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Pre/Post herbicide programs for RR corn in midwest.

Trial ID: 10S-THP-CTC-55 Protocol ID: 10S-THP-CTC-55
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: Investigator: Dr. Bill Johnson
 Sponsor Contact: Monsanto - John Willis

General Trial Information

Study Director: Paul Marquardt/Mike White **Title:** Research Associate
Investigator: Dr. William G. Johnson **Title:** Professor

Discipline: H herbicide
Trial Status: E established
Initiation Date: 3-12-2010

Trial Location

City: Lafayette USA 49.376656 - 24.53833
State/Prov.: IN -124.715843 - 66.968887
Postal Code: 47909
Country: USA

Personnel

Study Director: Paul Marquardt/Mike White **Title:** Research Associate

Affiliation: Purdue University
Address: 915 W. State St., Botany and Plant Pathology
Location: West Lafayette, IN

Postal Code: 47907 **E-mail:** pmarquar@purdue.edu

Phone No.: 765-494-4621 **Mobile No.:** 765-409-6369

Investigator: Dr. William G. Johnson **Title:** 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: Throckmorton Purdue Ag Center **Role:** Purdue Ag Center

Organization: Purdue University
Address 1: 8343 US 231 S

Phone No.: 765-538-3422

Fax No.: 765-538-3423

City: Lafayette

State/Prov: IN

Postal Code: 47909

E-mail: jayyoung@purdue.edu

Country: US

Crop Description

Crop 1: ZEAMX Zea mays Corn

Variety: DEKALB DKC61-19

BBCH Scale: BCOR

Description: Roundup Ready

Planting Date: 4-19-2010

Soil Temperature, Unit: 60 F

Emergence Date: 5-2-2010

Pest Description

Pest 1 Type: W **Code:** SETFA *Setaria faberi*

Common Name: Giant foxtail

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*

Common Name: Giant ragweed

Pest 3 Type: W **Code:** ABUTH *Abutilon theophrasti*

Common Name: Velvetleaf

Pest 4 Type: W **Code:** TAROF *Taraxacum officinale*

Common Name: Common dandelion

Pest 5 Type: W **Code:** CHEAL *Chenopodium album*

Common Name: Common lambsquarters

Pest 6 Type: W **Code:** AMARE *Amaranthus retroflexus*

Common Name: Redroot pigweed

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Site and Design

Plot Width, Unit: 10 FT Plot Length, Unit: 30 FT Plot Area, Unit: 300 FT ² Replications: 4	Site Type: FIELD field Experimental Unit: 1 PLOT plot Tillage Type: CONTIL conventional-till Study Design: RACOB� Randomized Complete Block (RCB) Untreated Arrangement: INCLUDED single control randomized in each block
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Soil Description

Description Name: TPAC Field 4A
% OM: 3.1 **Texture:** SIL silt loam
pH: 6 **Soil Name:** Toronto-Millbrook
CEC: 11.1

Application Description

	A	B	C	D
Application Date:	5-20-2010	6-1-2010	6-7-2010	4-20-2010
Time of Day:	7:40-7:50	9:30 AM	8:25-8:33	
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	EAPOWE	MIPOWE	LAPOWE	ATPLAN
Application Placement:	FOLIAR	FOLIAR	FOLIAR	FOLIAR
Applied By:	MH	MH	MH	
Air Temperature, Unit:	57 F	69 F	64 F	55 F
% Relative Humidity:	78	86	77	57
Wind Velocity, Unit:	0 MPH	1.5 MPH	2.3 MPH	2 SMPH
Wind Direction:		NE	SW	SE
Dew Presence (Y/N):	Y yes	Y yes	Y yes	N no
Soil Temperature, Unit:	57 F	70 F	71 F	60 F
Soil Moisture:	WET	WET	DRY	DRY
% Cloud Cover:	5	100	25	80

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH	BBCH	
Stage Majority, Percent:	V2	V6	V6	
Stage Maximum, Percent:	V3 90			
Height, Unit:		12 IN	3 FT	
Height Minimum, Maximum:	3 6			

