

University of Wisconsin-Madison

Burndown Evaluation: Minimum Tillage

Study Director: T. L. Trower **Title:** Senior Outreach Specialist
Investigator: V. M. Davis
Discipline: H herbicide

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: Croplan T8 421 VT3 **Description:** VT3
BBCH Scale: BCOR **Planting Date:** May-6-2011
Planting Method: SEEDED seeded **Rate, Unit:** 36000 S/A
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN **Spacing Within Row, Unit:** 5 IN
Seed Bed: MEDTRA medium/trashy
Soil Moisture: MOIST **Emergence Date:** May-19-2011

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:** VERAR Veronica arvensis
Common Name: Corn speedwell

Pest 4 Type: W **Code:** CAPBP Capsella bursa-pastoris
Common Name: Shepherd's purse

Pest 5 Type: W **Code:** POROL Portulaca oleracea
Common Name: Common purslane

Site and Design

Plot Width, Unit: 10 FT **Site Type:** CROPL
Plot Length, Unit: 25 FT
Plot Area, Unit: 250 FT² **Study Design:** RACOB Randomized Complete Block (RCB)
Replications: 4

Soil Description

Description Name: Fayette
Texture: SIL silt loam
Soil Name: Fayette

Application Description

	A
Application Date:	May-7-2011
Time of Day:	11:50AM
Application Method:	Broadcast
Application Timing:	Pre
Application Placement:	Surface
Applied By:	T. Trower
Air Temperature, Unit:	77 F
% Relative Humidity:	35
Wind Velocity, Unit:	5 MPH
Wind Direction:	NE
Soil Temperature, Unit:	62 F
Soil Moisture:	DRY/MST
% Cloud Cover:	50

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMD BCOR
Stage Scale Used:	BBCH
Stage Majority, Percent:	Pre

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	SETFA W
Stage Majority, Percent:	1 lf
Height, Unit:	0.25 IN
Pest 2 Code, Type, Scale:	AMBTR W
Stage Majority, Percent:	2 lvs
Height, Unit:	1 IN
Height Minimum, Maximum:	1 2
Density, Unit:	2 FT2
Pest 3 Code, Type, Scale:	VERAR W
Stage Majority, Percent:	2 lv
Height, Unit:	0.5 IN
Height Minimum, Maximum:	0.5 1
Pest 4 Code, Type, Scale:	CAPBP W
Stage Majority, Percent:	Pre
Pest 5 Code, Type, Scale:	POROL W
Stage Majority, Percent:	Pre

Application Equipment

	A
Appl. Equipment:	BACSPR
Operating Pressure, Unit:	23 PSI
Nozzle Type:	Flat Fan
Nozzle Size:	TT 11015
Nozzle Spacing, Unit:	20 IN
Boom Length, Unit:	10 FT
Boom Height, Unit:	19 IN
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Spray Volume, Unit:	20 gal/ac
Mix Size, Unit:	2.2 liters
Propellant:	CO2

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Pest Name					Faber's foxtail	Faber's foxtail
Rating Date					May-23-2011	Jun-3-2011
Rating Type					CONTROL	CONTROL
Rating Unit					%	%
Plant-Eval Interval					17 DP-1	28 DP-1
Trt	Treatment	Rate	Appl			
No.	Name	Unit	Code		3	10
1	Nontreated				0	0
2	Corvus	5.6 fl oz/a	A		100 a	100 a
	atrazine	1 qt/a	A			
	COC	1 % v/v	A			
3	Corvus	5.6 fl oz/a	A		100 a	100 a
	atrazine	1 qt/a	A			
	Roundup PowerMax	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
4	Corvus	5.6 fl oz/a	A		100 a	100 a
	atrazine	1 qt/a	A			
	Ignite 280	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
5	Capreno	3 fl oz/a	A		100 a	100 a
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
6	Capreno	3 fl oz/a	A		100 a	100 a
	atrazine	1 qt/a	A			
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
7	Capreno	4 fl oz/a	A		100 a	100 a
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
8	Capreno	5 fl oz/a	A		100 a	100 a
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
9	Capreno	3 fl oz/a	A		100 a	100 a
	Ignite 280	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
10	Capreno	3 fl oz/a	A		100 a	100 a
	Ignite 280	22 fl oz/a	A			
	Harness	2.1 pt/a	A			
	AMS	8.5 lb/100 gal	A			
11	Capreno	3 fl oz/a	A		100 a	100 a
	Roundup PowerMax	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
12	Capreno	3 fl oz/a	A		100 a	100 a
	Roundup PowerMax	22 fl oz/a	A			
	Harness	2.1 pt/a	A			
	AMS	8.5 lb/100 gal	A			
13	Halex GT	3.8 pt/a	A		100 a	100 a
	Activator 90	0.25 % v/v	A			
	AMS	8.5 lb/100 gal	A			
14	Harness	2.1 pt/a	A		100 a	100 a
	Roundup PowerMax	22 fl oz/a	A			
15	Verdict	16 fl oz/a	A		100 a	100 a
	MSO	1 % v/v	A			
	Roundup PowerMax	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
LSD (P=.10)					0.0	0.2

