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VALOR EARLY PREPLANT BURNDOWN - FIELD CORN

Trial ID: 13S-THP-NTC-32 Protocol ID: 13S-THP-NTC-32
 Location: Throckmorton Study Director:
 Project ID: VUSA2013FIERCCEMD68.01 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

General Trial Information

Study Director: Bill Johnson
Investigator: Dr. Bill Johnson **Title:** Professor

Discipline: H herbicide
Trial Status: E established
Initiation Date: Mar-26-2013

Trial Location

City: Lafayette
State/Prov.: IN
Postal Code: 47909
Country: USA

Personnel

Study Director: Bill Johnson
Investigator: Dr. Bill Johnson **Title:** Professor
Affiliation: Purdue University
Address: 915 W State Street
Location: West Lafayette, IN, USA
Postal Code: 47907 **E-mail:** wj@purdue.edu
Phone No.: 765-494-4656 **Mobile No.:** 765-404-9801

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: USA United States

Crop Description

Crop 1: ZEAM02 Zea mays var. indentata GMO Corn, BT/Roundup Ready
Variety: DEKALB DKC61-21 **Description:** RR/LL
BBCH Scale: BCOR **Planting Date:** May-13-2013
Planting Method: SEEDED seeded **Rate, Unit:** 32000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN

Soil Moisture: SLIWET slightly wet **Soil Temperature, Unit:** 59 F
Emergence Date: May-20-2013

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Pest Description	
Pest 1 Type: W	Code: TAROF Taraxacum officinale Common Name: Common dandelion
Pest 2 Type: W	Code: THLSS Thlaspi sp. Common Name: Pennycress
Pest 3 Type: W	Code: LACSE Lactuca serriola Common Name: Prickly lettuce
Pest 4 Type: W	Code: LAMAM Lamium amplexicaule Common Name: Henbit
Pest 5 Type: W	Code: STEME Stellaria media Common Name: Common chickweed
Pest 6 Type: W	Code: COIMA Conium maculatum Common Name: Poison hemlock
Pest 7 Type: W	Code: ERICA Conyza canadensis Common Name: Canada horseweed
Pest 8 Type: W	Common Name: MAIRS TAIL
Pest 9 Type: W	Common Name: WILD CARROT
Pest10 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 FT2	Tillage Type: NOTILL no-till
Replications: 4	Study Design: RACOBL 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	

Application Description		
	A	B
Application Date:	May-1-2013	Jun-18-2013
Time of Day:	AM	AM
Application Method:	SPRAY	SPRAY
Application Timing:	EPP-7	BULKREP
Application Placement:	SOIL	SOIL
Applied By:	MW	BM
Air Temperature, Unit:	70 F	76 F
% Relative Humidity:	58	73
Wind Velocity, Unit:	4.5 MPH	1.2 MPH
Wind Direction:	S	SW
Dew Presence (Y/N):	Y yes	Y yes
Soil Temperature, Unit:	56 F	74 F
Soil Moisture:	SLIWET	DRY
% Cloud Cover:	0	

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Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAM0 BCOR	ZEAM0 BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V4-V5

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	TAROF W	TAROF W
Height, Unit:	6 IN	
Density, Unit:	4 YD2	
Pest 2 Code, Type, Scale:	THLSS W	THLSS W
Height, Unit:	13 IN	
Density, Unit:	10 YD2	
Pest 3 Code, Type, Scale:	LACSE W	LACSE W
Height, Unit:	6.5 IN	2.5 IN
Density, Unit:	4 YD2	4 YD2
Pest 4 Code, Type, Scale:	LAMAM W	LAMAM W
Height, Unit:	7 IN	
Density, Unit:	10 FT2	
Pest 5 Code, Type, Scale:	STEME W	STEME W
Height, Unit:	4 IN	
Density, Unit:	6 FT2	
Pest 6 Code, Type, Scale:	COIMA W	COIMA W
Height, Unit:	2 IN	
Density, Unit:	2 FT2	
Pest 7 Code, Type, Scale:	ERICA W	ERICA W
Height, Unit:	3.5 IN	
Density, Unit:	7 YD2	
W	W	
Height, Unit:		8 IN
Density, Unit:		10 FT2
W	W	
Height, Unit:		3.5 IN
Density, Unit:		1 YD2
Pest10 Code, Type, Scale:	AMBTR W	AMBTR W
Height, Unit:		8 IN
Density, Unit:		3 YD2

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Application Equipment

	A	B
Appl. Equipment:	CUB	CUB
Equipment Type:	SPTRMO	TRMOSP
Operation Pressure, Unit:		20 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	XR 110 02	110 02 XR
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:	6	6
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	19 IN	18 IN
Ground Speed, Unit:	2.1 MPH	2.2 MPH
Carrier:	MEIGS	ACRE
Spray Volume, Unit:	20 gal/ac	20 gal/ac
Mix Size, Unit:	2.5 liters	2.5 liters
Propellant:		CO2

