

Purdue University

Early preplant burndown programs in corn with Valent products.

Trial ID: 10S-THP-NTC-75 Protocol ID: 10S-THP-NTC-75
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

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: 3-24-2010

Trial Location

City: Lafayette
State/Prov.: IN
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

City: Lafayette **Phone No.:** 765-538-3422
State/Prov.: IN **Fax No.:** 765-538-3423
Postal Code: 47909 **E-mail:** jayyoung@purdue.edu
Country: US

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: PIONEER 33W84 **Description:** Roundup Ready
BBCH Scale: BCOR **Planting Date:** 4-20-2010
Rate, Unit: 32000 S/A

Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 55 F
Soil Moisture: DRY dry **Emergence Date:** 5-2-2010

Purdue University

Pest Description

- Pest 1 Type:** W **Code:** BROTE *Bromus tectorum*
Common Name: Downy brome
- Pest 2 Type:** W **Code:** TAROF *Taraxacum officinale*
Common Name: Common dandelion
- Pest 3 Type:** W **Code:** HLOUM *Holosteum umbellatum*
Common Name: Jagged chickweed
- Pest 4 Type:** W **Code:** STEME *Stellaria media*
Common Name: Common chickweed
- Pest 5 Type:** W **Code:** COIMA *Conium maculatum*
Common Name: Poison hemlock
- Pest 6 Type:** W **Code:** LAMPU *Lamium purpureum*
Common Name: Purple deadnettel
- Pest 7 Type:** W **Code:** LAMAM *Lamium amplexicaule*
Common Name: Henbit
- Pest 8 Type:** W **Code:** VIOTR *Viola tricolor*
Common Name: Wild violet
- Pest 9 Type:** W **Code:** CIRAR *Cirsium arvense*
Common Name: Canada thistle
- Pest10 Type:** W **Code:** THLSS *Thlaspi sp.*
Common Name: Pennycress
- Pest11 Type:** W **Code:** GALAP *Galium aparine*
Common Name: Catchweed bedstraw
- Pest12 Type:** W **Code:** LACSE *Lactuca serriola*
Common Name: Prickly lettuce
- Pest13 Type:** W **Code:** ERICA *Conyza canadensis*
Common Name: Canada horseweed
- Pest14 Type:** W **Code:** RUMCR *Rumex crispus*
Common Name: Curly dock
- Pest15 Type:** W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Site and Design

Plot Width, Unit: 10 FT	Site Type: FIELD field	
Plot Length, Unit: 30 FT	Experimental Unit: 1 PLOT plot	
Plot Area, Unit: 300 FT ²	Tillage Type: NOTILL no-till	
Replications: 4	Study Design: RACOB L Randomized Complete Block (RCB)	
	Untreated Arrangement: INCLUDED	single control randomized in each block

Soil Description

Description Name: TPAC Field 5

% OM: 2.3	Texture: SIL silt loam	
pH: 6.6	Soil Name: Longlois	
CEC: 9.9		

Purdue University

Application Description			
	A	B	C
Application Date:	4-15-2010	4-20-2010	6-1-2010
Time of Day:	9:20-9:30		9:15 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	ATPLAN	POSPOS
Application Placement:	FOLIAR	FOLIAR	FOLIAR
Applied By:	RH	RT	RT/RH
Air Temperature, Unit:	70 F	55 F	69 F
% Relative Humidity:	48	57	86
Wind Velocity, Unit:	5 MPH	2 MPH	1.5 MPH
Wind Direction:	S	SE	NE
Dew Presence (Y/N):	N no		Y yes
Soil Temperature, Unit:	60 F	57 F	70 F
Soil Moisture:	DRY	DRY	WET
% Cloud Cover:	0	80	100

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	BROTE W	BROTE W	BROTE W
Stage Majority, Percent:	40 100		
Stage Minimum, Percent:		40 50	
Stage Maximum, Percent:		65 50	
Height, Unit:	6 IN	7.5 IN	
Height Minimum, Maximum:	4 8	3 12	
Density, Unit:	62.5 YD2	52.5 YD2	
Pest 2 Code, Type, Scale:	TAROF W	TAROF W	TAROF W
Stage Majority, Percent:	65 100		
Stage Minimum, Percent:		40 50	
Stage Maximum, Percent:		65 50	
Height, Unit:	7 IN	5.5 IN	
Height Minimum, Maximum:	4 10	3 8	
Density, Unit:	12.5 YD2	25 YD2	
Pest 3 Code, Type, Scale:	HLOUM W	HLOUM W	HLOUM W
Stage Majority, Percent:	65 100	40 100	
Height, Unit:	7.5 IN	6.5 IN	
Height Minimum, Maximum:	5 10	5 8	
Density, Unit:	5.5 YD2	1 YD2	
Pest 4 Code, Type, Scale:	STEME W	STEME W	STEME W
Stage Majority, Percent:	65 100	65 100	
Height, Unit:	7.5 IN	7 IN	
Height Minimum, Maximum:	5 10	4 10	
Density, Unit:	5.5 YD2	22.5 YD2	
Pest 5 Code, Type, Scale:	COIMA W	COIMA W	COIMA W

Purdue University

Stage Majority, Percent:	40 100		
Stage Minimum, Percent:		ROSET 50	
Stage Maximum, Percent:		BOLT 50	
Height, Unit:	9 IN	10 IN	
Height Minimum, Maximum:	3 15	2 18	
Density, Unit:	3 YD2	1 YD2	
Pest 6 Code, Type, Scale:	LAMPU W	LAMPU W	LAMPU W
Stage Majority, Percent:	65 100	65 100	
Height, Unit:	4.5 IN	7 IN	
Height Minimum, Maximum:	3 6	4 10	
Density, Unit:	3 YD2	10.5 YD2	
Pest 7 Code, Type, Scale:	LAMAM W	LAMAM W	LAMAM W
Stage Majority, Percent:	65 100	65 100	
Height, Unit:	4.5 IN	7 IN	
Height Minimum, Maximum:	3 6	4 10	
Density, Unit:	4.5 YD2	3 YD2	
Pest 8 Code, Type, Scale:	VIOTR W	VIOTR W	VIOTR W
Stage Majority, Percent:		65 100	
Height, Unit:		5 IN	
Height Minimum, Maximum:		4 6	
Density, Unit:		0.5 YD2	
Pest 9 Code, Type, Scale:	CIRAR W	CIRAR W	CIRAR W
Stage Majority, Percent:		40 100	
Height, Unit:		6 IN	
Height Minimum, Maximum:		4 8	
Density, Unit:		3 YD2	
Pest10 Code, Type, Scale:	THLSS W	THLSS W	THLSS W
Stage Minimum, Percent:	65 50	40 50	
Stage Maximum, Percent:	40 50	65 50	
Height, Unit:	5.5 IN	4.5 IN	
Height Minimum, Maximum:	1 10	1 8	
Density, Unit:	3 YD2	25.5 YD2	
Pest11 Code, Type, Scale:	GALAP W	GALAP W	GALAP W
Stage Majority, Percent:	40 100	40 100	
Height, Unit:	3.5 IN	7.5 IN	
Height Minimum, Maximum:	1 6	3 12	
Density, Unit:	25.5 YD2	50.5 YD2	
Pest12 Code, Type, Scale:	LACSE W	LACSE W	LACSE W
Stage Majority, Percent:		40 100	
Height, Unit:		6 IN	
Height Minimum, Maximum:		4 8	
Density, Unit:		10.5 YD2	
Pest13 Code, Type, Scale:	ERICA W	ERICA W	ERICA W
Stage Majority, Percent:		40 100	
Height, Unit:		2.5 IN	
Height Minimum, Maximum:		1 4	
Density, Unit:		3 YD2	
Pest14 Code, Type, Scale:	RUMCR W	RUMCR W	RUMCR W