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Pest Name					Crownweed	Crownweed
Rating Date					May-23-2011	Jun-3-2011
Rating Type					CONTROL	CONTROL
Rating Unit					%	%
Plant-Eval Interval					17 DP-1	28 DP-1
Trt No.	Treatment Name	Rate	Unit	Appl Code	5	12
1	Nontreated				0	0
2	Corvus	5.6 fl oz/a	A		99 a	97 a
	atrazine	1 qt/a	A			
	COC	1 % v/v	A			
3	Corvus	5.6 fl oz/a	A		100 a	99 a
	atrazine	1 qt/a	A			
	Roundup PowerMax	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
4	Corvus	5.6 fl oz/a	A		100 a	100 a
	atrazine	1 qt/a	A			
	Ignite 280	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
5	Capreno	3 fl oz/a	A		91 a	88 a
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
6	Capreno	3 fl oz/a	A		98 a	96 a
	atrazine	1 qt/a	A			
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
7	Capreno	4 fl oz/a	A		89 a	84 a
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
8	Capreno	5 fl oz/a	A		93 a	90 a
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
9	Capreno	3 fl oz/a	A		90 a	85 a
	Ignite 280	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
10	Capreno	3 fl oz/a	A		95 a	90 a
	Ignite 280	22 fl oz/a	A			
	Harness	2.1 pt/a	A			
	AMS	8.5 lb/100 gal	A			
11	Capreno	3 fl oz/a	A		94 a	88 a
	Roundup PowerMax	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
12	Capreno	3 fl oz/a	A		95 a	94 a
	Roundup PowerMax	22 fl oz/a	A			
	Harness	2.1 pt/a	A			
	AMS	8.5 lb/100 gal	A			
13	Halex GT	3.8 pt/a	A		96 a	93 a
	Activator 90	0.25 % v/v	A			
	AMS	8.5 lb/100 gal	A			
14	Harness	2.1 pt/a	A		96 a	88 a
	Roundup PowerMax	22 fl oz/a	A			
15	Verdict	16 fl oz/a	A		98 a	94 a
	MSO	1 % v/v	A			
	Roundup PowerMax	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
LSD (P=.10)					7.4	12.4

