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Kixor as a burndown in no-till soybeans

Trial ID: 09S-SEP-NTS-51 Protocol ID: 09S-SEP-NTS-51
Location: SEPAC Study Director: Melissa Kruger/Paul Marquardt
Project ID: Investigator: Dr. Bill Johnson
Sponsor Contact: Troy Klingaman

General Trial Information

Study Director: Melissa Kruger/Paul Marquardt **Title:** Lab Tech VIII/Research Assoc.
Investigator: Dr. William G. Johnson **Title:** Associate Professor

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5/26/09 **Planned Completion Date:** 8/12/09

Trial Location

City: Butlerville
State/Prov.: IN
Postal Code: 47223-0216
Country: USA

Objectives:

The objective of the trial is to evaluate Kixor as a burndown in no-till soybeans.

Personnel

Study Director: Melissa Kruger/Paul Marquardt **Title:** Lab Tech VIII/Research Assoc.
Affiliation: Purdue University
Address: 915 W. State St.
Location: West Lafayette, IN USA
Postal Code: 47907 **E-mail:** mmkruger@purdue.edu/pmarquar@purdue.edu
Phone No.: 765-494-4621
Investigator: Dr. William G. Johnson **Title:** Associate Professor
Affiliation: Purdue University
Address: 915 W. State St.
Location: West Lafayette, IN USA
Postal Code: 47907 **E-mail:** wgj@purdue.edu
Phone No.: 765-494-4656

Cooperator/Landowner

Cooperator: Southeastern-Purdue Ag Center **Role:** Cooperator
Organization: Purdue University
Address 1: 4425 E Co. Rd. 350 N
Phone No.: 1-812-458-6977
City: Butlerville **Fax No.:** 1-812-458-6979
State/Prov: IN
Postal Code: 477223-021 **E-mail:** biehled@purdue.edu
Country: USA United States

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3402 **Description:** RR; JD 7200
BBCH Scale: BSOY **Planting Date:** 5/26/09
Planting Method: DIRDRI direct drilled **Rate, Unit:** 150000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 78 F
Soil Moisture: MOIST **Emergence Date:** 5/31/09
Harvest Date: 11/6/09 **Harvest Equipment:** Gleaner F3
Harvested Width, Unit: 10 FT **Harvested Length, Unit:** 25 FT
% Standard Moisture: 13.0 **Moisture Meter:** CART 3 inch blade
Weighing Equipment: Carter Manufacturing

Pest Description

Pest 1 Type: W **Code:** ERICA Conyza canadensis
Common Name: Horseweed

Pest 2 Type: W **Code:** TAROF Taraxacum officinale
Common Name: Common dandelion

Pest 3 Type: W **Code:** SENGL Senecio glabellus
Common Name: Cressleaf groundsel

Pest 4 Type: W **Code:** BROTE Bromus tectorum
Common Name: Downy brome

Pest 5 Type: W **Code:** STEME Stellaria media
Common Name: Common chickweed

Pest 6 Type: W **Code:** CERVU Cerastium fontanum vulgare
Common Name: Mouse-ear chickweed

Pest 7 Type: W **Code:** AMBEL Ambrosia artemisiifolia
Common Name: Common ragweed

Pest 8 Type: W **Code:** DIGSA Digitaria sanguinalis
Common Name: Large crabgrass

Pest 9 Type: W **Code:** POAAN Poa annua
Common Name: Annual bluegrass

Pest10 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory

Pest11 Type: W **Code:** XANST Xanthium strumarium
Common Name: Common cocklebur

Pest12 Type: W **Code:** ERIAN Erigeron annuus
Common Name: Annual fleabane

Pest13 Type: W **Code:** ECHCG Echinochloa crus-galli
Common Name: Common barnyardgrass

Pest14 Type: W **Code:** SOLCA Solanum carolinense
Common Name: Horsenettle

Pest15 Type: W **Code:** PANDI Panicum dichotomiflorum
Common Name: Fall panicum

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 30 FT
Plot Area, Unit: 300 FT2
Replications: 4
Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: NOTILL no-till
Study Design: RACOBL Randomized Complete Block (RCB)
Untreated Arrangement: INCLUDED single control randomized in each block

Soil Description

Description Name: SEPAC Field U41-6
% OM: 1.3 **Texture:** SIL silt loam
pH: 6.5 **Soil Name:** Avonburg
CEC: 5.7

Analyzed By:
A&L Great Lakes Laboratories, Inc. Report #: F07320-0472

Additional Measured Elements

Element	Quantity	Unit
P	13	ppm
K	68	ppm
Mg	155	ppm
Ca	600	ppm

Moisture and Weather Conditions

Closest Weather Station: On research station **Distance, Unit:** 0.5 MI

Application Description

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	A	B
Application Date:	5/26/09	7/14/09
Time of Day:	3:15 PM	9:50 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PREPLA	POSPOS
Application Placement:	BROFOL	BROFOL
Applied By:	GK MK	RH JD
Air Temperature, Unit:	83 F	74 F
% Relative Humidity:	56	58
Wind Velocity, Unit:	4 MPH	5 MPH
Wind Direction:	SSW	E
Dew Presence (Y/N):	N no	Y yes
Soil Temperature, Unit:	78 F	72 F
Soil Moisture:	DRY	MOIST
% Cloud Cover:	50	10

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH
Stage Majority, Percent:	N/A	R2
Height, Unit:		25 IN
Height Minimum, Maximum:		20 30