Purdue University

Stage Minimum, Percent:	40 50		
Stage Maximum, Percent:	BOLT 50		
Height, Unit:	7 IN		
Height Minimum, Maximum:	4 10		
Density, Unit:	1.5 YD2		
Pest15 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Stage Majority, Percent:	40 100		
Height, Unit:	2.5 IN		
Height Minimum, Maximum:	1 4		
Density, Unit:	1.5 YD2		

Application Equipment			
	A	B	C
Appl. Equipment:	CO2 Backpack	CO2 Backpack	CO2 Backpack
Operating Pressure, Unit:	17 PSI	17 PSI	17 PSI
Nozzle Type:	Flat Fan	Flat Fan	Flat Fan
Nozzle Size:	XR11002	XR11002	XR11002
Nozzle Spacing, Unit:	15 IN	15 IN	15 IN
Nozzles/Row:	6	6	6
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Boom Height, Unit:	18 IN	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	MEIGS	MEIGS	MEIGS
Water Hardness (ppm CaCO3):	150	150	150
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC	15 GAL/AC
Mix Size, Unit:	1.8 Liters	1.8 Liters	1.8 Liters
Propellant:	CO2	CO2	CO2
Tank Mix (Y/N):	N no	N no	N no

Purdue University

Early preplant burndown programs in corn with Valent products.

Trial ID: 10S-THP-NTC-75 Protocol ID: 10S-THP-NTC-75
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	BROTE	TAROF	COIMA	LACSE	ERICA	STEME			
Pest Scientific Name	Bromus tectorum	Taraxacum offi>	Conium maculat>	Lactuca serrio>	Conyza canad>	Stellaria media			
Pest Name	Downy brome	Common dandel>	Poison hemlock	Prickly lettuce	Canada horsewe>	Common chickwe>			
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Crop Variety									
Description									
Rating Date	5-5-2010	5-5-2010	5-5-2010	5-5-2010	5-5-2010	5-5-2010			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority									
Pest Stage Majority	12"	7"	20"	8"	4"	6"			
Pest Density, Unit	100 YD2	2 YD2	1 YD2	41 YD2	2 YD2	10 YD2			
Assessed By	MW	MW	MW	MW	MW	MW			
Trt Treatment	Rate	Appl							
No. Name	Rate	Unit	Code	1	2	3	4	5	6
1 Untreated Check				0.0 c	0.0 d	0.0 b	0.0 b	0.0 b	0.0 b
2 Roundup PowerMax 4.5 SL AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a A 2.5 lb ai/a A 0.775 lb ae/a C 2.5 lb ai/a C			96.8 a	66.3 abc	96.8 a	94.3 a	99.0 a	93.3 a
3 Roundup PowerMax 4.5 SL V-10233 (76 WG) AMS - Liquid Roundup PowerMax 4.5 SL Atrazine AMS - Liquid	0.775 lb ae/a A 0.143 lb ai/a A 2.5 lb ai/a A 0.775 lb ae/a C 0.5 lb ai/a C 2.5 lb ai/a C			99.0 a	76.3 ab	89.5 a	99.0 a	99.0 a	99.0 a
4 Roundup PowerMax 4.5 SL Valor SX (51 WG) AMS - Liquid Roundup PowerMax 4.5 SL Atrazine AMS - Liquid	0.775 lb ae/a A 0.064 lb ai/a A 2.5 lb ai/a A 0.775 lb ae/a C 0.5 lb ai/a C 2.5 lb ai/a C			99.0 a	78.8 ab	90.8 a	99.0 a	99.0 a	99.0 a
5 Roundup PowerMax 4.5 SL Bicep II Magnum (5.5 SC) AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a B 2.06 lb ai/a B 2.5 lb ai/a B 0.775 lb ae/a C 2.5 lb ai/a C			90.8 ab	42.5 c	99.0 a	69.8 a	99.0 a	96.8 a
6 Roundup PowerMax 4.5 SL Lexar (3.7 SC) AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a B 1.39 lb ai/a B 2.5 lb ai/a B 0.775 lb ae/a C 2.5 lb ai/a C			80.0 b	57.5 bc	99.0 a	77.0 a	99.0 a	99.0 a

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	BROTE	TAROF	COIMA	LACSE	ERICA	STEME				
Pest Scientific Name	Bromus tectorum	Taraxacum offi>	Conium maculat>	Lactuca serrio>	Conyza canaden>	Stellaria media				
Pest Name	Downy brome	Common dandel>	Poison hemlock	Prickly lettuce	Canada horsewe>	Common chickwe>				
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Crop Variety										
Description										
Rating Date	5-5-2010	5-5-2010	5-5-2010	5-5-2010	5-5-2010	5-5-2010				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority										
Pest Stage Majority	12"	7"	20"	8"	4"	6"				
Pest Density, Unit	100 YD2	2 YD2	1 YD2	41 YD2	2 YD2	10 YD2				
Assessed By	MW	MW	MW	MW	MW	MW				
Trt No.	Treatment Name	Rate	Appl Unit	Code	1	2	3	4	5	6
7	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		89.8 ab	57.5 bc	93.0 a	83.5 a	99.0 a	99.0 a
	Corvus (2.63 SC)	0.0616 lb ai/a	B							
	Atrazine	1 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
8	Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		99.0 a	83.8 ab	94.3 a	98.0 a	99.0 a	99.0 a
	V-10233 (76 WG)	0.143 lb ai/a	A							
	AMS - Liquid	2.5 lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
9	Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		99.0 a	93.5 a	99.0 a	99.0 a	99.0 a	99.0 a
	Integrity (5.57 SC)	0.566 lb ai/a	A							
	AMS - Liquid	2.5 lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
10	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		94.3 a	55.0 bc	89.3 a	87.0 a	99.0 a	99.0 a
	V-10206 (85 WG)	0.186 lb ai/a	B							
	Atrazine	1 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
11	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		96.8 a	87.5 ab	99.0 a	98.0 a	99.0 a	98.0 a
	V-10206 (85 WG)	0.186 lb ai/a	B							
	Sharpen 2.85 SC	0.111 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	BROTE	TAROF	COIMA	LACSE	ERICA	STEME
Pest Scientific Name	Bromus tectorum	Taraxacum offi>	Conium maculat>	Lactuca serrio>	Conyza canaden>	Stellaria media
Pest Name	Downy brome	Common dandeli>	Poison hemlock	Prickly lettuce	Canada horsewe>	Common chickwe>
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Crop Variety						
Description						
Rating Date	5-5-2010	5-5-2010	5-5-2010	5-5-2010	5-5-2010	5-5-2010
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority						
Pest Stage Majority	12"	7"	20"	8"	4"	6"
Pest Density, Unit	100 YD2	2 YD2	1 YD2	41 YD2	2 YD2	10 YD2
Assessed By	MW	MW	MW	MW	MW	MW
Trt Treatment						
No. Name	1	2	3	4	5	6
12 Roundup PowerMax 4.5 SL	98.0 a	35.0 c	99.0 a	87.0 a	99.0 a	99.0 a
V-10206 (85 WG)						
AMS - Liquid						
Roundup PowerMax 4.5 SL						
Atrazine						
AMS - Liquid						
LSD (P=.05)	9.06	21.57	11.14	21.15	0.00	3.49
Standard Deviation	6.28	14.94	7.72	14.65	0.00	2.41
CV	7.23	24.44	8.83	17.73	0.0	2.68
Bartlett's X2	10.926	16.567	5.568	23.581	0.0	3.759
P(Bartlett's X2)	0.091	0.085	0.351	0.001*	.	0.153
Replicate F	1.864	3.016	3.269	0.360	0.000	1.439
Replicate Prob(F)	0.1549	0.0437	0.0334	0.7824	1.0000	0.2490
Treatment F	79.221	12.469	51.866	14.368	0.000	553.297
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	1.0000	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.