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Pest Stage At Each Application				
	A	B	C	D
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:	45 100	45 100		
Height, Unit:	1.5 IN	4.5 IN	10 IN	
Height Minimum, Maximum:	1 2	1 8		
Density, Unit:	17.5 FT2	150 YD2	200 YD2	
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W	AMBTR W
Stage Majority, Percent:	45 100	45 100		
Height, Unit:	2 IN	8 IN	14 IN	
Height Minimum, Maximum:	1 3		8 20	
Density, Unit:	2 YD2	4 YD2	9 YD2	
Pest 3 Code, Type, Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:	45 100	45 100		
Height, Unit:	1.5 IN	5 IN	9 IN	
Height Minimum, Maximum:	1 2	2 8	6 12	
Density, Unit:	3 YD2	7 YD2	8 YD2	
Pest 4 Code, Type, Scale:	TAROF W	TAROF W	TAROF W	TAROF W
Stage Majority, Percent:	ROSETT 100	BOLT 100		
Height, Unit:	2.5 IN	10 IN		
Height Minimum, Maximum:	1 4			
Density, Unit:	1.5 YD2	3 YD2		
Pest 5 Code, Type, Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:		45 100		
Height, Unit:		1.25 IN		
Height Minimum, Maximum:		0.5 2		
Density, Unit:		10 YD2		
Pest 6 Code, Type, Scale:	AMARE W	AMARE W	AMARE W	AMARE W
Height, Unit:			7 IN	
Density, Unit:			7 YD2	

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Application Equipment				
	A	B	C	D
Appl. Equipment:	CO2 BKPK	CO2 BKPK	CO2 BKPK	CO2 BKPK
Equipment Type:	SPRBAC	SPRBAC	SPRBAC	SPRBAC
Operating Pressure, Unit:	17 PSI	17 PSI	17 PSI	17 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	XR 110 02	XR 110 02	XR 110 02	XR 110 02
Nozzle Spacing, Unit:	15 IN	15 IN	15 IN	15 IN
Nozzles/Row:	8	8	8	8
Boom Length, Unit:	10 FT	10 FT	10 FT	10 FT
Boom Height, Unit:	18 IN	18 IN	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	3 MPH
Carrier:	MEIGS	MEIGS	MEIGS	MEIGS
Water Hardness (ppm CaCO3):	150	150	150	150
Spray Volume, Unit:	15 gal/ac	15 gal/ac	15 gal/ac	15 gal/ac
Mix Size, Unit:	1.8 liters	1.8 liters	1.8 liters	1.8 liters
Propellant:	CO2	CO2	CO2	CO2
Tank Mix (Y/N):	N no	N no	N no	N no

