

Postemergence Tank-Mixtures of Cadet and Glyphosate in Soybean.

Trial ID: 10-8A-N68

Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: Belleville IL 62221 USA
 Trial Status: FINAL Initiation Date: 05-25-10

Objectives: Evaluate Cadet applied in combination with glyphosate for postemergence applications in soybean.

Crop 1: GLXMA Soybean Variety: AG 4404 Description: RR/STS
 Planting Method: SEEDED Planting Date: 05-25-10
 Rate, Unit: 75 LB/A Depth, Unit: 1.0 IN
 Row Spacing, Unit: 30 IN Seed Bed: mudded

Pest 1 Type: W Code: AMBTR Ambrosia trifida L. ragweed, giant
 Pest 2 Type: W Code: SETFA Setaria faberi Herrm. foxtail, giant

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 27 FT Tillage Type: NO-TILL
 Replications: 4 Study Design: Randomized Complete Block

Prior Crops, Year
 1. GLXMA 2009

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.8 Texture: SILT LOAM
 pH: 6.8 Soil Name: PIERRON
 CEC: 10 Fert. Level: P1: 74 LB/A, K: 343 LB/A

Application Description

	A	B
Application Date:	05-26-10	06-16-10
Time of Day:	11:00	12:30
Application Method:	Spray	Spray
Application Timing:	PRE	V2-V3
Application Placement:	BROFOL	BROFOL
Applied By:	JW	JR
Air Temperature, Unit:	86 F	85 F
% Relative Humidity:	92	58
Wind Velocity, Unit:	0 MPH	0 MPH
Soil Moisture:	ABONOR	ABONOR

	05-26-10	06-16-10
Crop stage at application:	NA	V2
Height Min, Max (inch):	6	7

Pest Stage At Each Application

	05-26-10	06-16-10
Application Date:	05-26-10	06-16-10
Weed Code:	AMBTR	AMBTR
Stage Majority (leaves):	10+	10+
Stage Min, Max:	4 10+	10+ 10+
Height Majority:	10 IN	24 IN
Height Min, Max:	3 20	10 30
Density, Unit:	1 FT2	1.0 FT2
Weed Code:	SETFA	SETFA
Stage Majority (leaves):	2	10+
Stage Min, Max:	2 3	10+ 10+
Height Majority:	2 IN	18 IN
Height Min, Max:	2 4	10 24
Density, Unit:	.001 FT2	0.1 FT2

Application Equipment

	CO2 sprayer	CO2 sprayer
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

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Pest Code
Crop Code
Rating Date
Rating Data Type
Rating Unit
Rating Timing
Trt-Eval Interval

GLXMA GLXMA
10-06-10 10-06-10
Moisture Yield
Percent bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	12.8 a	39 a
1	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A		
1	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A		
1	CADET	0.91	EC	0.00356	lb ai/a	0.5	fl oz/a	V2-V3	B		
1	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B		
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-V3	B		
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B		
2	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	13.2 a	36 a
2	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A		
2	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A		
2	CADET	0.91	EC	0.005	lb ai/a	0.7	fl oz/a	V2-V3	B		
2	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B		
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-V3	B		
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B		
3	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	13.0 a	37 a
3	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A		
3	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A		
3	CADET	0.91	EC	0.0064	lb ai/a	0.9	fl oz/a	V2-V3	B		
3	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B		
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-V3	B		
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B		
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	12.9 a	41 a
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A		
4	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A		
4	RESOURCE	0.86	EC	0.0403	lb ai/a	6	fl oz/a	V2-V3	B		
4	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B		
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B		
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	12.5 a	39 a
5	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A		
5	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B		
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B		
LSD (P=.05)										0.75	8.7
Replicate F										4.087	0.400
Replicate Prob(F)										0.0326	0.7553
Treatment F										1.240	0.394
Treatment Prob(F)										0.3457	0.8094

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

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Pest Code
Crop Code
Rating Date
Rating Data Type
Rating Unit
Rating Timing
Trt-Eval Interval