Column 1: Weed or volunteer crop; US; control / burndown or knockdown; percent; 12"; per square yard; MW Column 2: Weed or volunteer crop; US; control / burndown or knockdown; percent; 7"; per square yard; MW Column 3: Weed or volunteer crop; US; control / burndown or knockdown; percent; 20"; per square yard; MW Column 4: Weed or volunteer crop; US; control / burndown or knockdown; percent; 8"; per square yard; MW Column 5: Weed or volunteer crop; US; control / burndown or knockdown; percent; 4"; per square yard; MW Column 6: Weed or volunteer crop; US; control / burndown or knockdown; percent; 6"; per square yard; MW Column 7: Weed or volunteer crop; US; CONTEO; percent; V2-4"; 16"; per square yard; MW Column 8: Weed or volunteer crop; US; control / burndown or knockdown; percent; 20"; per square yard; MW Column 9: Weed or volunteer crop; US; control / burndown or knockdown; percent; 10"; per square yard; MW Column 10: Weed or volunteer crop; US; control / burndown or knockdown; percent; 6"; per square yard; MW Column 11: Weed or volunteer crop; US; control / burndown or knockdown; percent; 7"; per square yard; MW Column 12: Weed or volunteer crop; US; control / burndown or knockdown; percent; 6"; per square yard; MW Column 13: Weed or volunteer crop; US; control / burndown or knockdown; percent; 0.5"; MW Column 14: phytotoxicity - chlorosis; MW Column 15: phytotoxicity - necrosis, leaf spot; MW Column 16: phytotoxicity - leaf curl; MW Column 17: count; V3; MH/BM Column 18: Weed or volunteer crop; US; control / burndown or knockdown; percent; 4"; per square yard Column 19: Weed or volunteer crop; US; control / burndown or knockdown; percent; 6"; per square yard Column 20: Weed or volunteer crop; US; control / burndown or knockdown; percent; 10"; per square yard Column 21: Weed or volunteer crop; US; control / burndown or knockdown; percent; 02"; per square yard Column 22: Weed or volunteer crop; US; control / burndown or knockdown; percent; 20"; per square yard Column 23: Weed or volunteer crop; US; control / burndown or knockdown; percent; 6"; per square yard Column 24: Weed or volunteer crop; US; control / burndown or knockdown; percent Column 25: Weed or volunteer crop; US; control / burndown or knockdown; percent Column 26: Weed or volunteer crop; US; control / burndown or knockdown; percent; V6-36"; 15"; per square yard Column 27: Weed or volunteer crop; US; control / burndown or knockdown; percent; 24"; per square yard Column 28: Weed or volunteer crop; US; control / burndown or knockdown; percent; 20"; per square yard Column 29: Weed or volunteer crop; US; control / burndown or knockdown; percent; 10"; per square yard Column 30: Weed or volunteer crop; US; control / burndown or knockdown; percent; 12"; per square yard Column 31: Weed or volunteer crop; US; control / burndown or knockdown; percent Column 32: Weed or volunteer crop; US; control / burndown or knockdown; percent Column 33: Weed or volunteer crop; US; control / burndown or knockdown; percent

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	GALAP	BROTE	LACSE	ERICA	STEME	TAROF				
Pest Scientific Name	Galium aparine	Bromus tectorum	Lactuca serriol	Conyza canadensis	Stellaria media	Taraxacum officinale				
Pest Name	Catchweed beds	Downy brome	Prickly lettuce	Canada horseweed	Common chickweed	Common dandelion				
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name	CORN									
Crop Variety										
Description										
Rating Date	5-20-2010	5-20-2010	5-20-2010	5-20-2010	5-20-2010	5-20-2010				
Rating Type	CONTEO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority	V2-4"									
Pest Stage Majority	16"	20"	10"	6"	7"	6"				
Pest Density, Unit	10 YD2	75 YD2	6 YD2	7 YD2	40 YD2	4 YD2				
Assessed By	MW	MW	MW	MW	MW	MW				
Trt No.	Treatment Name	Rate	Appl Unit	Code	7	8	9	10	11	12
1	Untreated Check				0.0 b	0.0 b	0.0 b	0.0 b	0.0 c	0.0 c
2	Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a 2.5 lb ai/a	A A		99.0 a	99.0 a	99.0 a	67.3 a	72.3 b	66.3 ab
	Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a 2.5 lb ai/a	C C							
3	Roundup PowerMax 4.5 SL V-10233 (76 WG) AMS - Liquid	0.775 lb ae/a 0.143 lb ai/a 2.5 lb ai/a	A A A		99.0 a	99.0 a	99.0 a	94.3 a	99.0 a	63.8 ab
	Roundup PowerMax 4.5 SL Atrazine AMS - Liquid	0.775 lb ae/a 0.5 lb ai/a 2.5 lb ai/a	C C C							
4	Roundup PowerMax 4.5 SL Valor SX (51 WG) AMS - Liquid	0.775 lb ae/a 0.064 lb ai/a 2.5 lb ai/a	A A A		99.0 a	99.0 a	99.0 a	83.3 a	99.0 a	61.3 ab
	Roundup PowerMax 4.5 SL Atrazine AMS - Liquid	0.775 lb ae/a 0.5 lb ai/a 2.5 lb ai/a	C C C							
5	Roundup PowerMax 4.5 SL Bicep II Magnum (5.5 SC) AMS - Liquid	0.775 lb ae/a 2.06 lb ai/a 2.5 lb ai/a	B B B		99.0 a	99.0 a	99.0 a	94.3 a	99.0 a	42.5 b
	Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a 2.5 lb ai/a	C C							
6	Roundup PowerMax 4.5 SL Lexar (3.7 SC) AMS - Liquid	0.775 lb ae/a 1.39 lb ai/a 2.5 lb ai/a	B B B		99.0 a	99.0 a	99.0 a	99.0 a	99.0 a	84.8 a
	Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a 2.5 lb ai/a	C C							