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Trial ID: 13S-THP-NTC-32 Protocol ID: 13S-THP-NTC-32
 Location: Throckmorton Study Director:
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Reps: 4 Plots: 10 by 30 feet
 Spray vol: 20 gal/ac Mix size: 2.5 liters (min 2.0856)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Other Rate	Other Rate	Growth Unit	Stage	Appl Code	Appl Description	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	Untreated Check													101	502	801	1002
2	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		EARPRE	A	EPP7		21.39 ml/mx	102	302	601	902	
	2,4-D	3.8 LBA/GAL	SL		0.95 lb ai/a	2 pt/a		EARPRE	A	EPP7		31.25 ml/mx					
	FIERCE	76 %W/W	WG		2.28 oz ai/a	3 oz wt/a		EARPRE	A	EPP7		2.808 g/mx					
	AMS - Liquid	3.4 LB/GAL	SL		0.525 lb ai/a	0.62 qt/a		EARPRE	A	EPP7		19.3 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		POST	B	42 DAP		21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		0.525 lb ai/a	0.62 qt/a		POST	B	42 DAP		19.3 ml/mx					
3	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		EARPRE	A	EPP7		21.39 ml/mx	201	401	701	1001	
	2,4-D	3.8 LBA/GAL	SL		0.95 lb ai/a	2 pt/a		EARPRE	A	EPP7		31.25 ml/mx					
	FIERCE	76 %W/W	WG		2.28 oz ai/a	3 oz wt/a		EARPRE	A	EPP7		2.808 g/mx					
	AMS - Liquid	3.4 LB/GAL	SL		0.525 lb ai/a	0.62 qt/a		EARPRE	A	EPP7		19.3 ml/mx					
	AATREX	4 LB/GAL	SC		1 lb ai/a	1 qt/a		EARPRE	A	EPP7		31.25 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		POST	B	42 DAP		21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		0.525 lb ai/a	0.62 qt/a		POST	B	42 DAP		19.3 ml/mx					
4	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		EARPRE	A	EPP7		21.39 ml/mx	202	402	702	901	
	2,4-D	3.8 LBA/GAL	SL		0.95 lb ai/a	2 pt/a		EARPRE	A	EPP7		31.25 ml/mx					
	SureStart (4.25 SC)	4.25 LBA/GAL	SC		1.6 lb ai/a	3 pt/a		EARPRE	A	EPP7		47.05 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		0.525 lb ai/a	0.62 qt/a		EARPRE	A	EPP7		19.3 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		POST	B	42 DAP		21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		0.525 lb ai/a	0.62 qt/a		POST	B	42 DAP		19.3 ml/mx					
5	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		EARPRE	A	EPP7		21.39 ml/mx	301	501	602	802	
	2,4-D	3.8 LBA/GAL	SL		0.95 lb ai/a	2 pt/a		EARPRE	A	EPP7		31.25 ml/mx					
	FIERCE	76 %W/W	WG		2.28 oz ai/a	3 oz wt/a		EARPRE	A	EPP7		2.808 g/mx					
	AATREX	4 LB/GAL	SC		1 lb ai/a	1 qt/a		EARPRE	A	EPP7		31.25 ml/mx					
	Sharpen 2.85 SC	2.85 LBA/GAL	SC		0.0445 lb ai/a	2 fl oz/a		EARPRE	A	EPP7		1.952 ml/mx					
	MSO				1 % v/v	1 % v/v		EARPRE	A	EPP7		25.0 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		0.525 lb ai/a	0.62 qt/a		EARPRE	A	EPP7		19.3 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		POST	B	42 DAP		21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		0.525 lb ai/a	0.62 qt/a		POST	B	42 DAP		19.3 ml/mx					

Sort Order: Treatment

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 Location: Throckmorton Study Director:
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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	BROTE	LACSE	THLSS	STEME	ERICA					
Pest Scientific Name	Bromus tectorum	Lactuca serrio>	Thlaspi sp.	Stellaria media	Conyza canaden>					
Pest Name	Downy brome	Prickly lettuce	Pennycress	Common chickwe>	Canada horsewe>					
Crop Code						ZEAMD				
BBCH Scale						BCOR				
Crop Scientific Name						Zea mays inden>				
Crop Name						Dent corn				
Part Rated						PLANT C				
Rating Date	May-13-2013	May-13-2013	May-13-2013	May-13-2013	May-13-2013	May-29-2013				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority						V2				
Pest Stage Majority	18 IN	12 IN	18 IN	6 IN	5 IN					
Pest Density, Unit	5 YD2	6 FT2	4 FT2	10 FT2	7 YD2					
Assessed By	MW	MW	MW	MW	MW	MW				
Days After First/Last Applic.	12 12	12 12	12 12	12 12	12 12	28 28				
Trt-Eval Interval	12 DA-A	12 DA-A	12 DA-A	12 DA-A	12 DA-A	28 DA-A				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1	0 DP-1	16 DP-1				
Days After Emergence	-7 DE-1	-7 DE-1	-7 DE-1	-7 DE-1	-7 DE-1	9 DE-1				
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	Plot	1	2	3	4	5	6
1 Untreated Check				101	0.0	0.0	0.0	0.0	0.0	0.0
				502	0.0	0.0	0.0	0.0	0.0	0.0
				801	0.0	0.0	0.0	0.0	0.0	0.0
				1002	0.0	0.0	0.0	0.0	0.0	0.0
				Mean =	0.0	0.0	0.0	0.0	0.0	0.0
2 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A		102	90.0	85.0	80.0	95.0	90.0	0.0
2,4-D	0.95 lb ai/a	A		302	90.0	90.0	95.0	95.0	90.0	0.0
FIERCE	2.28 oz ai/a	A		601	85.0	85.0	75.0	90.0	85.0	0.0
AMS - Liquid	0.525 lb ai/a	A		902	65.0	99.0	85.0	80.0	99.0	0.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
AMS - Liquid	0.525 lb ai/a	B								
				Mean =	82.5	89.8	83.8	90.0	91.0	0.0
3 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A		201	90.0	80.0	75.0	95.0	90.0	0.0
2,4-D	0.95 lb ai/a	A		401	85.0	90.0	85.0	90.0	80.0	0.0
FIERCE	2.28 oz ai/a	A		701	50.0	99.0	99.0	95.0	99.0	0.0
AMS - Liquid	0.525 lb ai/a	A		1001	60.0	90.0	99.0	95.0	99.0	0.0
AATREX	1 lb ai/a	A								
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
AMS - Liquid	0.525 lb ai/a	B								
				Mean =	71.3	89.8	89.5	93.8	92.0	0.0
4 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A		202	85.0	75.0	90.0	90.0	85.0	0.0
2,4-D	0.95 lb ai/a	A		402	80.0	80.0	85.0	95.0	75.0	0.0
SureStart (4.25 SC)	1.6 lb ai/a	A		702	40.0	70.0	80.0	85.0	99.0	0.0
AMS - Liquid	0.525 lb ai/a	A		901	80.0	99.0	99.0	95.0	99.0	0.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
AMS - Liquid	0.525 lb ai/a	B								
				Mean =	71.3	81.0	88.5	91.3	89.5	0.0