GLXMA 06-02-10 Injury Percent	GLXMA 06-09-10 Injury Percent	GLXMA 06-16-10 Injury Percent 21 DA-A	GLXMA 06-23-10 Injury Percent	GLXMA 06-30-10 Injury Percent	GLXMA 07-16-10 Injury Percent
7 DA-A	14 DA-A	0 DA-B	7 DA-B	14 DA-B	30 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	9 a	8 a	1 a
1	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A						
1	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A						
1	CADET	0.91	EC	0.00356	lb ai/a	0.5	fl oz/a	V2-V3	B						
1	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B						
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-V3	B						
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B						
2	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	8 a	8 a	0 a
2	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A						
2	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A						
2	CADET	0.91	EC	0.005	lb ai/a	0.7	fl oz/a	V2-V3	B						
2	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B						
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-V3	B						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B						
3	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	9 a	8 a	0 a
3	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A						
3	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A						
3	CADET	0.91	EC	0.0064	lb ai/a	0.9	fl oz/a	V2-V3	B						
3	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B						
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-V3	B						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B						
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	8 a	6 b	0 a
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A						
4	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A						
4	RESOURCE	0.86	EC	0.0403	lb ai/a	6	fl oz/a	V2-V3	B						
4	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B						
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	0 b	0 c	0 a
5	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A						
5	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B						
LSD (P=.05)										0.0	0.0	0.0	1.4	2.1	1.4
Replicate F										0.000	0.000	0.000	4.105	2.432	1.000
Replicate Prob(F)										1.0000	1.0000	1.0000	0.0321	0.1156	0.4262
Treatment F										0.000	0.000	0.000	71.147	28.268	1.000
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	0.0001	0.4449

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

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Pest Code									AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Crop Code														
Rating Date									06-02-10	06-09-10	06-16-10	06-23-10	06-30-10	07-16-10
Rating Data Type									Control	Control	Control	Control	Control	Control
Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing											21 DA-A			
Trt-Eval Interval									7 DA-A	14 DA-A	0 DA-B	7 DA-B	14 DA-B	30 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	SHARPEN	2.85	SC	0.0223	lb ai/a	1 fl oz/a		PRE	A	50 a	0 a	0 a	49 ab	92 a
1	SPARTAN 4F	4	SC	0.125	lb ai/a	4 fl oz/a		PRE	A					91 a
1	CLASSIC	25	WG	0.0156	lb ai/a	1 oz/a		PRE	A					
1	CADET	0.91	EC	0.00356	lb ai/a	0.5 fl oz/a		V2-V3	B					
1	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32 fl oz/a		V2-V3	B					
1	COC (PRIME OIL)	100	SL	1	% v/v	1 % v/v		V2-V3	B					
1	N-PAK AMS	100	SL	5	% v/v	5 % v/v		V2-V3	B					
2	SHARPEN	2.85	SC	0.0223	lb ai/a	1 fl oz/a		PRE	A	50 a	0 a	0 a	46 ab	90 a
2	SPARTAN 4F	4	SC	0.125	lb ai/a	4 fl oz/a		PRE	A					82 b
2	CLASSIC	25	WG	0.0156	lb ai/a	1 oz/a		PRE	A					
2	CADET	0.91	EC	0.005	lb ai/a	0.7 fl oz/a		V2-V3	B					
2	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32 fl oz/a		V2-V3	B					
2	COC (PRIME OIL)	100	SL	1	% v/v	1 % v/v		V2-V3	B					
2	N-PAK AMS	100	SL	5	% v/v	5 % v/v		V2-V3	B					
3	SHARPEN	2.85	SC	0.0223	lb ai/a	1 fl oz/a		PRE	A	50 a	0 a	0 a	55 a	93 a
3	SPARTAN 4F	4	SC	0.125	lb ai/a	4 fl oz/a		PRE	A					84 ab
3	CLASSIC	25	WG	0.0156	lb ai/a	1 oz/a		PRE	A					
3	CADET	0.91	EC	0.0064	lb ai/a	0.9 fl oz/a		V2-V3	B					
3	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32 fl oz/a		V2-V3	B					
3	COC (PRIME OIL)	100	SL	1	% v/v	1 % v/v		V2-V3	B					
3	N-PAK AMS	100	SL	5	% v/v	5 % v/v		V2-V3	B					
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1 fl oz/a		PRE	A	50 a	0 a	0 a	53 ab	96 a
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4 fl oz/a		PRE	A					87 ab
4	CLASSIC	25	WG	0.0156	lb ai/a	1 oz/a		PRE	A					
4	RESOURCE	0.86	EC	0.0403	lb ai/a	6 fl oz/a		V2-V3	B					
4	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32 fl oz/a		V2-V3	B					
4	N-PAK AMS	100	SL	5	% v/v	5 % v/v		V2-V3	B					
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1 fl oz/a		PRE	A	50 a	0 a	0 a	43 b	93 a
5	SPARTAN 4F	4	SC	0.125	lb ai/a	4 fl oz/a		PRE	A					91 a
5	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32 fl oz/a		V2-V3	B					
5	N-PAK AMS	100	SL	5	% v/v	5 % v/v		V2-V3	B					
LSD (P=.05)									0.0	0.0	0.0	10.5	6.1	9.0
Replicate F									0.000	0.000	0.000	1.650	2.357	0.771
Replicate Prob(F)									1.0000	1.0000	1.0000	0.2302	0.1231	0.5323
Treatment F									0.000	0.000	0.000	2.112	1.220	2.086
Treatment Prob(F)									1.0000	1.0000	1.0000	0.1421	0.3531	0.1458