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	GALAP	BROTE	LACSE	ERICA	STEME	TAROF				
Pest Scientific Name	Galium aparine	Bromus tectorum	Lactuca serriol	Conyza canadensis	Stellaria media	Taraxacum officinale				
Pest Name	Catchweed beds	Downy brome	Prickly lettuce	Canada horseweed	Common chickweed	Common dandelion				
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name	CORN									
Crop Variety										
Description										
Rating Date	5-20-2010	5-20-2010	5-20-2010	5-20-2010	5-20-2010	5-20-2010				
Rating Type	CONTEO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority	V2-4"									
Pest Stage Majority	16"	20"	10"	6"	7"	6"				
Pest Density, Unit	10 YD2	75 YD2	6 YD2	7 YD2	40 YD2	4 YD2				
Assessed By	MW	MW	MW	MW	MW	MW				
Trt No.	Treatment Name	Rate	Appl Unit	Code	7	8	9	10	11	12
7	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		94.3 a	99.0 a	99.0 a	99.0 a	99.0 a	77.5 a
	Corvus (2.63 SC)	0.0616 lb ai/a	B							
	Atrazine	1 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
8	Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		94.3 a	99.0 a	99.0 a	94.5 a	99.0 a	80.0 a
	V-10233 (76 WG)	0.143 lb ai/a	A							
	AMS - Liquid	2.5 lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
9	Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		99.0 a	99.0 a	99.0 a	86.8 a	85.8 a	63.8 ab
	Integrity (5.57 SC)	0.566 lb ai/a	A							
	AMS - Liquid	2.5 lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
10	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	99.0 a	99.0 a	94.5 a	99.0 a	60.0 ab
	V-10206 (85 WG)	0.186 lb ai/a	B							
	Atrazine	1 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
11	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	96.8 a	99.0 a	99.0 a	99.0 a	88.8 a
	V-10206 (85 WG)	0.186 lb ai/a	B							
	Sharpen 2.85 SC	0.111 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	GALAP	BROTE	LACSE	ERICA	STEME	TAROF			
Pest Scientific Name	Galium aparine	Bromus tectorum	Lactuca serri>	Conyza canaden>	Stellaria media	Taraxacum offi>			
Pest Name	Catchweed beds>	Downy brome	Prickly lettuce	Canada horsewe>	Common chickwe>	Common dandel>			
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name	CORN								
Crop Variety									
Description									
Rating Date	5-20-2010	5-20-2010	5-20-2010	5-20-2010	5-20-2010	5-20-2010			
Rating Type	CONTEO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	V2-4"								
Pest Stage Majority	16"	20"	10"	6"	7"	6"			
Pest Density, Unit	10 YD2	75 YD2	6 YD2	7 YD2	40 YD2	4 YD2			
Assessed By	MW	MW	MW	MW	MW	MW			
Trt Treatment	Rate	Appl							
No. Name	Rate	Unit	Code	7	8	9	10	11	12
12 Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	99.0 a	99.0 a	87.0 a	88.3 a	40.0 b
V-10206 (85 WG)	0.186 lb ai/a	B							
AMS - Liquid	2.5 lb ai/a	B							
Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
Atrazine	0.5 lb ai/a	C							
AMS - Liquid	2.5 lb ai/a	C							
LSD (P=.05)	5.34			1.88	0.00	19.53	11.97	21.83	
Standard Deviation	3.70			1.30	0.00	13.52	8.29	15.12	
CV	4.11			1.43	0.0	16.25	9.58	24.9	
Bartlett's X2	0.0			0.0	0.0	12.873	0.25	12.862	
P(Bartlett's X2)	.			.	.	0.075	0.883	0.169	
Replicate F	2.200			1.000	0.000	0.933	0.202	1.052	
Replicate Prob(F)	0.1066			0.4051	1.0000	0.4359	0.8940	0.3826	
Treatment F	235.748			1929.000	0.000	16.809	47.285	10.363	
Treatment Prob(F)	0.0001			0.0001	1.0000	0.0001	0.0001	0.0001	

Purdue University

Pest Type	W Weed					W Weed	W Weed	W Weed			
Pest Code	SETFA					SETFA	AMBEL	TAROF			
Pest Scientific Name	Setaria faberi					Setaria faberi	Ambrosia artem>	Taraxacum offi>			
Pest Name	Giant foxtail					Giant foxtail	Common ragweed	Common dandel>			
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Crop Variety											
Description											
Rating Date	5-20-2010	5-20-2010	5-20-2010	5-20-2010	5-24-2010	6-4-2010	6-4-2010	6-4-2010			
Rating Type	CONTRO	PHYCHL	PHYNLS	PHYLCU	COUNT	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1	1			
Crop Stage Majority					V3						
Pest Stage Majority	0.5"					4"	6"	10"			
Pest Density, Unit						60 YD2	15 YD2	2 YD2			
Assessed By	MW	MW	MW	MW	MH/BM						
Trt Treatment	Rate	Appl									
No. Name	Rate	Unit	Code	13	14	15	16	17	18	19	20
1 Untreated Check				0.0 c	0.0 a	0.0 a	0.0 a	14.0 c	0.0 d	0.0 b	0.0 b
2 Roundup PowerMax 4.5 SL AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a A 2.5 lb ai/a A 0.775 lb ae/a C 2.5 lb ai/a C			37.5 abc	4.0 a	0.8 a	0.0 a	32.3 a	12.5 cd	74.3 a	59.8 ab
3 Roundup PowerMax 4.5 SL V-10233 (76 WG) AMS - Liquid Roundup PowerMax 4.5 SL Atrazine AMS - Liquid	0.775 lb ae/a A 0.143 lb ai/a A 2.5 lb ai/a A 0.775 lb ae/a C 0.5 lb ai/a C 2.5 lb ai/a C			72.5 ab	2.0 a	0.8 a	4.5 a	27.0 ab	55.0 abc	91.8 a	37.3 ab
4 Roundup PowerMax 4.5 SL Valor SX (51 WG) AMS - Liquid Roundup PowerMax 4.5 SL Atrazine AMS - Liquid	0.775 lb ae/a A 0.064 lb ai/a A 2.5 lb ai/a A 0.775 lb ae/a C 0.5 lb ai/a C 2.5 lb ai/a C			67.5 ab	4.0 a	0.0 a	3.8 a	26.3 ab	30.0 bcd	86.8 a	32.5 ab
5 Roundup PowerMax 4.5 SL Bicep II Magnum (5.5 SC) AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a B 2.06 lb ai/a B 2.5 lb ai/a B 0.775 lb ae/a C 2.5 lb ai/a C			83.5 a	1.5 a	0.0 a	0.0 a	23.8 abc	52.5 abc	74.3 a	35.0 ab
6 Roundup PowerMax 4.5 SL Lexar (3.7 SC) AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a B 1.39 lb ai/a B 2.5 lb ai/a B 0.775 lb ae/a C 2.5 lb ai/a C			65.0 ab	5.5 a	3.0 a	0.0 a	26.5 ab	53.8 abc	99.0 a	87.3 a