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	ERICA W	ERICA W
Stage Majority, Percent:	BOLT	VEG
Stage Minimum, Percent:	COTY	
Stage Maximum, Percent:	BOLT	
Height, Unit:	2 IN	24 IN
Height Minimum, Maximum:	0 18	4 36
Density, Unit:	5 YD2	13 YD2
Pest 2 Code, Type, Scale:	TAROF W	TAROF W
Stage Majority, Percent:	VEG	ROSETT
Stage Minimum, Percent:	COTY	
Stage Maximum, Percent:	SEED	
Height, Unit:	10 IN	12 IN
Height Minimum, Maximum:	0 24	8 14
Density, Unit:	6 YD2	4 yd2
Pest 3 Code, Type, Scale:	SENGL W	SENGL W
Stage Majority, Percent:	FLOW	
Stage Minimum, Percent:	VEG	
Stage Maximum, Percent:	SEED	
Height, Unit:	35 IN	
Height Minimum, Maximum:	6 40	
Density, Unit:	5 YD2	
Pest 4 Code, Type, Scale:	BROTE W	BROTE W
Stage Majority, Percent:	FLOW	
Stage Minimum, Percent:	VEG	

Stage Maximum, Percent:	SEED	
Height, Unit:	30 IN	
Height Minimum, Maximum:	10 36	
Density, Unit:	35 FT2	
Pest 5 Code, Type, Scale:	STEME W	STEME W
Stage Majority, Percent:	FLOW	
Stage Minimum, Percent:	FLOW	
Stage Maximum, Percent:	SEED	
Height, Unit:	8 IN	
Height Minimum, Maximum:	6 12	
Density, Unit:	2 YD2	
Pest 6 Code, Type, Scale:	CERVU W	CERVU W
Stage Majority, Percent:	FLOW	
Stage Minimum, Percent:	FLOW	
Stage Maximum, Percent:	SEED	
Height, Unit:	10 IN	
Height Minimum, Maximum:	6 14	
Density, Unit:	2 YD2	
Pest 7 Code, Type, Scale:	AMBEL W	AMBEL W
Stage Majority, Percent:	COTY	5 NODE
Stage Minimum, Percent:		3 NODE
Stage Maximum, Percent:		7 NODE
Height, Unit:	1 IN	12 IN
Height Minimum, Maximum:	0 2	5 14
Density, Unit:	6 YD2	3 YD2
Pest 8 Code, Type, Scale:	DIGSA W	DIGSA W
Stage Majority, Percent:	1 LF	
Stage Minimum, Percent:	1 LF	
Stage Maximum, Percent:	3 LF	
Height, Unit:	2 IN	
Height Minimum, Maximum:	0 4	
Density, Unit:	150 FT2	
Pest 9 Code, Type, Scale:	POAAN W	POAAN W
Stage Majority, Percent:	VEG	
Stage Minimum, Percent:	VEG	
Stage Maximum, Percent:	SEED	
Height, Unit:	2 IN	
Height Minimum, Maximum:	0 4	
Density, Unit:	27 FT2	
Pest10 Code, Type, Scale:	IPOSS W	IPOSS W
Stage Majority, Percent:		VINE
Height, Unit:		10 IN
Height Minimum, Maximum:		5 14
Density, Unit:		2 YD2
Pest11 Code, Type, Scale:	XANST W	XANST W
Stage Majority, Percent:		VEG
Height, Unit:		10 IN
Height Minimum, Maximum:		4 16
Density, Unit:		5 YD2

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Pest12 Code, Type, Scale:	ERIAN W	ERIAN W
Stage Majority, Percent:		ROSETT
Height, Unit:		6 IN
Height Minimum, Maximum:		4 8
Density, Unit:		13 YD2
Pest13 Code, Type, Scale:	ECHCG W	ECHCG W
Stage Majority, Percent:		VEG
Stage Minimum, Percent:		VEG
Stage Maximum, Percent:		FLOW
Height, Unit:		30 IN
Height Minimum, Maximum:		20 36
Density, Unit:		10 YD2
Pest14 Code, Type, Scale:	SOLCA W	SOLCA W
Stage Majority, Percent:		VEG
Stage Minimum, Percent:		VEG
Stage Maximum, Percent:		FLOW
Height, Unit:		8 IN
Height Minimum, Maximum:		5 10
Density, Unit:		2 YD2
Pest15 Code, Type, Scale:	PANDI W	PANDI W
Stage Majority, Percent:		VEG
Stage Minimum, Percent:		VEG
Stage Maximum, Percent:		FLOW
Height, Unit:		20 IN
Height Minimum, Maximum:		15 24
Density, Unit:		5 YD2

Application Equipment

	A	**B**
Appl. Equipment:	CO2 Backpack	CO2 Backpack
Equipment Type:	SPRBAC	SPRBAC
Operating Pressure, Unit:	17 PSI	17 PSI
Nozzle Type:	Flat Fan	Flat Fan
Nozzle Size:	XR11002	XR11002
Nozzle Spacing, Unit:	15 IN	15 IN
Nozzles/Row:	8	8
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	H2O	H2O
Water Hardness (ppm CaCO3):	150	150
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC
Mix Size, Unit:	1.8 Liters	1.8 Liters
Propellant:	CO2	CO2
Tank Mix (Y/N):	N no	N no

Trt No Treatment Application Comment

3 Applied at planting - slight 2,4-D injury observed at 6/9/09

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Trial ID: 09S-SEP-NTS-51 Protocol ID: 09S-SEP-NTS-51
Location: SEPAC Study Director: Melissa Kruger/Paul Marquardt
Project ID: Investigator: Dr. Bill Johnson
Sponsor Contact: Troy Klingaman