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	W Weed BROTE Bromus tectorum Downy brome	W Weed LACSE Lactuca serrio> Prickly lettuce	W Weed THLSS Thlaspi sp. Pennycress	W Weed STEME Stellaria media Common chickwe>	W Weed ERICA Conyza canaden> Canada horsewe>		
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	
Part Rated						PLANT C	
Rating Date	May-13-2013	May-13-2013	May-13-2013	May-13-2013	May-13-2013	May-29-2013	
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	
Rating Unit	%	%	%	%	%	%	
Number of Subsamples	1	1	1	1	1	1	
Crop Stage Majority						V2	
Pest Stage Majority	18 IN	12 IN	18 IN	6 IN	5 IN		
Pest Density, Unit	5 YD2	6 FT2	4 FT2	10 FT2	7 YD2		
Assessed By	MW	MW	MW	MW	MW	MW	
Days After First/Last Applic.	12 12	12 12	12 12	12 12	12 12	28 28	
Trt-Eval Interval	12 DA-A	12 DA-A	12 DA-A	12 DA-A	12 DA-A	28 DA-A	
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1	0 DP-1	16 DP-1	
Days After Emergence	-7 DE-1	-7 DE-1	-7 DE-1	-7 DE-1	-7 DE-1	9 DE-1	
Trt Treatment							
No. Name	Rate Unit Code Plot	1	2	3	4	5	6
5 Roundup PowerMax 4.5 SL	0.77 lb ae/a A 301	95.0	99.0	95.0	99.0	99.0	0.0
2,4-D	0.95 lb ai/a A 501	90.0	95.0	95.0	99.0	99.0	0.0
FIERCE	2.28 oz ai/a A 602	90.0	99.0	99.0	99.0	99.0	0.0
AATREX	1 lb ai/a A 802	60.0	85.0	90.0	90.0	99.0	0.0
Sharpen 2.85 SC	0.0445 lb ai/a A						
MSO	1 % v/v A						
AMS - Liquid	0.525 lb ai/a A						
Roundup PowerMax 4.5 SL	0.77 lb ae/a B						
AMS - Liquid	0.525 lb ai/a B						
Mean =		83.8	94.5	94.8	96.8	99.0	0.0

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Pest Type	W Weed	W Weed	W Weed	W Weed		W Weed				
Pest Code	ERICA	LACSE	COIMA	SETFA		LACSE				
Pest Scientific Name	Conyza canadensis	Lactuca serriola	Conium maculatum	Setaria faberii		Lactuca serriola				
Pest Name	Canada horseweed	Prickly lettuce	Poison hemlock	Giant foxtail		Prickly lettuce				
Crop Code										
BBCB Scale										
Crop Scientific Name										
Crop Name										
Part Rated	- P	- P	- P	- P		- P				
Rating Date	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-18-2013				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority					V3					
Pest Stage Majority	14 IN	30 IN	40 IN	4 IN		40 IN				
Pest Density, Unit	10 FT2	2 YD2	2 YD2	10 FT2		2 YD2				
Assessed By	MW	MW	MW	MW		MW				
Days After First/Last Applic.	42 42	42 42	42 42	42 42	42 42	48 48				
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	48 DA-A				
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	36 DP-1				
Days After Emergence	23 DE-1	23 DE-1	23 DE-1	23 DE-1	23 DE-1	29 DE-1				
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	Plot	7	8	9	10	11	12
1 Untreated Check				101	0.0	0.0	0.0	0.0	0.0	0.0
				502	0.0	0.0	0.0	0.0	0.0	0.0
				801	0.0	0.0	0.0	0.0	0.0	0.0
				1002	0.0	0.0	0.0	0.0	0.0	0.0
				Mean =	0.0	0.0	0.0	0.0	0.0	0.0
2 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A		102	85.0	95.0	90.0	70.0	0.0	90.0
2,4-D	0.95 lb ai/a	A		302	85.0	99.0	99.0	85.0	0.0	99.0
FIERCE	2.28 oz ai/a	A		601	70.0	99.0	99.0	90.0	0.0	99.0
AMS - Liquid	0.525 lb ai/a	A		902	99.0	99.0	50.0	60.0	0.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
AMS - Liquid	0.525 lb ai/a	B								
				Mean =	84.8	98.0	84.5	76.3	0.0	96.8
3 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A		201	90.0	99.0	85.0	85.0	0.0	99.0
2,4-D	0.95 lb ai/a	A		401	80.0	99.0	70.0	95.0	0.0	99.0
FIERCE	2.28 oz ai/a	A		701	90.0	99.0	95.0	99.0	0.0	99.0
AMS - Liquid	0.525 lb ai/a	A		1001	95.0	99.0	60.0	75.0	0.0	99.0
AATREX	1 lb ai/a	A								
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
AMS - Liquid	0.525 lb ai/a	B								
				Mean =	88.8	99.0	77.5	88.5	0.0	99.0
4 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A		202	95.0	99.0	99.0	60.0	0.0	99.0
2,4-D	0.95 lb ai/a	A		402	70.0	99.0	99.0	99.0	0.0	99.0
SureStart (4.25 SC)	1.6 lb ai/a	A		702	99.0	99.0	99.0	65.0	0.0	99.0
AMS - Liquid	0.525 lb ai/a	A		901	99.0	99.0	90.0	40.0	0.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
AMS - Liquid	0.525 lb ai/a	B								
				Mean =	90.8	99.0	96.8	66.0	0.0	99.0

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	W Weed ERICA	W Weed LACSE	W Weed COIMA	W Weed SETFA		W Weed LACSE			
Pest Type	Conyza canadensis	Lactuca serriola	Conium maculatum	Setaria faberii		Lactuca serriola			
Pest Code	ERICA	LACSE	COIMA	SETFA		LACSE			
Pest Scientific Name	Conyza canadensis	Lactuca serriola	Conium maculatum	Setaria faberii		Lactuca serriola			
Pest Name	Canada horseweed	Prickly lettuce	Poison hemlock	Giant foxtail		Prickly lettuce			
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Part Rated	- P	- P	- P	- P		- P			
Rating Date	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-18-2013			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority					V3				
Pest Stage Majority	14 IN	30 IN	40 IN	4 IN		40 IN			
Pest Density, Unit	10 FT2	2 YD2	2 YD2	10 FT2		2 YD2			
Assessed By	MW	MW	MW	MW		MW			
Days After First/Last Applic.	42 42	42 42	42 42	42 42	42 42	48 48			
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	48 DA-A			
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	36 DP-1			
Days After Emergence	23 DE-1	23 DE-1	23 DE-1	23 DE-1	23 DE-1	29 DE-1			
Trt Treatment									
No. Name	Rate Unit	Appl Code	Plot	7	8	9	10	11	12
5 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A 301		90.0	99.0	99.0	65.0	0.0	99.0
2,4-D	0.95 lb ai/a	A 501		99.0	99.0	99.0	90.0	0.0	99.0
FIERCE	2.28 oz ai/a	A 602		99.0	99.0	99.0	85.0	0.0	99.0
AATREX	1 lb ai/a	A 802		90.0	99.0	90.0	85.0	0.0	99.0
Sharpen 2.85 SC	0.0445 lb ai/a	A							
MSO	1 % v/v	A							
AMS - Liquid	0.525 lb ai/a	A							
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
AMS - Liquid	0.525 lb ai/a	B							
		Mean =		94.5	99.0	96.8	81.3	0.0	99.0