Purdue University

Pest Type			W Weed					W Weed	W Weed	W Weed		
Pest Code			SETFA					SETFA	AMBEL	TAROF		
Pest Scientific Name			Setaria faberi					Setaria faberi	Ambrosia artem>	Taraxacum offi>		
Pest Name			Giant foxtail					Giant foxtail	Common ragweed	Common dandel>		
Crop Code												
BBCH Scale												
Crop Scientific Name												
Crop Name												
Crop Variety												
Description												
Rating Date			5-20-2010	5-20-2010	5-20-2010	5-20-2010	5-24-2010	6-4-2010	6-4-2010	6-4-2010		
Rating Type			CONTRO	PHYCHL	PHYNLS	PHYLCU	COUNT	CONTRO	CONTRO	CONTRO		
Rating Unit			%					%	%	%		
Number of Subsamples			1	1	1	1	1	1	1	1		
Crop Stage Majority							V3					
Pest Stage Majority			0.5"					4"	6"	10"		
Pest Density, Unit								60 YD2	15 YD2	2 YD2		
Assessed By			MW	MW	MW	MW	MH/BM					
Trt No.	Treatment Name	Rate	Appl Unit	Code	13	14	15	16	17	18	19	20
7	Roundup PowerMax 4.5 SL Corvus (2.63 SC) Atrazine AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a 0.0616 lb ai/a 1 lb ai/a 2.5 lb ai/a 0.775 lb ae/a 2.5 lb ai/a	B B B B C C		75.0 a	2.5 a	5.0 a	5.0 a	23.3 abc	75.0 ab	99.0 a	83.5 a
8	Roundup PowerMax 4.5 SL V-10233 (76 WG) AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a 0.143 lb ai/a 2.5 lb ai/a 0.775 lb ae/a 2.5 lb ai/a	A A A C C		59.5 ab	5.0 a	0.0 a	2.0 a	20.0 bc	59.8 abc	99.0 a	52.5 ab
9	Roundup PowerMax 4.5 SL Integrity (5.57 SC) AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a 0.566 lb ai/a 2.5 lb ai/a 0.775 lb ae/a 2.5 lb ai/a	A A A C C		22.5 bc	5.0 a	1.3 a	2.5 a	27.3 ab	17.5 cd	99.0 a	25.0 ab
10	Roundup PowerMax 4.5 SL V-10206 (85 WG) Atrazine AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a 0.186 lb ai/a 1 lb ai/a 2.5 lb ai/a 0.775 lb ae/a 2.5 lb ai/a	B B B B C C		88.5 a	3.3 a	2.5 a	5.0 a	18.8 bc	93.0 a	93.0 a	67.5 a
11	Roundup PowerMax 4.5 SL V-10206 (85 WG) Sharpen 2.85 SC AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a 0.186 lb ai/a 0.111 lb ai/a 2.5 lb ai/a 0.775 lb ae/a 2.5 lb ai/a	B B B B C C		90.0 a	3.3 a	0.0 a	0.8 a	25.5 ab	86.3 a	99.0 a	76.3 a

Purdue University

Pest Type	W Weed					W Weed	W Weed	W Weed		
Pest Code	SETFA					SETFA	AMBEL	TAROF		
Pest Scientific Name	Setaria faberi					Setaria faberi	Ambrosia artem>	Taraxacum offi>		
Pest Name	Giant foxtail					Giant foxtail	Common ragweed	Common dandel>		
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Crop Variety										
Description										
Rating Date	5-20-2010	5-20-2010	5-20-2010	5-20-2010	5-24-2010	6-4-2010	6-4-2010	6-4-2010		
Rating Type	CONTRO	PHYCHL	PHYNLS	PHYLCU	COUNT	CONTRO	CONTRO	CONTRO		
Rating Unit	%					%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Crop Stage Majority					V3					
Pest Stage Majority	0.5"					4"	6"	10"		
Pest Density, Unit						60 YD2	15 YD2	2 YD2		
Assessed By	MW	MW	MW	MW	MH/BM					
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit Code	13	14	15	16	17	18	19	20
12 Roundup PowerMax 4.5 SL	0.775 lb ae/a	B	81.3 a	4.0 a	0.0 a	0.8 a	28.0 ab	90.0 a	99.0 a	55.0 ab
V-10206 (85 WG)	0.186 lb ai/a	B								
AMS - Liquid	2.5 lb ai/a	B								
Roundup PowerMax 4.5 SL	0.775 lb ae/a	C								
Atrazine	0.5 lb ai/a	C								
AMS - Liquid	2.5 lb ai/a	C								
LSD (P=.05)	34.12		3.77	3.73	5.54	6.98	32.82	27.47	37.83	
Standard Deviation	23.63		2.61	2.58	3.84	4.84	22.73	19.02	26.20	
CV	38.18		78.33	233.85	189.84	19.84	43.63	22.51	51.41	
Bartlett's X2	23.797		8.203	8.404	18.844	18.689	24.239	8.631	12.386	
P(Bartlett's X2)	0.008*		0.514	0.135	0.009*	0.067	0.007*	0.071	0.26	
Replicate F	4.575		1.369	2.261	2.327	9.352	1.688	5.182	1.992	
Replicate Prob(F)	0.0087		0.2711	0.1016	0.0946	0.0001	0.1886	0.0048	0.1343	
Treatment F	5.631		1.523	1.544	1.153	4.036	7.626	8.786	3.941	
Treatment Prob(F)	0.0001		0.1750	0.1676	0.3583	0.0009	0.0001	0.0001	0.0011	

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	BROTE	LACSE	STEME	AMBTR	CHEAL	SETFA			
Pest Scientific Name	Bromus tectorum	Lactuca serrio>	Stellaria media	Ambrosia trifi>	Chenopodium al>	Setaria faberi			
Pest Name	Downy brome	Prickly lettuce	Common chickwe>	Giant ragweed	Common lambsqu>	Giant foxtail			
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Crop Variety									
Description									
Rating Date	6-4-2010	6-4-2010	6-4-2010	6-4-2010	6-4-2010	6-16-2010			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority						V6-36"			
Pest Stage Majority	02"	20"	6"			15"			
Pest Density, Unit	50 YD2	8 YD2	15 YD2			200 YD2			
Assessed By									
Trt Treatment	Rate	Appl							
No. Name	Rate	Unit	Code	21	22	23	24	25	26
1 Untreated Check				0.0 b	0.0 b	0.0 c	0.0 b	0.0 c	0.0 e
2 Roundup PowerMax 4.5 SL AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a A 2.5 lb ai/a A 0.775 lb ae/a C 2.5 lb ai/a C			99.0 a	95.5 a	52.3 b	52.3 a	57.0 ab	86.3 bc
3 Roundup PowerMax 4.5 SL V-10233 (76 WG) AMS - Liquid Roundup PowerMax 4.5 SL Atrazine AMS - Liquid	0.775 lb ae/a A 0.143 lb ai/a A 2.5 lb ai/a A 0.775 lb ae/a C 0.5 lb ai/a C 2.5 lb ai/a C			93.0 a	99.0 a	64.8 ab	64.5 a	62.0 ab	94.3 ab
4 Roundup PowerMax 4.5 SL Valor SX (51 WG) AMS - Liquid Roundup PowerMax 4.5 SL Atrazine AMS - Liquid	0.775 lb ae/a A 0.064 lb ai/a A 2.5 lb ai/a A 0.775 lb ae/a C 0.5 lb ai/a C 2.5 lb ai/a C			99.0 a	99.0 a	47.5 b	79.3 a	62.0 ab	96.0 a
5 Roundup PowerMax 4.5 SL Bicep II Magnum (5.5 SC) AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a B 2.06 lb ai/a B 2.5 lb ai/a B 0.775 lb ae/a C 2.5 lb ai/a C			70.8 a	99.0 a	91.8 a	99.0 a	99.0 a	77.3 d
6 Roundup PowerMax 4.5 SL Lexar (3.7 SC) AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a B 1.39 lb ai/a B 2.5 lb ai/a B 0.775 lb ae/a C 2.5 lb ai/a C			99.0 a	99.0 a	99.0 a	96.8 a	99.0 a	87.5 abc