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Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed ABUTH Abutilon theop> Velvetleaf	W Weed TAROF Taraxacum offi> Common dandel>	W Weed CHEAL Chenopodium al> Common lambsqu>			
Pest Code									
Pest Scientific Name									
Pest Name									
Crop Code	ZEAMX						ZEAMX		
BBCH Scale	BCOR						BCOR		
Crop Scientific Name	Zea mays						Zea mays		
Crop Name	Corn						Corn		
Crop Variety									
Description									
Rating Date	5-4-2010	5-28-2010	5-28-2010	5-28-2010	5-28-2010	5-28-2010	6-24-2010		
Rating Type	STAND	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN		
Rating Unit		%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Crop Stage Majority							6-7'		
Pest Stage Majority		1-6"	3"	6"	6"	3"			
Pest Density, Unit	105 IN/ROW	180 YD2	4 YD2	6 YD2	2 YD2	40 YD2			
Assessed By	MW	MW	MW	MW	MW	MW	WGJ		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	1	2	3	4	5	6	7
1 Untreated Check			15.3 a	0.0 d	0.0 c	0.0 c	0.0 b	0.0 b	15.0 a
2 Harness Xtra 5.6 (5.6 SC)	2.1 lb ai/a	A	15.3 a	97.0 a	74.8 ab	96.8 a	22.5 ab	99.0 a	2.5 a
3 Harness Xtra 5.6 (5.6 SC) Roundup PowerMax 4.5 SL AMS - Liquid	2.1 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	16.0 a	96.8 a	89.5 a	96.8 a	45.0 ab	99.0 a	0.0 a
4 Harness Xtra 5.6 (5.6 SC)	3.64 lb ai/a	A	15.0 a	98.0 a	39.8 abc	93.3 a	73.8 a	99.0 a	0.0 a
5 Harness Xtra 5.6 (5.6 SC) Roundup PowerMax 4.5 SL AMS - Liquid	3.64 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	15.3 a	99.0 a	78.5 ab	91.8 a	50.0 ab	99.0 a	0.0 a
6 Atrazine	2 lb ai/a	A	15.3 a	37.5 b	39.8 abc	84.5 a	10.0 ab	94.3 a	0.0 a
7 Atrazine Roundup PowerMax 4.5 SL AMS - Liquid	2 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	15.3 a	45.0 b	72.0 ab	99.0 a	5.0 ab	74.3 a	0.0 a
8 Integrity (5.57 SC)	0.696 lb ai/a	A	14.8 a	94.8 a	67.5 ab	99.0 a	20.0 ab	91.8 a	7.5 a
9 Integrity (5.57 SC) Roundup PowerMax 4.5 SL AMS - Liquid	0.696 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	15.8 a	98.0 a	64.3 ab	98.0 a	15.0 ab	98.0 a	0.0 a
10 Corvus (2.63 SC)	0.115 lb ai/a	A	16.8 a	93.0 a	62.5 ab	99.0 a	7.5 ab	99.0 a	0.0 a
11 Corvus (2.63 SC) Roundup PowerMax 4.5 SL AMS - Liquid	0.115 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	15.5 a	97.0 a	81.5 a	99.0 a	71.3 a	99.0 a	0.0 a
12 Balance Flexx (2 SC)	0.078 lb ai/a	A	15.0 a	77.5 a	84.5 a	97.5 a	56.3 ab	99.0 a	0.0 a

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Pest Type		W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifida Giant ragweed	W Weed ABUTH Abutilon theophrasti Velvetleaf	W Weed TAROF Taraxacum officinale Common dandelion	W Weed CHEAL Chenopodium album Common lambsquarters				
Pest Code										
Pest Scientific Name										
Pest Name										
Crop Code	ZEAMX						ZEAMX			
BBCH Scale	BCOR						BCOR			
Crop Scientific Name	Zea mays						Zea mays			
Crop Name	Corn						Corn			
Crop Variety										
Description										
Rating Date	5-4-2010	5-28-2010	5-28-2010	5-28-2010	5-28-2010	5-28-2010	6-24-2010			
Rating Type	STAND	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN			
Rating Unit		%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
Crop Stage Majority							6-7'			
Pest Stage Majority		1-6"	3"	6"	6"	3"				
Pest Density, Unit	105 IN/ROW	180 YD2	4 YD2	6 YD2	2 YD2	40 YD2				
Assessed By	MW	MW	MW	MW	MW	MW	WGJ			
Trt No.	Treatment Name	Rate	Appl Code	1	2	3	4	5	6	7
24	Roundup PowerMax 4.5 SL AMS - Liquid	0.75 lb ae/a 17 lb ai/100 gal D	D	15.8 a	21.3 c	22.5 bc	24.8 b	22.5 ab	22.5 b	17.5 a
LSD (P=.05)		1.85		15.49	31.74	18.86	37.38	25.08	10.03	
Standard Deviation		1.31		10.95	22.45	13.34	26.43	17.73	7.09	
CV		8.43		13.32	33.29	15.16	71.9	19.97	272.31	
Bartlett's X2		29.613		95.346	28.611	55.117	27.492	53.557	11.874	
P(Bartlett's X2)		0.161		0.001*	0.156	0.001*	0.193	0.001*	0.105	
Replicate F		0.992		1.099	7.453	1.804	1.955	0.303	0.366	
Replicate Prob(F)		0.4020		0.3557	0.0002	0.1546	0.1289	0.8234	0.7778	
Treatment F		0.910		25.429	3.906	13.601	3.265	8.009	1.966	
Treatment Prob(F)		0.5854		0.0001	0.0001	0.0001	0.0001	0.0001	0.0166	

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.