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Pest Name				Shepherd's pur>	Shepherd's pur>
Rating Date				May-23-2011	Jun-3-2011
Rating Type				CONTROL	CONTROL
Rating Unit				%	%
Plant-Eval Interval				17 DP-1	28 DP-1
Trt No.	Treatment Name	Rate	Appl Unit Code	6	13
1	Nontreated			0	0
2	Corvus	5.6 fl oz/a	A	100 a	100 a
	atrazine	1 qt/a	A		
	COC	1 % v/v	A		
3	Corvus	5.6 fl oz/a	A	100 a	100 a
	atrazine	1 qt/a	A		
	Roundup PowerMax	22 fl oz/a	A		
	AMS	8.5 lb/100 gal	A		
4	Corvus	5.6 fl oz/a	A	100 a	100 a
	atrazine	1 qt/a	A		
	Ignite 280	22 fl oz/a	A		
	AMS	8.5 lb/100 gal	A		
5	Capreno	3 fl oz/a	A	100 a	100 a
	COC	1 % v/v	A		
	AMS	8.5 lb/100 gal	A		
6	Capreno	3 fl oz/a	A	100 a	100 a
	atrazine	1 qt/a	A		
	COC	1 % v/v	A		
	AMS	8.5 lb/100 gal	A		
7	Capreno	4 fl oz/a	A	100 a	99 a
	COC	1 % v/v	A		
	AMS	8.5 lb/100 gal	A		
8	Capreno	5 fl oz/a	A	100 a	100 a
	COC	1 % v/v	A		
	AMS	8.5 lb/100 gal	A		
9	Capreno	3 fl oz/a	A	100 a	100 a
	Ignite 280	22 fl oz/a	A		
	AMS	8.5 lb/100 gal	A		
10	Capreno	3 fl oz/a	A	100 a	100 a
	Ignite 280	22 fl oz/a	A		
	Harness	2.1 pt/a	A		
	AMS	8.5 lb/100 gal	A		
11	Capreno	3 fl oz/a	A	100 a	100 a
	Roundup PowerMax	22 fl oz/a	A		
	AMS	8.5 lb/100 gal	A		
12	Capreno	3 fl oz/a	A	100 a	99 a
	Roundup PowerMax	22 fl oz/a	A		
	Harness	2.1 pt/a	A		
	AMS	8.5 lb/100 gal	A		
13	Halex GT	3.8 pt/a	A	100 a	100 a
	Activator 90	0.25 % v/v	A		
	AMS	8.5 lb/100 gal	A		
14	Harness	2.1 pt/a	A	100 a	100 a
	Roundup PowerMax	22 fl oz/a	A		
15	Verdict	16 fl oz/a	A	100 a	100 a
	MSO	1 % v/v	A		
	Roundup PowerMax	22 fl oz/a	A		
	AMS	8.5 lb/100 gal	A		
LSD (P=.10)				0.0	0.7

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Pest Name Rating Date Rating Type Rating Unit Plant-Eval Interval					Common purslane May-23-2011 CONTROL % 17 DP-1	Common purslane Jun-3-2011 CONTROL % 28 DP-1
Trt No.	Treatment Name	Rate	Unit	Appl Code	7	14
1	Nontreated				0	0
2	Corvus	5.6 fl oz/a	A		100 a	99 a
	atrazine	1 qt/a	A			
	COC	1 % v/v	A			
3	Corvus	5.6 fl oz/a	A		100 a	100 a
	atrazine	1 qt/a	A			
	Roundup PowerMax	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
4	Corvus	5.6 fl oz/a	A		100 a	100 a
	atrazine	1 qt/a	A			
	Ignite 280	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
5	Capreno	3 fl oz/a	A		96 a	92 a
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
6	Capreno	3 fl oz/a	A		99 a	98 a
	atrazine	1 qt/a	A			
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
7	Capreno	4 fl oz/a	A		99 a	96 a
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
8	Capreno	5 fl oz/a	A		98 a	98 a
	COC	1 % v/v	A			
	AMS	8.5 lb/100 gal	A			
9	Capreno	3 fl oz/a	A		96 a	94 a
	Ignite 280	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
10	Capreno	3 fl oz/a	A		99 a	99 a
	Ignite 280	22 fl oz/a	A			
	Harness	2.1 pt/a	A			
	AMS	8.5 lb/100 gal	A			
11	Capreno	3 fl oz/a	A		100 a	100 a
	Roundup PowerMax	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
12	Capreno	3 fl oz/a	A		100 a	99 a
	Roundup PowerMax	22 fl oz/a	A			
	Harness	2.1 pt/a	A			
	AMS	8.5 lb/100 gal	A			
13	Halex GT	3.8 pt/a	A		98 a	98 a
	Activator 90	0.25 % v/v	A			
	AMS	8.5 lb/100 gal	A			
14	Harness	2.1 pt/a	A		95 a	93 a
	Roundup PowerMax	22 fl oz/a	A			
15	Verdict	16 fl oz/a	A		92 a	89 a
	MSO	1 % v/v	A			
	Roundup PowerMax	22 fl oz/a	A			
	AMS	8.5 lb/100 gal	A			
LSD (P=.10)					4.6	6.9