Purdue University

Pest Type	W Weed	W Weed	W Weed			W Weed				
Pest Code	ERICA	SETFA	AMBTR			LACSE				
Pest Scientific Name	Conyza canadens>	Setaria faberi	Ambrosia trifi>			Lactuca serrio>				
Pest Name	Canada horsewe>	Giant foxtail	Giant ragweed			Prickly lettuce				
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Part Rated	- P	- P								
Rating Date	Jun-18-2013	Jun-18-2013	Jun-18-2013	Jun-18-2013	Jun-18-2013	Jul-9-2013				
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	PHYSTU	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority				V5	V5					
Pest Stage Majority	14 IN	6 IN	8 IN			28 IN				
Pest Density, Unit	5 FT2	15 FT2	2 YD2			3 YD2				
Assessed By	MW	MW	MW	MW	MW	MW				
Days After First/Last Applic.	48 48	48 48	48 48	48 48	48 48	69 21				
Trt-Eval Interval	48 DA-A	48 DA-A	48 DA-A	48 DA-A	48 DA-A	69 DA-A				
Plant-Eval Interval	36 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1	57 DP-1				
Days After Emergence	29 DE-1	29 DE-1	29 DE-1	29 DE-1	29 DE-1	50 DE-1				
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	Plot	13	14	15	16	17	18
1 Untreated Check				101	0.0	0.0	0.0	0.0	40.0	0.0
				502	0.0	0.0	0.0	0.0	30.0	0.0
				801	0.0	0.0	0.0	0.0	60.0	0.0
				1002	0.0	0.0	0.0	0.0	40.0	0.0
				Mean =	0.0	0.0	0.0	0.0	42.5	0.0
2 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A		102	85.0	75.0	99.0	0.0	0.0	99.0
2,4-D	0.95 lb ai/a	A		302	85.0	80.0	99.0	0.0	0.0	99.0
FIERCE	2.28 oz ai/a	A		601	70.0	85.0	99.0	0.0	0.0	99.0
AMS - Liquid	0.525 lb ai/a	A		902	85.0	90.0	99.0	0.0	15.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
AMS - Liquid	0.525 lb ai/a	B								
				Mean =	81.3	82.5	99.0	0.0	3.8	99.0
3 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A		201	87.0	85.0	99.0	0.0	0.0	99.0
2,4-D	0.95 lb ai/a	A		401	90.0	95.0	70.0	0.0	5.0	99.0
FIERCE	2.28 oz ai/a	A		701	99.0	97.0	90.0	0.0	0.0	99.0
AMS - Liquid	0.525 lb ai/a	A		1001	99.0	70.0	80.0	0.0	0.0	99.0
AATREX	1 lb ai/a	A								
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
AMS - Liquid	0.525 lb ai/a	B								
				Mean =	93.8	86.8	84.8	0.0	1.3	99.0
4 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A		202	99.0	0.0	99.0	0.0	0.0	99.0
2,4-D	0.95 lb ai/a	A		402	99.0	30.0	99.0	0.0	5.0	99.0
SureStart (4.25 SC)	1.6 lb ai/a	A		702	99.0	75.0	99.0	0.0	0.0	99.0
AMS - Liquid	0.525 lb ai/a	A		901	99.0	10.0	60.0	0.0	10.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
AMS - Liquid	0.525 lb ai/a	B								
				Mean =	99.0	28.8	89.3	0.0	3.8	99.0

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Pest Type	W Weed	W Weed	W Weed			W Weed				
Pest Code	ERICA	SETFA	AMBTR			LACSE				
Pest Scientific Name	Conyza canadensis	Setaria faberii	Ambrosia trifida			Lactuca serriola				
Pest Name	Canada horseweed	Giant foxtail	Giant ragweed			Prickly lettuce				
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Part Rated	- P	- P								
Rating Date	Jun-18-2013	Jun-18-2013	Jun-18-2013	Jun-18-2013	Jun-18-2013	Jul-9-2013				
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	PHYSTU	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority				V5	V5					
Pest Stage Majority	14 IN	6 IN	8 IN			28 IN				
Pest Density, Unit	5 FT2	15 FT2	2 YD2			3 YD2				
Assessed By	MW	MW	MW	MW	MW	MW				
Days After First/Last Applic.	48 48	48 48	48 48	48 48	48 48	69 21				
Trt-Eval Interval	48 DA-A	48 DA-A	48 DA-A	48 DA-A	48 DA-A	69 DA-A				
Plant-Eval Interval	36 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1	57 DP-1				
Days After Emergence	29 DE-1	29 DE-1	29 DE-1	29 DE-1	29 DE-1	50 DE-1				
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	Plot	13	14	15	16	17	18
5 Roundup PowerMax 4.5 SL	0.77 lb	ae/a	A	301	99.0	60.0	99.0	0.0	5.0	99.0
2,4-D	0.95 lb	ai/a	A	501	99.0	80.0	99.0	0.0	0.0	99.0
FIERCE	2.28 oz	ai/a	A	602	99.0	80.0	99.0	0.0	0.0	99.0
AATREX	1 lb	ai/a	A	802	95.0	90.0	99.0	0.0	0.0	99.0
Sharpen 2.85 SC	0.0445 lb	ai/a	A							
MSO	1 %	v/v	A							
AMS - Liquid	0.525 lb	ai/a	A							
Roundup PowerMax 4.5 SL	0.77 lb	ae/a	B							
AMS - Liquid	0.525 lb	ai/a	B							
				Mean =	98.0	77.5	99.0	0.0	1.3	99.0

