reduced by season-long deer feeding, thus yield differences are not representative of herbicide performance.