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Pest Name Rating Date Rating Type Rating Unit Plant-Eval Interval				Velvetleaf Jun-3-2011 CONTROL % 28 DP-1
Trt No.	Treatment Name	Rate Rate Unit	Appl Code	
1	Nontreated			0
2	Corvus	5.6 fl oz/a	A	100 a
	atrazine	1 qt/a	A	
	COC	1 % v/v	A	
3	Corvus	5.6 fl oz/a	A	100 a
	atrazine	1 qt/a	A	
	Roundup PowerMax	22 fl oz/a	A	
	AMS	8.5 lb/100 gal	A	
4	Corvus	5.6 fl oz/a	A	100 a
	atrazine	1 qt/a	A	
	Ignite 280	22 fl oz/a	A	
	AMS	8.5 lb/100 gal	A	
5	Capreno	3 fl oz/a	A	100 a
	COC	1 % v/v	A	
	AMS	8.5 lb/100 gal	A	
6	Capreno	3 fl oz/a	A	100 a
	atrazine	1 qt/a	A	
	COC	1 % v/v	A	
	AMS	8.5 lb/100 gal	A	
7	Capreno	4 fl oz/a	A	100 a
	COC	1 % v/v	A	
	AMS	8.5 lb/100 gal	A	
8	Capreno	5 fl oz/a	A	100 a
	COC	1 % v/v	A	
	AMS	8.5 lb/100 gal	A	
9	Capreno	3 fl oz/a	A	100 a
	Ignite 280	22 fl oz/a	A	
	AMS	8.5 lb/100 gal	A	
10	Capreno	3 fl oz/a	A	100 a
	Ignite 280	22 fl oz/a	A	
	Harness	2.1 pt/a	A	
	AMS	8.5 lb/100 gal	A	
11	Capreno	3 fl oz/a	A	100 a
	Roundup PowerMax	22 fl oz/a	A	
	AMS	8.5 lb/100 gal	A	
12	Capreno	3 fl oz/a	A	100 a
	Roundup PowerMax	22 fl oz/a	A	
	Harness	2.1 pt/a	A	
	AMS	8.5 lb/100 gal	A	
13	Halex GT	3.8 pt/a	A	100 a
	Activator 90	0.25 % v/v	A	
	AMS	8.5 lb/100 gal	A	
14	Harness	2.1 pt/a	A	99 a
	Roundup PowerMax	22 fl oz/a	A	
15	Verdict	16 fl oz/a	A	100 a
	MSO	1 % v/v	A	
	Roundup PowerMax	22 fl oz/a	A	
	AMS	8.5 lb/100 gal	A	
LSD (P=.10)				0.8

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Rating Date Rating Type Rating Unit Plant-Eval Interval Crop Name					May-23-2011 PHYSTU % 17 DP-1 Dent corn	May-23-2011 PHYCHL % 17 DP-1 Dent corn	Jun-3-2011 PHYSTU % 28 DP-1 Dent corn	Jun-3-2011 PHYCHL % 28 DP-1 Dent corn
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	8	9
1	Nontreated				0 a	0 a	0 a	0 a
2	Corvus atrazine COC	5.6 fl oz/a 1 qt/a 1 % v/v	A A A		0 a	0 a	0 a	0 a
3	Corvus atrazine Roundup PowerMax AMS	5.6 fl oz/a 1 qt/a 22 fl oz/a 8.5 lb/100 gal	A A A A		0 a	0 a	0 a	0 a
4	Corvus atrazine Ignite 280 AMS	5.6 fl oz/a 1 qt/a 22 fl oz/a 8.5 lb/100 gal	A A A A		0 a	0 a	0 a	0 a
5	Capreno COC AMS	3 fl oz/a 1 % v/v 8.5 lb/100 gal	A A A		0 a	0 a	0 a	0 a
6	Capreno atrazine COC AMS	3 fl oz/a 1 qt/a 1 % v/v 8.5 lb/100 gal	A A A A		0 a	0 a	0 a	0 a
7	Capreno COC AMS	4 fl oz/a 1 % v/v 8.5 lb/100 gal	A A A		0 a	0 a	0 a	0 a
8	Capreno COC AMS	5 fl oz/a 1 % v/v 8.5 lb/100 gal	A A A		0 a	0 a	0 a	0 a
9	Capreno Ignite 280 AMS	3 fl oz/a 22 fl oz/a 8.5 lb/100 gal	A A A		0 a	0 a	0 a	0 a
10	Capreno Ignite 280 Harness AMS	3 fl oz/a 22 fl oz/a 2.1 pt/a 8.5 lb/100 gal	A A A A		0 a	0 a	0 a	0 a
11	Capreno Roundup PowerMax AMS	3 fl oz/a 22 fl oz/a 8.5 lb/100 gal	A A A		0 a	0 a	0 a	0 a
12	Capreno Roundup PowerMax Harness AMS	3 fl oz/a 22 fl oz/a 2.1 pt/a 8.5 lb/100 gal	A A A A		0 a	0 a	0 a	0 a
13	Halex GT Activator 90 AMS	3.8 pt/a 0.25 % v/v 8.5 lb/100 gal	A A A		0 a	0 a	0 a	0 a
14	Harness Roundup PowerMax	2.1 pt/a 22 fl oz/a	A A		0 a	0 a	0 a	0 a
15	Verdict MSO Roundup PowerMax AMS	16 fl oz/a 1 % v/v 22 fl oz/a 8.5 lb/100 gal	A A A A		0 a	0 a	0 a	0 a
LSD (P=.10)					0.0	0.0	0.0	0.0