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	4	5	10	16	1	6
	Pest Type								W Weed	W Weed
	Pest Code								ERICA	ERICA
	Pest Scientific Name								Conyza canaden>	Conyza canaden>
	Pest Name								Canada horsewe>	Canada horsewe>
	Crop Code				GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
	Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
	Crop Name				Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
	Part Rated				PLOT C	PLOT C	PLOT C	PLOT C	PLOT P	PLOT P
	Rating Date				6/9/09	6/24/09	7/22/09	8/12/09	6/5/09	6/24/09
	Rating Type				PHYGEN	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO
	Rating Unit				%	%	%	%	%	%
	Sample Size, Unit									
	Number of Subsamples				1	1	1	1	1	1
	Crop Stage Majority				V1	V2	R2	R5	VC-V1	V2
	Crop Stage Minimum/Maximum				2-4"	4-8"	20-28"	24-30"	1-1.5"	4-8"
	Pest Stage Majority								CTY-BOLT	CTY-BOLT
	Pest Stage Minimum/Maximum								0-12"	0-24"
	Pest Density, Unit								13 YD2	26 YD2
	Footnote Number					1				
	Assessed By				MK CB	MK	MK JM	MK	MK	MK
	Rating Timing									
	Days After First/Last Applic.				14 14	29 29	57 8	78 29	10 10	29 29
	Trt-Eval Interval									
	Plant-Eval Interval				14 DP-1	29 DP-1	57 DP-1	78 DP-1	10 DP-1	29 DP-1
	Days After Emergence				9 DE-1	24 DE-	52 DE-	73 DE-	5 DE-1	24 DE-
	Number of Decimals									
1	Untreated				0.0 a	0.0 a	0.0 a	0.0 a	0.0 c	0.0 c
2	Roundup PowerMAX	0.77	lb ae/a	A	0.0 a	18.0 a	0.0 a	0.0 a	99.6 a	92.8 b
	NIS	0.25	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
3	Roundup PowerMAX	0.77	lb ae/a	A		12.5 a	0.0 a	0.0 a	98.8 b	97.0 a
	2,4-D Ester	0.5	lb ae/a	A						
	NIS	0.25	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
4	Sharpen	0.0223	lb ai/a	A	0.5 a	5.0 a	0.0 a	0.0 a	100.0 a	100.0 a
	Roundup PowerMAX	0.77	lb ae/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						

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Pest Type										W Weed	W Weed
Pest Code										ERICA	ERICA
Pest Scientific Name										Conyza canaden>	Conyza canaden>
Pest Name										Canada horsewe>	Canada horsewe>
Crop Code							GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Scientific Name							Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name							Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated							PLOT C	PLOT C	PLOT C	PLOT C	PLOT P	PLOT P
Rating Date							6/9/09	6/24/09	7/22/09	8/12/09	6/5/09	6/24/09
Rating Type							PHYGEN	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO
Rating Unit							%	%	%	%	%	%
Sample Size, Unit												
Number of Subsamples							1	1	1	1	1	1
Crop Stage Majority							V1	V2	R2	R5	VC-V1	V2
Crop Stage Minimum/Maximum							2-4"	4-8"	20-28"	24-30"	1-1.5"	4-8"
Pest Stage Majority											CTY-BOLT	CTY-BOLT
Pest Stage Minimum/Maximum											0-12"	0-24"
Pest Density, Unit											13 YD2	26 YD2
Footnote Number								1				
Assessed By							MK CB	MK	MK JM	MK	MK	MK
Rating Timing												
Days After First/Last Applic.							14 14	29 29	57 8	78 29	10 10	29 29
Trt-Eval Interval												
Plant-Eval Interval							14 DP-1	29 DP-1	57 DP-1	78 DP-1	10 DP-1	29 DP-1
Days After Emergence							9 DE-1	24 DE-	52 DE-	73 DE-	5 DE-1	24 DE-
Number of Decimals												
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code			4	5	10	16	1	6
5	OpTill	0.085	lb ai/a	A			0.0 a	7.0 a	0.0 a	0.0 a	100.0 a	99.8 a
	Roundup PowerMAX	0.77	lb ae/a	A								
	Destiny	1	% v/v	A								
	Ammonium Sulfate	17	lb/100 gal	A								
	Roundup PowerMAX	0.77	lb ae/a	B								
	NIS	0.25	% v/v	B								
	Ammonium Sulfate	17	lb/100 gal	B								
6	Sharpen	0.0223	lb ai/a	A			0.3 a	16.3 a	0.0 a	0.0 a	100.0 a	100.0 a
	Extreme	0.81	lb ai/a	A								
	Destiny	1	% v/v	A								
	Ammonium Sulfate	17	lb/100 gal	A								
	Roundup PowerMAX	0.77	lb ae/a	B								
	NIS	0.25	% v/v	B								
	Ammonium Sulfate	17	lb/100 gal	B								
7	Sharpen	0.0223	lb ai/a	A			0.9 a	5.0 a	0.0 a	0.0 a	100.0 a	100.0 a
	Prowl H2O	0.95	lb ai/a	A								
	Roundup PowerMAX	0.77	lb ae/a	A								
	Destiny	1	% v/v	A								
	Ammonium Sulfate	17	lb/100 gal	A								
	Roundup PowerMAX	0.77	lb ae/a	B								
	NIS	0.25	% v/v	B								
	Ammonium Sulfate	17	lb/100 gal	B								
8	Sharpen	0.0223	lb ai/a	A			0.8 a	10.0 a	0.0 a	0.0 a	99.8 a	99.5 a
	Scepter	0.123	lb ai/a	A								
	Destiny	1	% v/v	A								
	Ammonium Sulfate	17	lb/100 gal	A								
	Roundup PowerMAX	0.77	lb ae/a	B								
	NIS	0.25	% v/v	B								
	Ammonium Sulfate	17	lb/100 gal	B								
9	Untreated						0.0 a	0.0 a	0.0 a	0.0 a	0.0 c	0.0 c