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Pest Type		W Weed	W Weed		
Pest Code		ERICA	TAROF		
Pest Scientific Name		Conyza canadens	Taraxacum offi		
Pest Name		Canada horsewe	Common dandel		
Crop Code				ZEAMX	ZEAMX
BBCH Scale				BCOR	BCOR
Crop Scientific Name				Zea mays	Zea mays
Crop Name				Corn	Corn
Part Rated					
Rating Date		Jul-9-2013	Jul-9-2013	Oct-18-2013	Oct-18-2013
Rating Type		CONTRO	CONTRO	MOICON	YIELD
Rating Unit		%	%	%	bu/ac
Number of Subsamples		1	1	1	1
Crop Stage Majority					
Pest Stage Majority		14 IN	15 IN		
Pest Density, Unit		6 FT2	2 YD2		
Assessed By		MW	MW		
Days After First/Last Applic.		69 21	69 21	170 122	170 122
Trt-Eval Interval		69 DA-A	69 DA-A		
Plant-Eval Interval		57 DP-1	57 DP-1	158 DP-1	158 DP-1
Days After Emergence		50 DE-1	50 DE-1	151 DE-1	151 DE-1
Trt Treatment	Rate	Appl			
No. Name	Rate	Unit Code Plot	19	20	21
1 Untreated Check		101	0.0	99.0	22.80
		502	0.0	0.0	20.70
		801	0.0	0.0	19.40
		1002	0.0	0.0	19.00
		Mean =	0.0	24.8	20.48
2 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A 102	95.0	87.0	19.00
2,4-D	0.95 lb ai/a	A 302	93.0	99.0	18.20
FIERCE	2.28 oz ai/a	A 601	90.0	99.0	17.70
AMS - Liquid	0.525 lb ai/a	A 902	99.0	90.0	21.30
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B			
AMS - Liquid	0.525 lb ai/a	B			
		Mean =	94.3	93.8	19.05
3 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A 201	93.0	99.0	20.60
2,4-D	0.95 lb ai/a	A 401	87.0	99.0	18.30
FIERCE	2.28 oz ai/a	A 701	99.0	99.0	18.50
AMS - Liquid	0.525 lb ai/a	A 1001	99.0	99.0	19.40
AATREX	1 lb ai/a	A			
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B			
AMS - Liquid	0.525 lb ai/a	B			
		Mean =	94.5	99.0	19.20
4 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A 202	99.0	99.0	18.40
2,4-D	0.95 lb ai/a	A 402	99.0	99.0	19.80
SureStart (4.25 SC)	1.6 lb ai/a	A 702	99.0	99.0	19.60
AMS - Liquid	0.525 lb ai/a	A 901	99.0	99.0	20.20
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B			
AMS - Liquid	0.525 lb ai/a	B			
		Mean =	99.0	99.0	19.50
					213.55

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Pest Type	W Weed	W Weed		
Pest Code	ERICA	TAROF		
Pest Scientific Name	Conyza canadens	Taraxacum offi		
Pest Name	Canada horsewe	Common dandel		
Crop Code			ZEAMX	ZEAMX
BBCH Scale			BCOR	BCOR
Crop Scientific Name			Zea mays	Zea mays
Crop Name			Corn	Corn
Part Rated				
Rating Date	Jul-9-2013	Jul-9-2013	Oct-18-2013	Oct-18-2013
Rating Type	CONTRO	CONTRO	MOICON	YIELD
Rating Unit	%	%	%	bu/ac
Number of Subsamples	1	1	1	1
Crop Stage Majority				
Pest Stage Majority	14 IN	15 IN		
Pest Density, Unit	6 FT2	2 YD2		
Assessed By	MW	MW		
Days After First/Last Applic.	69 21	69 21	170 122	170 122
Trt-Eval Interval	69 DA-A	69 DA-A		
Plant-Eval Interval	57 DP-1	57 DP-1	158 DP-1	158 DP-1
Days After Emergence	50 DE-1	50 DE-1	151 DE-1	151 DE-1
Trt Treatment	Rate	Appl		
No. Name	Rate	Unit Code Plot	19	20
5 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A 301	97.0	99.0
2,4-D	0.95 lb ai/a	A 501	95.0	99.0
FIERCE	2.28 oz ai/a	A 602	99.0	99.0
AATREX	1 lb ai/a	A 802	97.0	99.0
Sharpen 2.85 SC	0.0445 lb ai/a	A		
MSO	1 % v/v	A		
AMS - Liquid	0.525 lb ai/a	A		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B		
AMS - Liquid	0.525 lb ai/a	B		
Mean =			97.0	99.0
				18.70
				217.43

Purdue University

VALOR EARLY PREPLANT BURNDOWN - FIELD CORN

Trial ID: 13S-THP-NTC-32 Protocol ID: 13S-THP-NTC-32
 Location: Throckmorton Study Director:
 Project ID: VUSA2013FIERCCEMD68.01 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

BROTE, Bromus tectorum, = US
 LACSE, Lactuca serriola, = US
 THLSS, Thlaspi sp., = US
 STEME, Stellaria media, = US
 ERICA, Conyza canadensis, = US
 COIMA, Conium maculatum, = US
 SETFA, Setaria faberi, = US
 AMBTR, Ambrosia trifida, = US
 TAROF, Taraxacum officinale, = US

Crop Code

ZEAMD, BCOR, Zea mays indentata, = US
 ZEAMX, BCOR, Zea mays, = US

Part Rated

PLANT = plant
 C = Crop is Part Rated
 P = Pest is Part Rated

Rating Type

CONTRO = control / burndown or knockdown
 PHYGEN = phytotoxicity - general / injury
 PHYSTU = phytotoxicity - stunting
 MOICON = moisture content
 YIELD = yield