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	BROTE	LACSE	STEME	AMBTR	CHEAL	SETFA				
Pest Scientific Name	Bromus tectorum	Lactuca serriol	Stellaria media	Ambrosia trifida	Chenopodium album	Setaria faberii				
Pest Name	Downy brome	Prickly lettuce	Common chickweed	Giant ragweed	Common lambsquarters	Giant foxtail				
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Crop Variety										
Description										
Rating Date	6-4-2010	6-4-2010	6-4-2010	6-4-2010	6-4-2010	6-16-2010				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority						V6-36"				
Pest Stage Majority	02"	20"	6"			15"				
Pest Density, Unit	50 YD2	8 YD2	15 YD2			200 YD2				
Assessed By										
Trt No.	Treatment Name	Rate	Appl Unit	Code	21	22	23	24	25	26
7	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	99.0 a	99.0 a	96.8 a	99.0 a	81.3 cd
	Corvus (2.63 SC)	0.0616 lb ai/a	B							
	Atrazine	1 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
8	Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		99.0 a	99.0 a	74.5 ab	84.3 a	84.3 a	84.0 cd
	V-10233 (76 WG)	0.143 lb ai/a	A							
	AMS - Liquid	2.5 lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
9	Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		99.0 a	95.5 a	99.0 a	67.0 a	10.0 bc	88.8 abc
	Integrity (5.57 SC)	0.566 lb ai/a	A							
	AMS - Liquid	2.5 lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
10	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	99.0 a	96.8 a	86.8 a	99.0 a	87.5 abc
	V-10206 (85 WG)	0.186 lb ai/a	B							
	Atrazine	1 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
11	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	99.0 a	94.3 a	99.0 a	54.8 ab	89.0 abc
	V-10206 (85 WG)	0.186 lb ai/a	B							
	Sharpen 2.85 SC	0.111 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	BROTE	LACSE	STEME	AMBTR	CHEAL	SETFA		
Pest Scientific Name	Bromus tectorum	Lactuca serriol	Stellaria media	Ambrosia trifida	Chenopodium album	Setaria faberii		
Pest Name	Downy brome	Prickly lettuce	Common chickweed	Giant ragweed	Common lambsquarters	Giant foxtail		
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Crop Variety								
Description								
Rating Date	6-4-2010	6-4-2010	6-4-2010	6-4-2010	6-4-2010	6-16-2010		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority						V6-36"		
Pest Stage Majority	02"	20"	6"			15"		
Pest Density, Unit	50 YD2	8 YD2	15 YD2			200 YD2		
Assessed By								
Trt Treatment	Rate	Appl						
No. Name	Rate	Unit Code	21	22	23	24	25	26
12 Roundup PowerMax 4.5 SL	0.775 lb ae/a	B	99.0 a	99.0 a	50.0 b	99.0 a	91.8 a	95.5 a
V-10206 (85 WG)	0.186 lb ai/a	B						
AMS - Liquid	2.5 lb ai/a	B						
Roundup PowerMax 4.5 SL	0.775 lb ae/a	C						
Atrazine	0.5 lb ai/a	C						
AMS - Liquid	2.5 lb ai/a	C						
LSD (P=.05)	20.56		4.19	25.19	33.69	39.66	5.53	
Standard Deviation	14.24		2.90	17.45	23.33	27.47	3.83	
CV	16.2		3.22	24.1	30.28	40.3	4.75	
Bartlett's X2	4.42		0.0	12.349	17.577	7.681	17.17	
P(Bartlett's X2)	0.036*		.	0.09	0.014*	0.262	0.071	
Replicate F	0.898		0.647	1.319	2.290	2.260	3.750	
Replicate Prob(F)	0.4527		0.5904	0.2846	0.0965	0.0997	0.0212	
Treatment F	16.421		384.166	12.424	6.135	6.280	184.402	
Treatment Prob(F)	0.0001		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	LACSE	AMBEL	TAROF	ERICA	AMBTR	CHEAL			
Pest Scientific Name	Lactuca serrio>	Ambrosia artem>	Taraxacum offi>	Conyza canaden>	Ambrosia trifi>	Chenopodium al>			
Pest Name	Prickly lettuce	Common ragweed	Common dandel>	Canada horsewe>	Giant ragweed	Common lambsqu>			
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Crop Variety									
Description									
Rating Date	6-16-2010	6-16-2010	6-16-2010	6-16-2010	6-16-2010	6-16-2010			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority									
Pest Stage Majority	24"	20"	10"	12"					
Pest Density, Unit	6 YD2	18 YD2	3 YD2	5 YD2					
Assessed By									
Trt Treatment	Rate	Appl							
No. Name	Rate	Unit	Code	27	28	29	30	31	32
1 Untreated Check				0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b
2 Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		99.0 a	95.5 a	87.0 a	84.8 a	93.3 a	99.0 a
AMS - Liquid	2.5 lb ai/a	A							
Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
AMS - Liquid	2.5 lb ai/a	C							
3 Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		99.0 a	98.0 a	80.0 a	88.5 a	96.8 a	99.0 a
V-10233 (76 WG)	0.143 lb ai/a	A							
AMS - Liquid	2.5 lb ai/a	A							
Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
Atrazine	0.5 lb ai/a	C							
AMS - Liquid	2.5 lb ai/a	C							
4 Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		98.0 a	94.3 a	74.8 a	91.0 a	95.5 a	98.0 a
Valor SX (51 WG)	0.064 lb ai/a	A							
AMS - Liquid	2.5 lb ai/a	A							
Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
Atrazine	0.5 lb ai/a	C							
AMS - Liquid	2.5 lb ai/a	C							
5 Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	99.3 a	59.9 a	96.9 a	87.3 a	99.2 a
Bicep II Magnum (5.5 SC)	2.06 lb ai/a	B							
AMS - Liquid	2.5 lb ai/a	B							
Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
AMS - Liquid	2.5 lb ai/a	C							
6 Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	99.0 a	93.0 a	96.8 a	91.0 a	96.8 a
Lexar (3.7 SC)	1.39 lb ai/a	B							
AMS - Liquid	2.5 lb ai/a	B							
Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
AMS - Liquid	2.5 lb ai/a	C							