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Pest Type						W Weed	W Weed
Pest Code						ERICA	ERICA
Pest Scientific Name						Conyza canaden>	Conyza canaden>
Pest Name						Canada horsewe>	Canada horsewe>
Crop Code		GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Scientific Name		Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name		Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated		PLOT C	PLOT C	PLOT C	PLOT C	PLOT P	PLOT P
Rating Date		6/9/09	6/24/09	7/22/09	8/12/09	6/5/09	6/24/09
Rating Type		PHYGEN	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO
Rating Unit		%	%	%	%	%	%
Sample Size, Unit							
Number of Subsamples		1	1	1	1	1	1
Crop Stage Majority		V1	V2	R2	R5	VC-V1	V2
Crop Stage Minimum/Maximum		2-4"	4-8"	20-28"	24-30"	1-1.5"	4-8"
Pest Stage Majority						CTY-BOLT	CTY-BOLT
Pest Stage Minimum/Maximum						0-12"	0-24"
Pest Density, Unit						13 YD2	26 YD2
Footnote Number			1				
Assessed By		MK CB	MK	MK JM	MK	MK	MK
Rating Timing							
Days After First/Last Applic.		14 14	29 29	57 8	78 29	10 10	29 29
Trt-Eval Interval							
Plant-Eval Interval		14 DP-1	29 DP-1	57 DP-1	78 DP-1	10 DP-1	29 DP-1
Days After Emergence		9 DE-1	24 DE-	52 DE-	73 DE-	5 DE-1	24 DE-
Number of Decimals							
Trt No.	Treatment Name / Rate / Unit / Appl Code	4	5	10	16	1	6
10	Untreated	0.0 a	0.0 a	0.0 a	0.0 a	0.0 c	0.0 c
LSD (P=.05)		0.76	11.68	0.00	0.00	0.55	3.66
Standard Deviation		0.52	8.05	0.00	0.00	0.37	2.52
CV		189.41	109.1	0.0	0.0	0.54	3.66
Bartlett's X2		1.842	11.692	0.0	0.0	1.352	16.371
P(Bartlett's X2)		0.606	0.069	.	.	0.509	0.001*
Replicate F		0.818	1.862	0.000	0.000	1.225	1.079
Replicate Prob(F)		0.4976	0.1599	1.0000	1.0000	0.3207	0.3748
Treatment F		2.015	2.742	0.000	0.000	66056.350	1423.370
Treatment Prob(F)		0.0925	0.0205	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

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

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Pest Type					W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code					ERICA	ERICA	TAROF	TAROF	TAROF
Pest Scientific Name					Conyza canaden>	Conyza canaden>	Taraxacum offi>	Taraxacum offi>	Taraxacum offi>
Pest Name					Canada horsewe>	Canada horsewe>	Common dandeli>	Common dandeli>	Common dandeli>
Crop Code					GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Scientific Name					Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name					Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated					PLOT P	PLOT C	PLOT P	PLOT P	PLOT P
Rating Date					7/22/09	8/12/09	6/5/09	6/24/09	7/22/09
Rating Type					CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					%	%	%	%	%
Sample Size, Unit									
Number of Subsamples					1	1	1	1	1
Crop Stage Majority					R2	R5	VC-V1	V2	R2
Crop Stage Minimum/Maximum					20-28"	24-30"	1-1.5"	4-8"	20-28"
Pest Stage Majority					BOLT	FLOW	CTY-SEED	CTY-SEED	ROSETT
Pest Stage Minimum/Maximum					4-36"	12-45"	0-18"	0-18"	12-24"
Pest Density, Unit					16 YD2	16 YD2	3 YD2	4 YD2	4 YD2
Footnote Number									
Assessed By					MK JM	MK	MK	MK	MK JM
Rating Timing									
Days After First/Last Applic.					57 8	78 29	10 10	29 29	57 8
Trt-Eval Interval									
Plant-Eval Interval					57 DP-1	78 DP-1	10 DP-1	29 DP-1	57 DP-1
Days After Emergence					52 DE-	73 DE-	5 DE-1	24 DE-	52 DE-
Number of Decimals									
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	11	17	2	7	12
1	Untreated				0.0 b	0.0 b	0.0 d	0.0 c	0.0 b
2	Roundup PowerMAX	0.77	lb ae/a	A	91.8 a	97.3 a	12.2 c	92.5 b	71.3 a
	NIS	0.25	% v/v	A					
	Ammonium Sulfate	17	lb/100 gal	A					
	Roundup PowerMAX	0.77	lb ae/a	B					
	NIS	0.25	% v/v	B					
	Ammonium Sulfate	17	lb/100 gal	B					
3	Roundup PowerMAX	0.77	lb ae/a	A	99.8 a	100.0 a	85.0 b	92.5 b	38.8 ab
	2,4-D Ester	0.5	lb ae/a	A					
	NIS	0.25	% v/v	A					
	Ammonium Sulfate	17	lb/100 gal	A					
	Roundup PowerMAX	0.77	lb ae/a	B					
	NIS	0.25	% v/v	B					
	Ammonium Sulfate	17	lb/100 gal	B					
4	Sharpen	0.0223	lb ai/a	A	98.8 a	100.0 a	97.0 a	96.8 ab	87.5 a
	Roundup PowerMAX	0.77	lb ae/a	A					
	Destiny	1	% v/v	A					
	Ammonium Sulfate	17	lb/100 gal	A					
	Roundup PowerMAX	0.77	lb ae/a	B					
	NIS	0.25	% v/v	B					
	Ammonium Sulfate	17	lb/100 gal	B					