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Rating Date Rating Type Rating Unit Plant-Eval Interval Crop Name				May-23-2011 CONTROL % 17 DP-1 corn speedwell	Jun-3-2011 CONTROL % 28 DP-1 corn speedwell
Trt No.	Treatment Name	Rate	Unit	Appl Code	
1	Nontreated				0 c
2	Corvus	5.6 fl oz/a	A		100 a
	atrazine	1 qt/a	A		
	COC	1 % v/v	A		
3	Corvus	5.6 fl oz/a	A		100 a
	atrazine	1 qt/a	A		
	Roundup PowerMax	22 fl oz/a	A		
	AMS	8.5 lb/100 gal	A		
4	Corvus	5.6 fl oz/a	A		100 a
	atrazine	1 qt/a	A		
	Ignite 280	22 fl oz/a	A		
	AMS	8.5 lb/100 gal	A		
5	Capreno	3 fl oz/a	A		99 b
	COC	1 % v/v	A		
	AMS	8.5 lb/100 gal	A		
6	Capreno	3 fl oz/a	A		100 a
	atrazine	1 qt/a	A		
	COC	1 % v/v	A		
	AMS	8.5 lb/100 gal	A		
7	Capreno	4 fl oz/a	A		100 a
	COC	1 % v/v	A		
	AMS	8.5 lb/100 gal	A		
8	Capreno	5 fl oz/a	A		100 a
	COC	1 % v/v	A		
	AMS	8.5 lb/100 gal	A		
9	Capreno	3 fl oz/a	A		99 ab
	Ignite 280	22 fl oz/a	A		
	AMS	8.5 lb/100 gal	A		
10	Capreno	3 fl oz/a	A		100 a
	Ignite 280	22 fl oz/a	A		
	Harness	2.1 pt/a	A		
	AMS	8.5 lb/100 gal	A		
11	Capreno	3 fl oz/a	A		100 a
	Roundup PowerMax	22 fl oz/a	A		
	AMS	8.5 lb/100 gal	A		
12	Capreno	3 fl oz/a	A		100 a
	Roundup PowerMax	22 fl oz/a	A		
	Harness	2.1 pt/a	A		
	AMS	8.5 lb/100 gal	A		
13	Halex GT	3.8 pt/a	A		100 a
	Activator 90	0.25 % v/v	A		
	AMS	8.5 lb/100 gal	A		
14	Harness	2.1 pt/a	A		100 a
	Roundup PowerMax	22 fl oz/a	A		
15	Verdict	16 fl oz/a	A		100 a
	MSO	1 % v/v	A		
	Roundup PowerMax	22 fl oz/a	A		
	AMS	8.5 lb/100 gal	A		
LSD (P=.10)				0.9	1.4