Column 1: US; STAND; IN/ROW; MW
Column 2: Weed or volunteer crop; US; control / burndown or knockdown; percent; 1-6"; per square yard; MW
Column 3: Weed or volunteer crop; US; control / burndown or knockdown; percent; 3"; per square yard; MW
Column 4: Weed or volunteer crop; US; control / burndown or knockdown; percent; 6"; per square yard; MW
Column 5: Weed or volunteer crop; US; control / burndown or knockdown; percent; 6"; per square yard; MW
Column 6: Weed or volunteer crop; US; control / burndown or knockdown; percent; 3"; per square yard; MW
Column 7: US; phytotoxicity - general / injury; percent; 6-7"; WGJ
Column 8: Weed or volunteer crop; US; control / burndown or knockdown; percent; 4"; per square foot; WGJ
Column 9: Weed or volunteer crop; US; control / burndown or knockdown; percent; 4-6"; per square meter; WGJ
Column 10: Weed or volunteer crop; US; control / burndown or knockdown; percent; 3-5"; per square meter; WGJ
Column 11: Weed or volunteer crop; US; control / burndown or knockdown; percent; 2-3"; per square meter; WGJ
Column 12: Weed or volunteer crop; US; control / burndown or knockdown; percent; WGJ
Column 13: US; yield; bushel 56 lb
Column 14: US; moisture content; percent

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	ABUTH	CHEAL	TAROF			
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Abutilon theop>	Chenopodium al>	Taraxacum offi>			
Pest Name	Giant foxtail	Giant ragweed	Velvetleaf	Common lambsqu>	Common dandel>			
Crop Code								
BBCH Scale								
Crop Scientific Name						ZEAMD		
Crop Name						BCOR		
Crop Variety						Zea mays inden>		
Description						Dent corn		
Rating Date	6-24-2010	6-24-2010	6-24-2010	6-24-2010	6-24-2010	9-30-2010		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	YIELD		
Rating Unit	%	%	%	%	%	BU56LB		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority								
Pest Stage Majority	4"	4-6"	3-5"	2-3"				
Pest Density, Unit	20 FT2	2.5 M2	1 M2	1 M2				
Assessed By	WGJ	WGJ	WGJ	WGJ	WGJ			
Trt Treatment	Rate	Appl	8	9	10	11	12	13
No. Name	Rate Unit	Code						
1 Untreated Check			0.0 e	0.0 d	0.0 b	0.0 c	0.0 b	53.63 c
2 Harness Xtra 5.6 (5.6 SC)	2.1 lb ai/a	A	85.0 ab	66.3 abc	90.0 a	100.0 a	68.3 a	182.00 ab
3 Harness Xtra 5.6 (5.6 SC)	2.1 lb ai/a	A	93.3 ab	94.0 ab	93.8 a	100.0 a	82.5 a	214.63 a
Roundup PowerMax 4.5 SL	0.75 lb ae/a	C						
AMS - Liquid	17 lb ai/100 gal	C						
4 Harness Xtra 5.6 (5.6 SC)	3.64 lb ai/a	A	88.3 ab	62.0 abc	96.3 a	100.0 a	70.0 a	117.90 b
5 Harness Xtra 5.6 (5.6 SC)	3.64 lb ai/a	A	92.8 ab	92.3 ab	97.0 a	100.0 a	87.0 a	209.18 a
Roundup PowerMax 4.5 SL	0.75 lb ae/a	C						
AMS - Liquid	17 lb ai/100 gal	C						
6 Atrazine	2 lb ai/a	A	47.5 d	56.3 bc	95.0 a	100.0 a	58.8 a	117.38 b
7 Atrazine	2 lb ai/a	A	82.5 ab	92.0 ab	100.0 a	100.0 a	77.5 a	199.28 a
Roundup PowerMax 4.5 SL	0.75 lb ae/a	C						
AMS - Liquid	17 lb ai/100 gal	C						
8 Integrity (5.57 SC)	0.696 lb ai/a	A	88.3 ab	62.0 abc	97.5 a	100.0 a	50.0 a	159.18 ab
9 Integrity (5.57 SC)	0.696 lb ai/a	A	94.3 ab	90.8 ab	98.8 a	100.0 a	77.3 a	207.80 a
Roundup PowerMax 4.5 SL	0.75 lb ae/a	C						
AMS - Liquid	17 lb ai/100 gal	C						
10 Corvus (2.63 SC)	0.115 lb ai/a	A	72.5 bc	66.3 abc	91.3 a	100.0 a	57.5 a	171.88 ab
11 Corvus (2.63 SC)	0.115 lb ai/a	A	92.0 ab	94.8 ab	97.5 a	100.0 a	89.5 a	214.38 a
Roundup PowerMax 4.5 SL	0.75 lb ae/a	C						
AMS - Liquid	17 lb ai/100 gal	C						
12 Balance Flexx (2 SC)	0.078 lb ai/a	A	75.8 abc	80.0 ab	100.0 a	100.0 a	78.5 a	169.23 ab