Purdue University

Pest Type					W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code					ERICA	ERICA	TAROF	TAROF	TAROF
Pest Scientific Name					Conyza canaden>	Conyza canaden>	Taraxacum offi>	Taraxacum offi>	Taraxacum offi>
Pest Name					Canada horsewe>	Canada horsewe>	Common dandeli>	Common dandeli>	Common dandeli>
Crop Code					GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Scientific Name					Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name					Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated					PLOT P	PLOT C	PLOT P	PLOT P	PLOT P
Rating Date					7/22/09	8/12/09	6/5/09	6/24/09	7/22/09
Rating Type					CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					%	%	%	%	%
Sample Size, Unit									
Number of Subsamples					1	1	1	1	1
Crop Stage Majority					R2	R5	VC-V1	V2	R2
Crop Stage Minimum/Maximum					20-28"	24-30"	1-1.5"	4-8"	20-28"
Pest Stage Majority					BOLT	FLOW	CTY-SEED	CTY-SEED	ROSETT
Pest Stage Minimum/Maximum					4-36"	12-45"	0-18"	0-18"	12-24"
Pest Density, Unit					16 YD2	16 YD2	3 YD2	4 YD2	4 YD2
Footnote Number									
Assessed By					MK JM	MK	MK	MK	MK JM
Rating Timing									
Days After First/Last Applic.					57 8	78 29	10 10	29 29	57 8
Trt-Eval Interval									
Plant-Eval Interval					57 DP-1	78 DP-1	10 DP-1	29 DP-1	57 DP-1
Days After Emergence					52 DE-	73 DE-	5 DE-1	24 DE-	52 DE-
Number of Decimals									
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	11	17	2	7	12
5	OpTill	0.085	lb ai/a	A	100.0 a	100.0 a	96.0 a	94.0 ab	61.3 a
	Roundup PowerMAX	0.77	lb ae/a	A					
	Destiny	1	% v/v	A					
	Ammonium Sulfate	17	lb/100 gal	A					
	Roundup PowerMAX	0.77	lb ae/a	B					
	NIS	0.25	% v/v	B					
	Ammonium Sulfate	17	lb/100 gal	B					
6	Sharpen	0.0223	lb ai/a	A	99.0 a	100.0 a	91.8 a	96.0 ab	62.5 a
	Extreme	0.81	lb ai/a	A					
	Destiny	1	% v/v	A					
	Ammonium Sulfate	17	lb/100 gal	A					
	Roundup PowerMAX	0.77	lb ae/a	B					
	NIS	0.25	% v/v	B					
	Ammonium Sulfate	17	lb/100 gal	B					
7	Sharpen	0.0223	lb ai/a	A	98.5 a	100.0 a	93.8 a	95.5 ab	40.0 ab
	Prowl H2O	0.95	lb ai/a	A					
	Roundup PowerMAX	0.77	lb ae/a	A					
	Destiny	1	% v/v	A					
	Ammonium Sulfate	17	lb/100 gal	A					
	Roundup PowerMAX	0.77	lb ae/a	B					
	NIS	0.25	% v/v	B					
	Ammonium Sulfate	17	lb/100 gal	B					
8	Sharpen	0.0223	lb ai/a	A	100.0 a	100.0 a	99.3 a	98.8 a	85.0 a
	Scepter	0.123	lb ai/a	A					
	Destiny	1	% v/v	A					
	Ammonium Sulfate	17	lb/100 gal	A					
	Roundup PowerMAX	0.77	lb ae/a	B					
	NIS	0.25	% v/v	B					
	Ammonium Sulfate	17	lb/100 gal	B					
9	Untreated				0.0 b	0.0 b	0.0 d	0.0 c	0.0 b

Purdue University

Pest Type			W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code			ERICA	ERICA	TAROF	TAROF	TAROF
Pest Scientific Name			Conyza canaden>	Conyza canaden>	Taraxacum offi>	Taraxacum offi>	Taraxacum offi>
Pest Name			Canada horsewe>	Canada horsewe>	Common dandeli>	Common dandeli>	Common dandeli>
Crop Code			GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Scientific Name			Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name			Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated			PLOT P	PLOT C	PLOT P	PLOT P	PLOT P
Rating Date			7/22/09	8/12/09	6/5/09	6/24/09	7/22/09
Rating Type			CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit			%	%	%	%	%
Sample Size, Unit							
Number of Subsamples			1	1	1	1	1
Crop Stage Majority			R2	R5	VC-V1	V2	R2
Crop Stage Minimum/Maximum			20-28"	24-30"	1-1.5"	4-8"	20-28"
Pest Stage Majority			BOLT	FLOW	CTY-SEED	CTY-SEED	ROSETT
Pest Stage Minimum/Maximum			4-36"	12-45"	0-18"	0-18"	12-24"
Pest Density, Unit			16 YD2	16 YD2	3 YD2	4 YD2	4 YD2
Footnote Number							
Assessed By			MK JM	MK	MK	MK	MK JM
Rating Timing							
Days After First/Last Applic.			57 8	78 29	10 10	29 29	57 8
Trt-Eval Interval							
Plant-Eval Interval			57 DP-1	78 DP-1	10 DP-1	29 DP-1	57 DP-1
Days After Emergence			52 DE-	73 DE-	5 DE-1	24 DE-	52 DE-
Number of Decimals							
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	11	17	2	7	12
10	Untreated				0.0 b	0.0 b	0.0 d	0.0 c	0.0 b
LSD (P=.05)					7.00	2.23	6.44	4.01	36.79
Standard Deviation					4.82	1.54	4.43	2.76	25.35
CV					7.01	2.2	7.7	4.15	56.81
Bartlett's X2					30.853	0.0	13.653	14.14	16.442
P(Bartlett's X2)					0.001*	.	0.034*	0.028*	0.012*
Replicate F					0.732	1.000	1.524	1.066	1.142
Replicate Prob(F)					0.5421	0.4079	0.2318	0.3801	0.3500
Treatment F					388.228	3927.785	453.146	1108.662	7.470
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001

