

University of Wisconsin-Madison

Fall Burndown Evaluation

Study Director: T. L. Trower **Title:** Sr. Outreach Specialist
Investigator: V. M. Davis
Discipline: H herbicide
Initiation Date: Nov-2-2010

Trial Location

City: Arlington **Latitude of LL Corner °:** 43.18083 N
State/Prov.: WI **Longitude of LL Corner °:** 89.20341 W
Postal Code: 53911 **Altitude of LL Corner, Unit:** 1067.00 FT
Country: USA United States

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: DKC 52-59
BBCH Scale: BCOR **Planting Date:** Jun-14-2011
Planting Method: SEEDED seeded **Rate, Unit:** 32400 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN **Spacing Within Row, Unit:** 7 IN
Seed Bed: SMOOTH smooth
Soil Moisture: NORMAL normal
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 25 FT

Pest Description

Pest 1 Type: W **Code:** TAROF Taraxacum officinale
Common Name: Common dandelion

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FALLOW fallow
Plot Length, Unit: 25 FT **Tillage Type:** MINTIL minimum-till
Plot Area, Unit: 250 FT2 **Study Design:** RAOBL Randomized Complete Block (RCB)
Replications: 4

Soil Description

Description Name: Plano Silt Loam
% Sand: 9 **% OM:** 3.6 **Texture:** SIL silt loam
% Silt: 68 **pH:** 6 **Soil Name:** Plano
% Clay: 23 **Fert. Level:** F fair
Soil Drainage: E excellent

Application Description

	A
Application Date:	Nov-2-2010
Time of Day:	3:50pm
Application Method:	SPRAY
Applied By:	T. Trower
Air Temperature, Unit:	50.2 F
% Relative Humidity:	40
Wind Velocity, Unit:	3.0 MPH
Wind Direction:	SSW
Dew Presence (Y/N):	N
Soil Temperature, Unit:	46 F
Soil Moisture:	MOIST
% Cloud Cover:	0

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMD BCOR

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	TAROF W
Stage Minimum, Percent:	6 lvs
Stage Maximum, Percent:	7 lvs
Diameter, Unit:	6 IN
IN	
8	
Density, Unit:	5 FT2

Application Equipment

	A	
Operating Pressure, Unit:	30	PSI
Nozzle Type:	Flat Fan	
Nozzle Size:	XR8003	
Nozzle Spacing, Unit:	20	IN
Nozzles/Row:	6	
% Coverage:	100.0	
Boom Length, Unit:	10	FT
Boom Height, Unit:	19	IN
Ground Speed, Unit:	3	MPH
Carrier:	Water	
Spray Volume, Unit:	20	GAL/A
Mix Size, Unit:	2.2	Liters
Propellant:	CO2	