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	AMBTR	ABUTH	CHEAL	TAROF					
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Abutilon theop>	Chenopodium al>	Taraxacum offi>					
Pest Name	Giant foxtail	Giant ragweed	Velvetleaf	Common lambsqu>	Common dandel>					
Crop Code						ZEAMD				
BBCH Scale						BCOR				
Crop Scientific Name						Zea mays inden>				
Crop Name						Dent corn				
Crop Variety										
Description										
Rating Date	6-24-2010	6-24-2010	6-24-2010	6-24-2010	6-24-2010	9-30-2010				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	YIELD				
Rating Unit	%	%	%	%	%	BU56LB				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority										
Pest Stage Majority	4"	4-6"	3-5"	2-3"						
Pest Density, Unit	20 FT2	2.5 M2	1 M2	1 M2						
Assessed By	WGJ	WGJ	WGJ	WGJ	WGJ					
Trt No.	Treatment Name	Rate	Unit	Appl Code	8	9	10	11	12	13
13	Balance Flexx (2 SC)	0.078 lb ai/a	A		89.5 ab	93.3 ab	98.8 a	100.0 a	85.0 a	202.15 a
	Roundup PowerMax 4.5 SL	0.75 lb ae/a	C							
	AMS - Liquid	17 lb ai/100 gal	C							
14	Guardsman Max (5 SC)	2.5 lb ai/a	A		90.0 ab	63.8 abc	100.0 a	100.0 a	51.3 a	145.83 ab
15	Guardsman Max (5 SC)	2.5 lb ai/a	A		97.3 a	88.3 ab	98.8 a	100.0 a	76.3 a	218.45 a
	Roundup PowerMax 4.5 SL	0.75 lb ae/a	C							
	AMS - Liquid	17 lb ai/100 gal	C							
16	Lumax (3.95 SC)	2.96 lb ai/a	A		94.8 ab	89.5 ab	100.0 a	100.0 a	67.0 a	215.80 a
17	Lumax (3.95 SC)	2.96 lb ai/a	A		98.0 a	94.8 ab	98.8 a	100.0 a	77.5 a	209.90 a
	Roundup PowerMax 4.5 SL	0.75 lb ae/a	C							
	AMS - Liquid	17 lb ai/100 gal	C							
18	Harness Xtra 5.6 (5.6 SC)	2.1 lb ai/a	A		86.3 ab	79.5 ab	98.8 a	100.0 a	68.8 a	177.18 ab
	Hornet (85.6 WG)	0.16 lb ai/a	A							
19	Harness Xtra 5.6 (5.6 SC)	2.1 lb ai/a	A		92.0 ab	93.5 ab	93.8 a	100.0 a	75.8 a	202.93 a
	Hornet (85.6 WG)	0.16 lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.75 lb ae/a	C							
	AMS - Liquid	17 lb ai/100 gal	C							
20	SureStart (4.25 SC)	1.06 lb ai/a	A		92.0 ab	45.0 c	87.5 a	100.0 a	47.5 a	145.73 ab
21	SureStart (4.25 SC)	1.06 lb ai/a	A		88.3 ab	90.8 ab	95.0 a	100.0 a	84.3 a	202.33 a
	Roundup PowerMax 4.5 SL	0.75 lb ae/a	C							
	AMS - Liquid	17 lb ai/100 gal	C							
22	Halex GT (4.39 SC)	1.98 lb ai/a	B		60.8 c	86.5 ab	86.3 a	100.0 a	80.8 a	161.38 ab
	AMS - Liquid	17 lb ai/100 gal	B							
23	Roundup PowerMax 4.5 SL	0.75 lb ae/a	B		97.0 a	96.3 a	97.5 a	100.0 a	86.0 a	175.25 ab
	AMS - Liquid	17 lb ai/100 gal	B							
	Roundup PowerMax 4.5 SL	0.75 lb ae/a	D							
	AMS - Liquid	17 lb ai/100 gal	D							