Rating Unit

% = percent
 bu/ac = bushels per acre

YD2 = per square yard
 FT2 = per square foot

Plant-Eval Interval

0 DP-1 = 1 ZEAM02 May-13-2013
 16 DP-1 = 1 ZEAM02 May-13-2013
 30 DP-1 = 1 ZEAM02 May-13-2013
 36 DP-1 = 1 ZEAM02 May-13-2013
 57 DP-1 = 1 ZEAM02 May-13-2013
 158 DP-1 = 1 ZEAM02 May-13-2013

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VALOR EARLY PREPLANT BURNDOWN - FIELD CORN

Trial ID: 13S-THP-NTC-32 Protocol ID: 13S-THP-NTC-32
 Location: Throckmorton Study Director:
 Project ID: VUSA2013FIERCCEMD68.01 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	
Pest Code	BROTE	LACSE	THLSS	STEME	ERICA	
Pest Scientific Name	Bromus tectorum	Lactuca serrio>	Thlaspi sp.	Stellaria media	Conyza canaden>	
Pest Name	Downy brome	Prickly lettuce	Pennycress	Common chickwe>	Canada horsewe>	
Crop Code						ZEAMD
BBCH Scale						BCOR
Crop Scientific Name						Zea mays inden>
Crop Name						Dent corn
Part Rated						PLANT C
Rating Date	May-13-2013	May-13-2013	May-13-2013	May-13-2013	May-13-2013	May-29-2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority						V2
Pest Stage Majority	18 IN	12 IN	18 IN	6 IN	5 IN	
Pest Density, Unit	5 YD2	6 FT2	4 FT2	10 FT2	7 YD2	
Assessed By	MW	MW	MW	MW	MW	MW
Days After First/Last Applic.	12 12	12 12	12 12	12 12	12 12	28 28
Trt-Eval Interval	12 DA-A	12 DA-A	12 DA-A	12 DA-A	12 DA-A	28 DA-A
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1	0 DP-1	16 DP-1
Days After Emergence	-7 DE-1	-7 DE-1	-7 DE-1	-7 DE-1	-7 DE-1	9 DE-1
Trt Treatment						
No. Name	1	2	3	4	5	6
1 Untreated Check	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a
2 Roundup PowerMax 4.5 SL	82.5 a	89.8 a	83.8 a	90.0 a	91.0 a	0.0 a
2,4-D						
FIERCE						
AMS - Liquid						
Roundup PowerMax 4.5 SL						
AMS - Liquid						
3 Roundup PowerMax 4.5 SL	71.3 a	89.8 a	89.5 a	93.8 a	92.0 a	0.0 a
2,4-D						
FIERCE						
AMS - Liquid						
AATREX						
Roundup PowerMax 4.5 SL						
AMS - Liquid						
4 Roundup PowerMax 4.5 SL	71.3 a	81.0 a	88.5 a	91.3 a	89.5 a	0.0 a
2,4-D						
SureStart (4.25 SC)						
AMS - Liquid						
Roundup PowerMax 4.5 SL						
AMS - Liquid						

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	BROTE	LACSE	THLSS	STEME	ERICA	
Pest Scientific Name	Bromus tectorum	Lactuca serrio>	Thlaspi sp.	Stellaria media	Conyza canadens>	
Pest Name	Downy brome	Prickly lettuce	Pennycress	Common chickwe>	Canada horsewe>	
Crop Code						ZEAMD
BBCH Scale						BCOR
Crop Scientific Name						Zea mays inden>
Crop Name						Dent corn
Part Rated						PLANT C
Rating Date	May-13-2013	May-13-2013	May-13-2013	May-13-2013	May-13-2013	May-29-2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority						V2
Pest Stage Majority	18 IN	12 IN	18 IN	6 IN	5 IN	
Pest Density, Unit	5 YD2	6 FT2	4 FT2	10 FT2	7 YD2	
Assessed By	MW	MW	MW	MW	MW	MW
Days After First/Last Applic.	12 12	12 12	12 12	12 12	12 12	28 28
Trt-Eval Interval	12 DA-A	12 DA-A	12 DA-A	12 DA-A	12 DA-A	28 DA-A
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1	0 DP-1	16 DP-1
Days After Emergence	-7 DE-1	-7 DE-1	-7 DE-1	-7 DE-1	-7 DE-1	9 DE-1
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate
No. Name	Unit	Unit	Unit	Unit	Unit	Unit
	Code	Code	Code	Code	Code	Code
	1	2	3	4	5	6
5 Roundup PowerMax 4.5 SL	0.77 lb ae/a A					
2,4-D	0.95 lb ai/a A					
FIERCE	2.28 oz ai/a A					
AATREX	1 lb ai/a A					
Sharpen 2.85 SC	0.0445 lb ai/a A					
MSO	1 % v/v A					
AMS - Liquid	0.525 lb ai/a A					
Roundup PowerMax 4.5 SL	0.77 lb ae/a B					
AMS - Liquid	0.525 lb ai/a B					
LSD (P=.05)	20.27	12.64	12.21	7.01	9.48	0.00
Standard Deviation	13.16	8.20	7.93	4.55	6.15	0.00
CV	21.31	11.56	11.12	6.12	8.28	0.0
Bartlett's X2	0.95	1.795	3.102	2.679	1.278	0.0
P(Bartlett's X2)	0.813	0.616	0.376	0.444	0.528	.
Replicate F	2.992	0.578	0.604	0.809	2.681	0.000
Replicate Prob(F)	0.0732	0.6402	0.6249	0.5131	0.0940	1.0000
Treatment F	28.350	95.031	102.147	335.505	183.639	0.000
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	1.0000