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	LACSE	AMBEL	TAROF	ERICA	AMBTR	CHEAL				
Pest Scientific Name	Lactuca serrio>	Ambrosia artem>	Taraxacum offi>	Conyza canad>	Ambrosia trifi>	Chenopodium al>				
Pest Name	Prickly lettuce	Common ragweed	Common dandel>	Canada horsewe>	Giant ragweed	Common lambsqu>				
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Crop Variety										
Description										
Rating Date	6-16-2010	6-16-2010	6-16-2010	6-16-2010	6-16-2010	6-16-2010				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority										
Pest Stage Majority	24"	20"	10"	12"						
Pest Density, Unit	6 YD2	18 YD2	3 YD2	5 YD2						
Assessed By										
Trt No.	Treatment Name	Rate	Appl Unit	Code	27	28	29	30	31	32
7	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	99.0 a	89.3 a	99.0 a	89.5 a	99.0 a
	Corvus (2.63 SC)	0.0616 lb ai/a	B							
	Atrazine	1 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
8	Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		99.0 a	99.3 a	91.2 a	87.2 a	87.0 a	99.2 a
	V-10233 (76 WG)	0.143 lb ai/a	A							
	AMS - Liquid	2.5 lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
9	Roundup PowerMax 4.5 SL	0.775 lb ae/a	A		96.8 a	99.0 a	90.8 a	96.8 a	84.8 a	96.8 a
	Integrity (5.57 SC)	0.566 lb ai/a	A							
	AMS - Liquid	2.5 lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
10	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	99.0 a	86.0 a	99.0 a	89.5 a	99.0 a
	V-10206 (85 WG)	0.186 lb ai/a	B							
	Atrazine	1 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							
11	Roundup PowerMax 4.5 SL	0.775 lb ae/a	B		99.0 a	99.3 a	87.9 a	90.2 a	98.3 a	93.2 a
	V-10206 (85 WG)	0.186 lb ai/a	B							
	Sharpen 2.85 SC	0.111 lb ai/a	B							
	AMS - Liquid	2.5 lb ai/a	B							
	Roundup PowerMax 4.5 SL	0.775 lb ae/a	C							
	AMS - Liquid	2.5 lb ai/a	C							

Purdue University

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	W Weed AMARE Amaranthus ret> Redroot pigweed 6-16-2010 CONTRO % 1																																																																																																																																																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Trt No.</th> <th style="text-align: left;">Treatment Name</th> <th style="text-align: left;">Rate</th> <th style="text-align: left;">Unit</th> <th style="text-align: left;">Appl Code</th> <th style="text-align: left;">Mean</th> <th style="text-align: left;">SE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Untreated Check</td> <td></td> <td></td> <td></td> <td>0.0</td> <td>c</td> </tr> <tr> <td>2</td> <td>Roundup PowerMax 4.5 SL</td> <td>0.775</td> <td>lb ae/a</td> <td>A</td> <td rowspan="4">86.0</td> <td rowspan="4">ab</td> </tr> <tr> <td></td> <td>AMS - Liquid</td> <td>2.5</td> <td>lb ai/a</td> <td>A</td> </tr> <tr> <td></td> <td>Roundup PowerMax 4.5 SL</td> <td>0.775</td> <td>lb ae/a</td> <td>C</td> </tr> <tr> <td></td> <td>AMS - Liquid</td> <td>2.5</td> <td>lb ai/a</td> <td>C</td> </tr> <tr> <td>3</td> <td>Roundup PowerMax 4.5 SL</td> <td>0.775</td> <td>lb ae/a</td> <td>A</td> <td rowspan="6">99.0</td> <td rowspan="6">a</td> </tr> <tr> <td></td> <td>V-10233 (76 WG)</td> <td>0.143</td> <td>lb ai/a</td> <td>A</td> </tr> <tr> <td></td> <td>AMS - Liquid</td> <td>2.5</td> <td>lb ai/a</td> <td>A</td> </tr> <tr> <td></td> <td>Roundup PowerMax 4.5 SL</td> <td>0.775</td> <td>lb ae/a</td> <td>C</td> </tr> <tr> <td></td> <td>Atrazine</td> <td>0.5</td> <td>lb ai/a</td> <td>C</td> </tr> <tr> <td></td> <td>AMS - Liquid</td> <td>2.5</td> <td>lb ai/a</td> <td>C</td> </tr> <tr> <td>4</td> <td>Roundup PowerMax 4.5 SL</td> <td>0.775</td> <td>lb ae/a</td> <td>A</td> <td rowspan="6">98.0</td> <td rowspan="6">a</td> </tr> <tr> <td></td> <td>Valor SX (51 WG)</td> <td>0.064</td> <td>lb ai/a</td> <td>A</td> </tr> <tr> <td></td> <td>AMS - Liquid</td> <td>2.5</td> <td>lb ai/a</td> <td>A</td> </tr> <tr> <td></td> <td>Roundup PowerMax 4.5 SL</td> <td>0.775</td> <td>lb ae/a</td> <td>C</td> </tr> <tr> <td></td> <td>Atrazine</td> <td>0.5</td> <td>lb ai/a</td> <td>C</td> </tr> <tr> <td></td> <td>AMS - Liquid</td> <td>2.5</td> <td>lb ai/a</td> <td>C</td> </tr> <tr> <td>5</td> <td>Roundup PowerMax 4.5 SL</td> <td>0.775</td> <td>lb ae/a</td> <td>B</td> <td rowspan="5">82.6</td> <td rowspan="5">b</td> </tr> <tr> <td></td> <td>Bicep II Magnum (5.5 SC)</td> <td>2.06</td> <td>lb ai/a</td> <td>B</td> </tr> <tr> <td></td> <td>AMS - Liquid</td> <td>2.5</td> <td>lb ai/a</td> <td>B</td> </tr> <tr> <td></td> <td>Roundup PowerMax 4.5 SL</td> <td>0.775</td> <td>lb ae/a</td> <td>C</td> </tr> <tr> <td></td> <td>AMS - Liquid</td> <td>2.5</td> <td>lb ai/a</td> <td>C</td> </tr> <tr> <td>6</td> <td>Roundup PowerMax 4.5 SL</td> <td>0.775</td> <td>lb ae/a</td> <td>B</td> <td rowspan="5">87.3</td> <td rowspan="5">ab</td> </tr> <tr> <td></td> <td>Lexar (3.7 SC)</td> <td>1.39</td> <td>lb ai/a</td> <td>B</td> </tr> <tr> <td></td> <td>AMS - Liquid</td> <td>2.5</td> <td>lb ai/a</td> <td>B</td> </tr> <tr> <td></td> <td>Roundup PowerMax 4.5 SL</td> <td>0.775</td> <td>lb ae/a</td> <td>C</td> </tr> <tr> <td></td> <td>AMS - Liquid</td> <td>2.5</td> <td>lb ai/a</td> <td>C</td> </tr> </tbody> </table>	Trt No.	Treatment Name	Rate	Unit	Appl Code	Mean	SE	1	Untreated Check				0.0	c	2	Roundup PowerMax 4.5 SL	0.775	lb ae/a	A	86.0	ab		AMS - Liquid	2.5	lb ai/a	A		Roundup PowerMax 4.5 SL	0.775	lb ae/a	C		AMS - Liquid	2.5	lb ai/a	C	3	Roundup PowerMax 4.5 SL	0.775	lb ae/a	A	99.0	a		V-10233 (76 WG)	0.143	lb ai/a	A		AMS - Liquid	2.5	lb ai/a	A		Roundup PowerMax 4.5 SL	0.775	lb ae/a	C		Atrazine	0.5	lb ai/a	C		AMS - Liquid	2.5	lb ai/a	C	4	Roundup PowerMax 4.5 SL	0.775	lb ae/a	A	98.0	a		Valor SX (51 WG)	0.064	lb ai/a	A		AMS - Liquid	2.5	lb ai/a	A		Roundup PowerMax 4.5 SL	0.775	lb ae/a	C		Atrazine	0.5	lb ai/a	C		AMS - Liquid	2.5	lb ai/a	C	5	Roundup PowerMax 4.5 SL	0.775	lb ae/a	B	82.6	b		Bicep II Magnum (5.5 SC)	2.06	lb ai/a	B		AMS - Liquid	2.5	lb ai/a	B		Roundup PowerMax 4.5 SL	0.775	lb ae/a	C		AMS - Liquid	2.5	lb ai/a	C	6	Roundup PowerMax 4.5 SL	0.775	lb ae/a	B	87.3	ab		Lexar (3.7 SC)	1.39	lb ai/a	B		AMS - Liquid	2.5	lb ai/a	B		Roundup PowerMax 4.5 SL	0.775	lb ae/a	C		AMS - Liquid	2.5	lb ai/a	C
Trt No.	Treatment Name	Rate	Unit	Appl Code	Mean	SE																																																																																																																																																				
1	Untreated Check				0.0	c																																																																																																																																																				
2	Roundup PowerMax 4.5 SL	0.775	lb ae/a	A	86.0	ab																																																																																																																																																				
	AMS - Liquid	2.5	lb ai/a	A																																																																																																																																																						
	Roundup PowerMax 4.5 SL	0.775	lb ae/a	C																																																																																																																																																						
	AMS - Liquid	2.5	lb ai/a	C																																																																																																																																																						
3	Roundup PowerMax 4.5 SL	0.775	lb ae/a	A	99.0	a																																																																																																																																																				
	V-10233 (76 WG)	0.143	lb ai/a	A																																																																																																																																																						
	AMS - Liquid	2.5	lb ai/a	A																																																																																																																																																						
	Roundup PowerMax 4.5 SL	0.775	lb ae/a	C																																																																																																																																																						
	Atrazine	0.5	lb ai/a	C																																																																																																																																																						
	AMS - Liquid	2.5	lb ai/a	C																																																																																																																																																						
4	Roundup PowerMax 4.5 SL	0.775	lb ae/a	A	98.0	a																																																																																																																																																				
	Valor SX (51 WG)	0.064	lb ai/a	A																																																																																																																																																						
	AMS - Liquid	2.5	lb ai/a	A																																																																																																																																																						
	Roundup PowerMax 4.5 SL	0.775	lb ae/a	C																																																																																																																																																						
	Atrazine	0.5	lb ai/a	C																																																																																																																																																						
	AMS - Liquid	2.5	lb ai/a	C																																																																																																																																																						
5	Roundup PowerMax 4.5 SL	0.775	lb ae/a	B	82.6	b																																																																																																																																																				
	Bicep II Magnum (5.5 SC)	2.06	lb ai/a	B																																																																																																																																																						
	AMS - Liquid	2.5	lb ai/a	B																																																																																																																																																						
	Roundup PowerMax 4.5 SL	0.775	lb ae/a	C																																																																																																																																																						
	AMS - Liquid	2.5	lb ai/a	C																																																																																																																																																						
6	Roundup PowerMax 4.5 SL	0.775	lb ae/a	B	87.3	ab																																																																																																																																																				
	Lexar (3.7 SC)	1.39	lb ai/a	B																																																																																																																																																						
	AMS - Liquid	2.5	lb ai/a	B																																																																																																																																																						
	Roundup PowerMax 4.5 SL	0.775	lb ae/a	C																																																																																																																																																						
	AMS - Liquid	2.5	lb ai/a	C																																																																																																																																																						