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

Postemergence Tank-Mixtures of Cadet and Glyphosate in Soybean.

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Location: Belleville Res. Center

								SETFA	SETFA	SETFA	SETFA	SETFA	SETFA
Pest Code								06-02-10	06-09-10	06-16-10	06-23-10	06-30-10	07-16-10
Crop Code								Control	Control	Control	Control	Control	Control
Rating Date								Percent	Percent	Percent	Percent	Percent	Percent
Rating Data Type										21 DA-A			
Rating Unit													
Rating Timing													
Trt-Eval Interval								7 DA-A	14 DA-A	0 DA-B	7 DA-B	14 DA-B	30 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	60 b
1	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A				98 b
1	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A				98 ab
1	CADET	0.91	EC	0.00356	lb ai/a	0.5	fl oz/a	V2-V3	B				
1	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B				
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-V3	B				
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B				
2	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	63 ab
2	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A				99 ab
2	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A				98 a
2	CADET	0.91	EC	0.005	lb ai/a	0.7	fl oz/a	V2-V3	B				
2	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B				
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-V3	B				
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B				
3	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	59 b
3	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A				98 ab
3	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A				98 a
3	CADET	0.91	EC	0.0064	lb ai/a	0.9	fl oz/a	V2-V3	B				
3	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B				
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-V3	B				
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B				
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	63 ab
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A				99 a
4	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A				98 ab
4	RESOURCE	0.86	EC	0.0403	lb ai/a	6	fl oz/a	V2-V3	B				
4	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B				
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	65 a
5	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A				98 ab
5	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	V2-V3	B				96 b
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-V3	B				
LSD (P=.05)								0.0	0.0	0.0	4.8	0.9	2.1
Replicate F								0.000	0.000	0.000	3.609	0.884	0.475
Replicate Prob(F)								1.0000	1.0000	1.0000	0.0458	0.4771	0.7055
Treatment F								0.000	0.000	0.000	2.478	2.302	2.425
Treatment Prob(F)								1.0000	1.0000	1.0000	0.1002	0.1183	0.1053

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

Trial Comments

1. Protocol: FMC (Flut.soy.10.JPR01).
2. Ratings: CI/WC at 7 and 14 DA-A and at 0, 7, 14, and 30 DA-B.
3. Yield.
4. Harvested 10-6-10, (2) 30 inch rows by 24 ft.