Purdue University

Pest Type					W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code					TAROF	BROTE	IPOSS	IPOSS	IPOSS	ECHCG
Pest Scientific Name					Taraxacum offi>	Bromus tectorum	Ipomoea sp.	Ipomoea sp.	Ipomoea sp.	Echinochloa cr>
Pest Name					Common dandeli>	Downy brome	Morning glory	Morning glory	Morning glory	Common barnyar>
Crop Code					GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Scientific Name					Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name					Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated					PLOT C	PLOT P	PLOT P	PLOT P	PLOT C	PLOT P
Rating Date					8/12/09	6/5/09	6/24/09	7/22/09	8/12/09	6/24/09
Rating Type					CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					%	%	%	%	%	%
Sample Size, Unit										
Number of Subsamples					1	1	1	1	1	1
Crop Stage Majority					R5	VC-V1	V2	R2	R5	V2
Crop Stage Minimum/Maximum					24-30"	1-1.5"	4-8"	20-28"	24-30"	4-8"
Pest Stage Majority					VEG	SEED	CTY-VINE	VINE	FLOW	1-3 LF
Pest Stage Minimum/Maximum					12-30"	10-26"	0-6"	4-18"	6-30"	0-18"
Pest Density, Unit					4 YD2	5 YD2	4 YD2	4 YD2	4 YD2	27 FT2
Footnote Number										
Assessed By					MK	MK	MK	MK JM	MK	MK
Rating Timing										
Days After First/Last Applic.					78 29	10 10	29 29	57 8	78 29	29 29
Trt-Eval Interval										
Plant-Eval Interval					78 DP-1	10 DP-1	29 DP-1	57 DP-1	78 DP-1	29 DP-1
Days After Emergence					73 DE-	5 DE-1	24 DE-	52 DE-	73 DE-	24 DE-
Number of Decimals										
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	18	3	8	13	19	9
1	Untreated				0.0 c	0.0 c	0.0 b	0.0 b	0.0 b	0.0 c
2	Roundup PowerMAX	0.77	lb ae/a	A	91.3 ab	99.8 a	75.0 a	73.8 a	90.0 a	85.8 b
	NIS	0.25	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
3	Roundup PowerMAX	0.77	lb ae/a	A	93.3 ab	97.5 a	99.5 a	79.8 a	85.0 a	92.3 ab
	2,4-D Ester	0.5	lb ae/a	A						
	NIS	0.25	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
4	Sharpen	0.0223	lb ai/a	A	97.8 ab	100.0 a	99.3 a	99.0 a	99.8 a	87.5 b
	Roundup PowerMAX	0.77	lb ae/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code						
Pest Type					W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code					TAROF	BROTE	IPOSS	IPOSS	IPOSS	ECHCG
Pest Scientific Name					Taraxacum offi>	Bromus tectorum	Ipomoea sp.	Ipomoea sp.	Ipomoea sp.	Echinochloa cr>
Pest Name					Common dandeli>	Downy brome	Morning glory	Morning glory	Morning glory	Common barnyar>
Crop Code					GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Scientific Name					Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name					Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated					PLOT C	PLOT P	PLOT P	PLOT P	PLOT C	PLOT P
Rating Date					8/12/09	6/5/09	6/24/09	7/22/09	8/12/09	6/24/09
Rating Type					CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					%	%	%	%	%	%
Sample Size, Unit										
Number of Subsamples					1	1	1	1	1	1
Crop Stage Majority					R5	VC-V1	V2	R2	R5	V2
Crop Stage Minimum/Maximum					24-30"	1-1.5"	4-8"	20-28"	24-30"	4-8"
Pest Stage Majority					VEG	SEED	CTY-VINE	VINE	FLOW	1-3 LF
Pest Stage Minimum/Maximum					12-30"	10-26"	0-6"	4-18"	6-30"	0-18"
Pest Density, Unit					4 YD2	5 YD2	4 YD2	4 YD2	4 YD2	27 FT2
Footnote Number										
Assessed By					MK	MK	MK	MK JM	MK	MK
Rating Timing										
Days After First/Last Applic.					78 29	10 10	29 29	57 8	78 29	29 29
Trt-Eval Interval										
Plant-Eval Interval					78 DP-1	10 DP-1	29 DP-1	57 DP-1	78 DP-1	29 DP-1
Days After Emergence					73 DE-	5 DE-1	24 DE-	52 DE-	73 DE-	24 DE-
Number of Decimals										
5	OpTill	0.085	lb ai/a	A	87.5 b	100.0 a	99.3 a	97.3 a	95.0 a	99.8 a
	Roundup PowerMAX	0.77	lb ae/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
6	Sharpen	0.0223	lb ai/a	A	95.3 ab	100.0 a	98.0 a	95.0 a	98.8 a	100.0 a
	Extreme	0.81	lb ai/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
7	Sharpen	0.0223	lb ai/a	A	89.3 ab	100.0 a	99.8 a	95.0 a	96.3 a	96.8 a
	Prowl H2O	0.95	lb ai/a	A						
	Roundup PowerMAX	0.77	lb ae/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
8	Sharpen	0.0223	lb ai/a	A	98.3 a	57.5 b	98.5 a	97.8 a	99.8 a	98.8 a
	Scepter	0.123	lb ai/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
9	Untreated				0.0 c	0.0 c	0.0 b	0.0 b	0.0 b	0.0 c