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed		W Weed
Pest Code	ERICA	LACSE	COIMA	SETFA		LACSE
Pest Scientific Name	Conyza canadensis	Lactuca serriola	Conium maculatum	Setaria faberii		Lactuca serriola
Pest Name	Canada horseweed	Prickly lettuce	Poison hemlock	Giant foxtail		Prickly lettuce
Crop Code						
BBCB Scale						
Crop Scientific Name						
Crop Name						
Part Rated	- P	- P	- P	- P		- P
Rating Date	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-18-2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority					V3	
Pest Stage Majority	14 IN	30 IN	40 IN	4 IN		40 IN
Pest Density, Unit	10 FT2	2 YD2	2 YD2	10 FT2		2 YD2
Assessed By	MW	MW	MW	MW		MW
Days After First/Last Applic.	42 42	42 42	42 42	42 42	42 42	48 48
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	48 DA-A
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	36 DP-1
Days After Emergence	23 DE-1	23 DE-1	23 DE-1	23 DE-1	23 DE-1	29 DE-1
Trt Treatment						
No. Name	7	8	9	10	11	12
1 Untreated Check	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a	0.0 b
2 Roundup PowerMax 4.5 SL	84.8 a	98.0 a	84.5 a	76.3 a	0.0 a	96.8 a
2,4-D						
FIERCE						
AMS - Liquid						
Roundup PowerMax 4.5 SL						
AMS - Liquid						
3 Roundup PowerMax 4.5 SL	88.8 a	99.0 a	77.5 a	88.5 a	0.0 a	99.0 a
2,4-D						
FIERCE						
AMS - Liquid						
AATREX						
Roundup PowerMax 4.5 SL						
AMS - Liquid						
4 Roundup PowerMax 4.5 SL	90.8 a	99.0 a	96.8 a	66.0 a	0.0 a	99.0 a
2,4-D						
SureStart (4.25 SC)						
AMS - Liquid						
Roundup PowerMax 4.5 SL						
AMS - Liquid						

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Pest Type	W Weed ERICA	W Weed LACSE	W Weed COIMA	W Weed SETFA	W Weed LACSE
Pest Code	ERICA	LACSE	COIMA	SETFA	LACSE
Pest Scientific Name	Conyza canadensis	Lactuca serriola	Conium maculatum	Setaria faberii	Lactuca serriola
Pest Name	Canada horseweed	Prickly lettuce	Poison hemlock	Giant foxtail	Prickly lettuce
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Part Rated	- P	- P	- P	- P	- P
Rating Date	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-18-2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Crop Stage Majority				V3	
Pest Stage Majority	14 IN	30 IN	40 IN	4 IN	40 IN
Pest Density, Unit	10 FT2	2 YD2	2 YD2	10 FT2	2 YD2
Assessed By	MW	MW	MW	MW	MW
Days After First/Last Applic.	42 42	42 42	42 42	42 42	48 48
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A	48 DA-A
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	36 DP-1
Days After Emergence	23 DE-1	23 DE-1	23 DE-1	23 DE-1	29 DE-1
Trt Treatment					
No. Name	7	8	9	10	11
5 Roundup PowerMax 4.5 SL	0.77 lb ae/a A				
2,4-D	0.95 lb ai/a A				
FIERCE	2.28 oz ai/a A				
AATREX	1 lb ai/a A				
Sharpen 2.85 SC	0.0445 lb ai/a A				
MISO	1 % v/v A				
AMS - Liquid	0.525 lb ai/a A				
Roundup PowerMax 4.5 SL	0.77 lb ae/a B				
AMS - Liquid	0.525 lb ai/a B				
LSD (P=.05)	13.81	1.38	15.88	17.48	0.00
Standard Deviation	8.97	0.89	10.31	11.35	0.00
CV	12.5	1.13	14.5	18.19	0.0
Bartlett's X2	3.456	0.0	9.77	2.754	0.0
P(Bartlett's X2)	0.327	.	0.021*	0.431	.
Replicate F	0.997	1.000	3.802	3.989	0.000
Replicate Prob(F)	0.4273	0.4262	0.0398	0.0348	1.0000
Treatment F	80.663	9752.501	62.024	39.876	0.000
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	1.0000

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Pest Type	W Weed ERICA	W Weed SETFA	W Weed AMBTR			W Weed LACSE	W Weed ERICA			
Pest Code										
Pest Scientific Name	Conyza canadensis	Setaria faberii	Ambrosia trifida			Lactuca serriola	Conyza canadensis			
Pest Name	Canada horseweed	Giant foxtail	Giant ragweed			Prickly lettuce	Canada horseweed			
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Part Rated	- P	- P								
Rating Date	Jun-18-2013	Jun-18-2013	Jun-18-2013	Jun-18-2013	Jun-18-2013	Jul-9-2013	Jul-9-2013			
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	PHYSTU	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
Crop Stage Majority				V5	V5					
Pest Stage Majority	14 IN	6 IN	8 IN			28 IN	14 IN			
Pest Density, Unit	5 FT2	15 FT2	2 YD2			3 YD2	6 FT2			
Assessed By	MW	MW	MW	MW	MW	MW	MW			
Days After First/Last Applic.	48 48	48 48	48 48	48 48	48 48	69 21	69 21			
Trt-Eval Interval	48 DA-A	48 DA-A	48 DA-A	48 DA-A	48 DA-A	69 DA-A	69 DA-A			
Plant-Eval Interval	36 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1	57 DP-1	57 DP-1			
Days After Emergence	29 DE-1	29 DE-1	29 DE-1	29 DE-1	29 DE-1	50 DE-1	50 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	13	14	15	16	17	18	19
5 Roundup PowerMax 4.5 SL	0.77 lb ae/a	A		98.0 a	77.5 a	99.0 a	0.0 a	1.3 b	99.0 a	97.0 a
2,4-D	0.95 lb ai/a	A								
FIERCE	2.28 oz ai/a	A								
AATREX	1 lb ai/a	A								
Sharpen 2.85 SC	0.0445 lb ai/a	A								
MISO	1 % v/v	A								
AMS - Liquid	0.525 lb ai/a	A								
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
AMS - Liquid	0.525 lb ai/a	B								
LSD (P=.05)				7.47	24.10	15.50	0.00	11.47	0.00	4.63
Standard Deviation				4.85	15.64	10.06	0.00	7.44	0.00	3.01
CV				6.52	28.39	13.53	0.0	70.9	0.0	3.91
Bartlett's X2				4.005	7.662	0.551	0.0	9.945	0.0	3.685
P(Bartlett's X2)				0.135	0.054	0.458	.	0.041*	.	0.158
Replicate F				0.187	1.959	1.305	0.000	0.511	0.000	1.526
Replicate Prob(F)				0.9032	0.1740	0.3180	1.0000	0.6820	1.0000	0.2583
Treatment F				302.607	24.453	69.854	0.000	23.211	0.000	821.048
Treatment Prob(F)				0.0001	0.0001	0.0001	1.0000	0.0001	1.0000	0.0001