Purdue University

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	W Weed AMARE Amaranthus ret> Redroot pigweed 6-16-2010 CONTRO % 1	
Trt Treatment No. Name	Rate Appl Rate Unit Code	33
7 Roundup PowerMax 4.5 SL Corvus (2.63 SC) Atrazine AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a B 0.0616 lb ai/a B 1 lb ai/a B 2.5 lb ai/a B 0.775 lb ae/a C 2.5 lb ai/a C	83.5 b
8 Roundup PowerMax 4.5 SL V-10233 (76 WG) AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a A 0.143 lb ai/a A 2.5 lb ai/a A 0.775 lb ae/a C 2.5 lb ai/a C	87.3 ab
9 Roundup PowerMax 4.5 SL Integrity (5.57 SC) AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a A 0.566 lb ai/a A 2.5 lb ai/a A 0.775 lb ae/a C 2.5 lb ai/a C	81.3 b
10 Roundup PowerMax 4.5 SL V-10206 (85 WG) Atrazine AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a B 0.186 lb ai/a B 1 lb ai/a B 2.5 lb ai/a B 0.775 lb ae/a C 2.5 lb ai/a C	87.3 ab
11 Roundup PowerMax 4.5 SL V-10206 (85 WG) Sharpen 2.85 SC AMS - Liquid Roundup PowerMax 4.5 SL AMS - Liquid	0.775 lb ae/a B 0.186 lb ai/a B 0.111 lb ai/a B 2.5 lb ai/a B 0.775 lb ae/a C 2.5 lb ai/a C	84.3 b

Purdue University

Pest Type	W Weed
Pest Code	AMARE
Pest Scientific Name	Amaranthus ret>
Pest Name	Redroot pigweed
Crop Code	
BBCH Scale	
Crop Scientific Name	
Crop Name	
Crop Variety	
Description	
Rating Date	6-16-2010
Rating Type	CONTRO
Rating Unit	%
Number of Subsamples	1
Crop Stage Majority	
Pest Stage Majority	
Pest Density, Unit	
Assessed By	
Trt Treatment	Rate Appl
No. Name	Rate Unit Code
	33
12 Roundup PowerMax 4.5 SL	0.775 lb ae/a B
V-10206 (85 WG)	0.186 lb ai/a B
AMS - Liquid	2.5 lb ai/a B
Roundup PowerMax 4.5 SL	0.775 lb ae/a C
Atrazine	0.5 lb ai/a C
AMS - Liquid	2.5 lb ai/a C
	99.0 a
LSD (P=.05)	8.95
Standard Deviation	6.20
CV	7.63
Bartlett's X2	8.499
P(Bartlett's X2)	0.291
Replicate F	3.359
Replicate Prob(F)	0.0317
Treatment F	72.469
Treatment Prob(F)	0.0001