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Pest Type			W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code			TAROF	BROTE	IPOSS	IPOSS	IPOSS	ECHCG
Pest Scientific Name			Taraxacum offi>	Bromus tectorum	Ipomoea sp.	Ipomoea sp.	Ipomoea sp.	Echinochloa cr>
Pest Name			Common dandeli>	Downy brome	Morning glory	Morning glory	Morning glory	Common barnyar>
Crop Code			GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Scientific Name			Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name			Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated			PLOT C	PLOT P	PLOT P	PLOT P	PLOT C	PLOT P
Rating Date			8/12/09	6/5/09	6/24/09	7/22/09	8/12/09	6/24/09
Rating Type			CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit			%	%	%	%	%	%
Sample Size, Unit								
Number of Subsamples			1	1	1	1	1	1
Crop Stage Majority			R5	VC-V1	V2	R2	R5	V2
Crop Stage Minimum/Maximum			24-30"	1-1.5"	4-8"	20-28"	24-30"	4-8"
Pest Stage Majority			VEG	SEED	CTY-VINE	VINE	FLOW	1-3 LF
Pest Stage Minimum/Maximum			12-30"	10-26"	0-6"	4-18"	6-30"	0-18"
Pest Density, Unit			4 YD2	5 YD2	4 YD2	4 YD2	4 YD2	27 FT2
Footnote Number								
Assessed By			MK	MK	MK	MK JM	MK	MK
Rating Timing								
Days After First/Last Applic.			78 29	10 10	29 29	57 8	78 29	29 29
Trt-Eval Interval								
Plant-Eval Interval			78 DP-1	10 DP-1	29 DP-1	57 DP-1	78 DP-1	29 DP-1
Days After Emergence			73 DE-	5 DE-1	24 DE-	52 DE-	73 DE-	24 DE-
Number of Decimals								
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	18	3	8	13	19	9
10	Untreated				0.0 c	0.0 c	0.0 b	0.0 b	0.0 b	0.0 c
LSD (P=.05)					6.87	13.27	16.81	20.32	14.07	7.35
Standard Deviation					4.73	9.14	11.58	14.00	9.70	5.06
CV					7.25	13.97	17.31	21.97	14.59	7.66
Bartlett's X2					13.704	24.454	81.132	36.891	48.773	29.325
P(Bartlett's X2)					0.033*	0.001*	0.001*	0.001*	0.001*	0.001*
Replicate F					0.969	1.168	1.290	0.668	0.355	2.067
Replicate Prob(F)					0.4215	0.3401	0.2980	0.5788	0.7860	0.1282
Treatment F					364.308	105.734	65.227	40.838	90.321	328.195
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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Pest Type					W Weed	W Weed	W Weed	W Weed		
Pest Code					ECHCG	ECHCG	AMBEL	AMBEL		
Pest Scientific Name					Echinochloa cr>	Echinochloa cr>	Ambrosia artem>	Ambrosia artem>		
Pest Name					Common barnyar>	Common barnyar>	Common ragweed	Common ragweed		
Crop Code					GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Scientific Name					Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name					Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated					PLOT P	PLOT C	PLOT P	PLOT C		
Rating Date					7/22/09	8/12/09	7/22/09	8/12/09	11/6/09	11/6/09
Rating Type					CONTRO	CONTRO	CONTRO	CONTRO	YIELD	YIELD
Rating Unit					%	%	%	%	LB	BU
Sample Size, Unit										
Number of Subsamples					1	1	1	1	1	1
Crop Stage Majority					R2	R5	R2	R5	R8	R8
Crop Stage Minimum/Maximum					20-28"	24-30"	20-28"	24-30"		
Pest Stage Majority					VEG-FLOW	FLOW	VEG	FLOW		
Pest Stage Minimum/Maximum					6-28"	12-50"	12-30"	12-40"		
Pest Density, Unit					27 FT2	27 FT2	3 YD2	3 YD2		
Footnote Number										
Assessed By					MK JM	MK	MK JM	MK	PM	PM
Rating Timing										
Days After First/Last Applic.					57 8	78 29	57 8	78 29	164 115	164 115
Trt-Eval Interval										
Plant-Eval Interval					57 DP-1	78 DP-1	57 DP-1	78 DP-1	164 DP-1	164 DP-1
Days After Emergence					52 DE-	73 DE-	52 DE-	73 DE-	159 DE	159 DE
Number of Decimals										1
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	15	21	14	20	22	23
1	Untreated				0.0 d	0.0 b	0.0 b	0.0 b	12.83 b	37.2 b
2	Roundup PowerMAX	0.77	lb ae/a	A	90.0 b	99.3 a	96.3 a	100.0 a	19.80 a	57.5 a
	NIS	0.25	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
3	Roundup PowerMAX	0.77	lb ae/a	A	90.8 b	100.0 a	98.1 a	100.0 a	19.08 a	55.4 a
	2,4-D Ester	0.5	lb ae/a	A						
	NIS	0.25	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
4	Sharpen	0.0223	lb ai/a	A	86.8 c	99.0 a	97.3 a	100.0 a	18.00 a	52.3 a
	Roundup PowerMAX	0.77	lb ae/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	15	21	14	20	22	23
	Pest Type				W Weed	W Weed	W Weed	W Weed		
	Pest Code				ECHCG	ECHCG	AMBEL	AMBEL		
	Pest Scientific Name				Echinochloa cr>	Echinochloa cr>	Ambrosia artem>	Ambrosia artem>		
	Pest Name				Common barnyar>	Common barnyar>	Common ragweed	Common ragweed		
	Crop Code				GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
	Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
	Crop Name				Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
	Part Rated				PLOT P	PLOT C	PLOT P	PLOT C		
	Rating Date				7/22/09	8/12/09	7/22/09	8/12/09	11/6/09	11/6/09
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	YIELD	YIELD
	Rating Unit				%	%	%	%	LB	BU
	Sample Size, Unit									
	Number of Subsamples				1	1	1	1	1	1
	Crop Stage Majority				R2	R5	R2	R5	R8	R8
	Crop Stage Minimum/Maximum				20-28"	24-30"	20-28"	24-30"		
	Pest Stage Majority				VEG-FLOW	FLOW	VEG	FLOW		
	Pest Stage Minimum/Maximum				6-28"	12-50"	12-30"	12-40"		
	Pest Density, Unit				27 FT2	27 FT2	3 YD2	3 YD2		
	Footnote Number									
	Assessed By				MK JM	MK	MK JM	MK	PM	PM
	Rating Timing									
	Days After First/Last Applic.				57 8	78 29	57 8	78 29	164 115	164 115
	Trt-Eval Interval									
	Plant-Eval Interval				57 DP-1	78 DP-1	57 DP-1	78 DP-1	164 DP-1	164 DP-1
	Days After Emergence				52 DE-	73 DE-	52 DE-	73 DE-	159 DE	159 DE
	Number of Decimals									1
5	OpTill	0.085	lb ai/a	A	97.0 a	94.5 a	100.0 a	100.0 a	19.88 a	57.7 a
	Roundup PowerMAX	0.77	lb ae/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
6	Sharpen	0.0223	lb ai/a	A	99.0 a	100.0 a	100.0 a	100.0 a	22.15 a	64.3 a
	Extreme	0.81	lb ai/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
7	Sharpen	0.0223	lb ai/a	A	92.5 b	100.0 a	100.0 a	100.0 a	19.78 a	57.4 a
	Prowl H2O	0.95	lb ai/a	A						
	Roundup PowerMAX	0.77	lb ae/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
8	Sharpen	0.0223	lb ai/a	A	98.0 a	100.0 a	100.0 a	100.0 a	19.40 a	56.3 a
	Scepter	0.123	lb ai/a	A						
	Destiny	1	% v/v	A						
	Ammonium Sulfate	17	lb/100 gal	A						
	Roundup PowerMAX	0.77	lb ae/a	B						
	NIS	0.25	% v/v	B						
	Ammonium Sulfate	17	lb/100 gal	B						
9	Untreated				0.0 d	0.0 b	0.0 b	0.0 b	19.70 a	57.2 a