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	ABUTH	CHEAL	TAROF	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Abutilon theop>	Chenopodium al>	Taraxacum offi>	
Pest Name	Giant foxtail	Giant ragweed	Velvetleaf	Common lambsqu>	Common dandel>	
Crop Code						ZEAMD
BBCH Scale						BCOR
Crop Scientific Name						Zea mays inden>
Crop Name						Dent corn
Crop Variety						
Description						
Rating Date	6-24-2010	6-24-2010	6-24-2010	6-24-2010	6-24-2010	9-30-2010
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	YIELD
Rating Unit	%	%	%	%	%	BU56LB
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority						
Pest Stage Majority	4"	4-6"	3-5"	2-3"		
Pest Density, Unit	20 FT2	2.5 M2	1 M2	1 M2		
Assessed By	WGJ	WGJ	WGJ	WGJ	WGJ	
Trt No.	8	9	10	11	12	13
Treatment Name	24 Roundup PowerMax 4.5 SL AMS - Liquid					
Rate	0.75 lb ae/a					
Unit	17 lb ai/100 gal D					
Appl Code	D					
Mean	94.0 ab	94.5 ab	92.5 a	80.0 b	89.5 a	199.30 a
LSD (P=.05)	12.81	21.19	12.65	8.16	23.16	39.434
Standard Deviation	9.06	14.98	8.94	5.77	16.38	27.884
CV	10.92	19.21	9.73	6.08	23.31	15.66
Bartlett's X2	61.235	53.839	57.62	0.0	29.238	32.43
P(Bartlett's X2)	0.001*	0.001*	0.001*	.	0.138	0.092
Replicate F	2.151	2.173	2.768	1.000	3.451	7.458
Replicate Prob(F)	0.1017	0.0990	0.0482	0.3982	0.0212	0.0002
Treatment F	22.135	8.967	19.933	51.130	5.683	8.256
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Crop Variety Description Rating Date Rating Type Rating Unit Number of Subsamples Crop Stage Majority Pest Stage Majority Pest Density, Unit Assessed By				ZEAMD BCOR Zea mays inden> Dent corn 9-30-2010 MOICON % 1
Trt No.	Treatment Name	Rate Rate Unit	Appl Code	
1	Untreated Check			14.13 a
2	Harness Xtra 5.6 (5.6 SC)	2.1 lb ai/a	A	13.63 ab
3	Harness Xtra 5.6 (5.6 SC) Roundup PowerMax 4.5 SL AMS - Liquid	2.1 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	13.53 ab
4	Harness Xtra 5.6 (5.6 SC)	3.64 lb ai/a	A	13.40 ab
5	Harness Xtra 5.6 (5.6 SC) Roundup PowerMax 4.5 SL AMS - Liquid	3.64 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	13.53 ab
6	Atrazine	2 lb ai/a	A	13.70 ab
7	Atrazine Roundup PowerMax 4.5 SL AMS - Liquid	2 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	13.63 ab
8	Integrity (5.57 SC)	0.696 lb ai/a	A	13.55 ab
9	Integrity (5.57 SC) Roundup PowerMax 4.5 SL AMS - Liquid	0.696 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	13.65 ab
10	Corvus (2.63 SC)	0.115 lb ai/a	A	13.38 ab
11	Corvus (2.63 SC) Roundup PowerMax 4.5 SL AMS - Liquid	0.115 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	13.53 ab
12	Balance Flexx (2 SC)	0.078 lb ai/a	A	13.33 ab