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Pest Type	W Weed		
Pest Code	TAROF		
Pest Scientific Name	Taraxacum offi>		
Pest Name	Common dandel>		
Crop Code	ZEAMX		ZEAMX
BBCB Scale	BCOR		BCOR
Crop Scientific Name	Zea mays		Zea mays
Crop Name	Corn		Corn
Part Rated			
Rating Date	Jul-9-2013	Oct-18-2013	Oct-18-2013
Rating Type	CONTRO	MOICON	YIELD
Rating Unit	%	%	bu/ac
Number of Subsamples	1	1	1
Crop Stage Majority			
Pest Stage Majority	15 IN		
Pest Density, Unit	2 YD2		
Assessed By	MW		
Days After First/Last Applic.	69 21	170 122	170 122
Trt-Eval Interval	69 DA-A		
Plant-Eval Interval	57 DP-1	158 DP-1	158 DP-1
Days After Emergence	50 DE-1	151 DE-1	151 DE-1
Trt Treatment	Rate	Appl	
No. Name	Rate	Unit	Code
	20		21
			22
1 Untreated Check	24.8 b		20.48 a
			57.45 b
2 Roundup PowerMax 4.5 SL	0.77 lb ae/a A		
2,4-D	0.95 lb ai/a A		
FIERCE	2.28 oz ai/a A		
AMS - Liquid	0.525 lb ai/a A		
Roundup PowerMax 4.5 SL	0.77 lb ae/a B		
AMS - Liquid	0.525 lb ai/a B		
	93.8 a		19.05 a
			212.40 a
3 Roundup PowerMax 4.5 SL	0.77 lb ae/a A		
2,4-D	0.95 lb ai/a A		
FIERCE	2.28 oz ai/a A		
AMS - Liquid	0.525 lb ai/a A		
AATREX	1 lb ai/a A		
Roundup PowerMax 4.5 SL	0.77 lb ae/a B		
AMS - Liquid	0.525 lb ai/a B		
	99.0 a		19.20 a
			223.10 a
4 Roundup PowerMax 4.5 SL	0.77 lb ae/a A		
2,4-D	0.95 lb ai/a A		
SureStart (4.25 SC)	1.6 lb ai/a A		
AMS - Liquid	0.525 lb ai/a A		
Roundup PowerMax 4.5 SL	0.77 lb ae/a B		
AMS - Liquid	0.525 lb ai/a B		
	99.0 a		19.50 a
			213.55 a

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Pest Type	W Weed		
Pest Code	TAROF		
Pest Scientific Name	Taraxacum offi>		
Pest Name	Common dandel>		
Crop Code		ZEAMX	ZEAMX
BBCH Scale		BCOR	BCOR
Crop Scientific Name		Zea mays	Zea mays
Crop Name		Corn	Corn
Part Rated			
Rating Date	Jul-9-2013	Oct-18-2013	Oct-18-2013
Rating Type	CONTRO	MOICON	YIELD
Rating Unit	%	%	bu/ac
Number of Subsamples	1	1	1
Crop Stage Majority			
Pest Stage Majority	15 IN		
Pest Density, Unit	2 YD2		
Assessed By	MW		
Days After First/Last Applic.	69 21	170 122	170 122
Trt-Eval Interval	69 DA-A		
Plant-Eval Interval	57 DP-1	158 DP-1	158 DP-1
Days After Emergence	50 DE-1	151 DE-1	151 DE-1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit Code		
		20	21
			22
5 Roundup PowerMax 4.5 SL	0.77 lb ae/a A	99.0 a	18.70 a
2,4-D	0.95 lb ai/a A		
FIERCE	2.28 oz ai/a A		
AATREX	1 lb ai/a A		
Sharpen 2.85 SC	0.0445 lb ai/a A		
MSO	1 % v/v A		
AMS - Liquid	0.525 lb ai/a A		
Roundup PowerMax 4.5 SL	0.77 lb ae/a B		
AMS - Liquid	0.525 lb ai/a B		
LSD (P=.05)		35.13	1.912
Standard Deviation		22.80	1.241
CV		27.44	6.4
Bartlett's X2		8.142	3.516
P(Bartlett's X2)		0.004*	0.475
Replicate F		0.786	0.952
Replicate Prob(F)		0.5246	0.4466
Treatment F		8.225	1.180
Treatment Prob(F)		0.0020	0.3683
			0.458
			0.7164
			43.110
			0.0001

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VALOR EARLY PREPLANT BURNDOWN - FIELD CORN

Trial ID: 13S-THP-NTC-32 Protocol ID: 13S-THP-NTC-32
 Location: Throckmorton Study Director:
 Project ID: VUSA2013FIERCCEMD68.01 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

BROTE, Bromus tectorum, = US
 LACSE, Lactuca serriola, = US
 THLSS, Thlaspi sp., = US
 STEME, Stellaria media, = US
 ERICA, Conyza canadensis, = US
 COIMA, Conium maculatum, = US
 SETFA, Setaria faberi, = US
 AMBTR, Ambrosia trifida, = US
 TAROF, Taraxacum officinale, = US

Crop Code

ZEAMD, BCOR, Zea mays indentata, = US
 ZEAMX, BCOR, Zea mays, = US

Part Rated

PLANT = plant
 C = Crop is Part Rated
 P = Pest is Part Rated

Rating Type

CONTRO = control / burndown or knockdown
 PHYGEN = phytotoxicity - general / injury
 PHYSTU = phytotoxicity - stunting
 MOICON = moisture content
 YIELD = yield

Rating Unit

% = percent
 bu/ac = bushels per acre

YD2 = per square yard
 FT2 = per square foot

Plant-Eval Interval

0 DP-1 = 1 ZEAM02 May-13-2013
 16 DP-1 = 1 ZEAM02 May-13-2013
 30 DP-1 = 1 ZEAM02 May-13-2013
 36 DP-1 = 1 ZEAM02 May-13-2013
 57 DP-1 = 1 ZEAM02 May-13-2013
 158 DP-1 = 1 ZEAM02 May-13-2013