Purdue University

Pest Type		W Weed	W Weed	W Weed	W Weed		
Pest Code		ECHCG	ECHCG	AMBEL	AMBEL		
Pest Scientific Name		Echinochloa cr>	Echinochloa cr>	Ambrosia artem>	Ambrosia artem>		
Pest Name		Common barnyar>	Common barnyar>	Common ragweed	Common ragweed		
Crop Code		GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Scientific Name		Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name		Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated		PLOT P	PLOT C	PLOT P	PLOT C		
Rating Date		7/22/09	8/12/09	7/22/09	8/12/09	11/6/09	11/6/09
Rating Type		CONTRO	CONTRO	CONTRO	CONTRO	YIELD	YIELD
Rating Unit		%	%	%	%	LB	BU
Sample Size, Unit							
Number of Subsamples		1	1	1	1	1	1
Crop Stage Majority		R2	R5	R2	R5	R8	R8
Crop Stage Minimum/Maximum		20-28"	24-30"	20-28"	24-30"		
Pest Stage Majority		VEG-FLOW	FLOW	VEG	FLOW		
Pest Stage Minimum/Maximum		6-28"	12-50"	12-30"	12-40"		
Pest Density, Unit		27 FT2	27 FT2	3 YD2	3 YD2		
Footnote Number							
Assessed By		MK JM	MK	MK JM	MK	PM	PM
Rating Timing							
Days After First/Last Applic.		57 8	78 29	57 8	78 29	164 115	164 115
Trt-Eval Interval							
Plant-Eval Interval		57 DP-1	78 DP-1	57 DP-1	78 DP-1	164 DP-1	164 DP-1
Days After Emergence		52 DE-	73 DE-	52 DE-	73 DE-	159 DE	159 DE
Number of Decimals							1
Trt No.	Treatment Name	Rate Unit	Appl Code				
				15	21	14	20	22	23
10	Untreated			0.0 d	0.0 b	0.0 b	0.0 b	18.23 a	52.9 a
LSD (P=.05)				2.31	4.57	2.61	0.00	2.935	8.52
Standard Deviation				1.59	3.15	1.79	0.00	2.019	5.86
CV				2.44	4.54	2.6	0.0	10.69	10.69
Bartlett's X2				4.386	15.393	1.556	0.0	14.306	14.306
P(Bartlett's X2)				0.495	0.001*	0.459	.	0.112	0.112
Replicate F				1.839	0.817	2.047	0.000	4.980	4.980
Replicate Prob(F)				0.1638	0.4959	0.1320	1.0000	0.0073	0.0073
Treatment F				3233.829	923.820	2829.899	0.000	5.690	5.690
Treatment Prob(F)				0.0001	0.0001	0.0001	1.0000	0.0002	0.0002