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Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Crop Variety Description Rating Date Rating Type Rating Unit Number of Subsamples Crop Stage Majority Pest Stage Majority Pest Density, Unit Assessed By				ZEAMD BCOR Zea mays inden> Dent corn 9-30-2010 MOICON % 1
Trt No.	Treatment Name	Rate Rate Unit	Appl Code	
13	Balance Flexx (2 SC) Roundup PowerMax 4.5 SL AMS - Liquid	0.078 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	13.28 b
14	Guardsman Max (5 SC)	2.5 lb ai/a	A	13.45 ab
15	Guardsman Max (5 SC) Roundup PowerMax 4.5 SL AMS - Liquid	2.5 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	12.53 c
16	Lumax (3.95 SC)	2.96 lb ai/a	A	13.40 ab
17	Lumax (3.95 SC) Roundup PowerMax 4.5 SL AMS - Liquid	2.96 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	13.33 ab
18	Harness Xtra 5.6 (5.6 SC) Hornet (85.6 WG)	2.1 lb ai/a 0.16 lb ai/a	A A	13.50 ab
19	Harness Xtra 5.6 (5.6 SC) Hornet (85.6 WG) Roundup PowerMax 4.5 SL AMS - Liquid	2.1 lb ai/a 0.16 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A A C C	13.53 ab
20	SureStart (4.25 SC)	1.06 lb ai/a	A	13.90 ab
21	SureStart (4.25 SC) Roundup PowerMax 4.5 SL AMS - Liquid	1.06 lb ai/a 0.75 lb ae/a 17 lb ai/100 gal	A C C	13.53 ab
22	Halex GT (4.39 SC) AMS - Liquid	1.98 lb ai/a 17 lb ai/100 gal	B B	13.83 ab
23	Roundup PowerMax 4.5 SL AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.75 lb ae/a 17 lb ai/100 gal 0.75 lb ae/a 17 lb ai/100 gal	B B D D	13.43 ab

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Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code				ZEAMD
BBCH Scale				BCOR
Crop Scientific Name	Zea mays inden>			
Crop Name	Dent corn			
Crop Variety				
Description				
Rating Date	9-30-2010			
Rating Type	MOICON			
Rating Unit				%
Number of Subsamples				1
Crop Stage Majority				
Pest Stage Majority				
Pest Density, Unit				
Assessed By				
Trt No.	Treatment Name	Rate	Appl Code	
		Rate Unit		14
24	Roundup PowerMax 4.5 SL AMS - Liquid	0.75 lb ae/a 17 lb ai/100 gal D	D	13.83 ab
LSD (P=.05)				0.460
Standard Deviation				0.325
CV				2.41
Bartlett's X2				38.745
P(Bartlett's X2)				0.021*
Replicate F				1.267
Replicate Prob(F)				0.2926
Treatment F				3.215
Treatment Prob(F)				0.0001