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Pest Name Rating Date Rating Type Rating Unit Plant-Eval Interval Crop Stage Majority					Common dandelion Nov-29-2010 Control % -197 DP-1	Common dandelion May-2-2011 Control % -43 DP-1 mature	Common dandelion May-2-2011 Control % -43 DP-1 seedling	Common dandelion May-17-2011 Control % -28 DP-1 mature
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4
1	Nontreated				0	0	0	0
2	Autumn Roundup Original Max	0.3 oz/a	A		25 cde	99 a	70 a-d	97 a
	COC	1 qt/a	A					
	AMS	1 % v/v	A					
		8.5 lb/100 gal	A					
3	Autumn Super 2,4-D LVE	0.5 oz/a	A		15 e	92 c	57 b-g	83 bcd
	COC	1 pt/a	A					
	AMS	1 % v/v	A					
		8.5 lb/100 gal	A					
4	Autumn Super Roundup Original Max	0.5 oz/a	A		25 cde	99 a	77 a-d	95 a
	COC	1 qt/a	A					
	AMS	1 % v/v	A					
		8.5 lb/100 gal	A					
5	Autumn Super Sencor DF	0.5 oz/a	A		13 e	87 d	64 b-e	78 cde
	COC	6 oz/a	A					
	AMS	1 % v/v	A					
		8.5 lb/100 gal	A					
6	Canopy EX 2,4-D LVE	1.85 oz/a	A		28 cde	91 c	98 a	99 a
	COC	1 pt/a	A					
		1 % v/v	A					
7	Basis Express 2,4-D LVE	0.33 oz/a	A		15 e	91 c	81 abc	98 a
	COC	0.2 oz/a	A					
		1 pt/a	A					
		1 % v/v	A					
8	2,4-D LVE Roundup PowerMax	1 pt/a	A		28 cde	99 a	30 f-i	86 bc
		28 fl oz/a	A					
9	Distinct 2,4-D LVE	2 oz/a	A		30 b-e	98 a	8 hi	83 bcd
	Roundup PowerMax	1 pt/a	A					
	Activator 90	22 fl oz/a	A					
	AMS	0.25 % v/v	A					
		17 lb/100 gal	A					
10	Distinct 2,4-D LVE	3 oz/a	A		40 bc	98 a	35 e-h	82 b-e
	Roundup PowerMax	32 fl oz/a	A					
	Activator 90	44 fl oz/a	A					
	AMS	0.25 % v/v	A					
		17 lb/100 gal	A					
11	Sharpen 2,4-D LVE	1 fl oz/a	A		95 a	97 ab	51 c-g	69 f
	Roundup PowerMax	1 pt/a	A					
	MSO	22 fl oz/a	A					
	AMS	1 % v/v	A					
		17 lb/100 gal	A					
12	Sharpen 2,4-D LVE	1 fl oz/a	A		97 a	98 a	78 abc	81 cde
	Roundup PowerMax	32 fl oz/a	A					
	MSO	44 fl oz/a	A					
	AMS	1 % v/v	A					
		17 lb/100 gal	A					
13	Express 2,4-D LVE	0.25 oz/a	A		25 cde	99 a	44 d-g	83 bcd
	Roundup PowerMax	16 fl oz/a	A					
	Activator 90	22 fl oz/a	A					
	AMS	0.25 % v/v	A					
		17 lb/100 gal	A					

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Pest Name Rating Date Rating Type Rating Unit Plant-Eval Interval Crop Stage Majority					Common dandelion May-17-2011 Control % -28 DP-1 seedling	Common dandelion Jun-3-2011 Control % -11 DP-1 mature	Common dandelion Jun-3-2011 Control % -11 DP-1 seedling
Trt No.	Treatment Name	Rate	Unit	Appl Code	5	6	7
1	Nontreated				0	0	0
2	Autumn Roundup Original Max	0.3 oz/a	A		65 bcd	93 a	58 bc
	COC	1 qt/a	A				
	AMS	1 % v/v	A				
		8.5 lb/100 gal	A				
3	Autumn Super 2,4-D LVE	0.5 oz/a	A		73 abc	73 bc	58 bc
	COC	1 pt/a	A				
	AMS	1 % v/v	A				
		8.5 lb/100 gal	A				
4	Autumn Super Roundup Original Max	0.5 oz/a	A		68 bcd	91 a	43 c
	COC	1 qt/a	A				
	AMS	1 % v/v	A				
		8.5 lb/100 gal	A				
5	Autumn Super Sencor DF	0.5 oz/a	A		51 cde	65 cd	50 bc
	COC	6 oz/a	A				
	AMS	1 % v/v	A				
		8.5 lb/100 gal	A				
6	Canopy EX 2,4-D LVE	1.85 oz/a	A		99 a	100 a	100 a
	COC	1 pt/a	A				
		1 % v/v	A				
7	Basis Express 2,4-D LVE	0.33 oz/a	A		97 a	100 a	99 a
	COC	0.2 oz/a	A				
		1 pt/a	A				
		1 % v/v	A				
8	2,4-D LVE Roundup PowerMax	1 pt/a	A		10 gh	70 bc	0 d
		28 fl oz/a	A				
9	Distinct 2,4-D LVE	2 oz/a	A		8 gh	64 cd	0 d
	Roundup PowerMax	1 pt/a	A				
	Activator 90	22 fl oz/a	A				
	AMS	0.25 % v/v	A				
		17 lb/100 gal	A				
10	Distinct 2,4-D LVE	3 oz/a	A		15 gh	65 cd	0 d
	Roundup PowerMax	32 fl oz/a	A				
	Activator 90	44 fl oz/a	A				
	AMS	0.25 % v/v	A				
		17 lb/100 gal	A				
11	Sharpen 2,4-D LVE	1 fl oz/a	A		28 efg	51 de	10 d
	Roundup PowerMax	1 pt/a	A				
	MSO	22 fl oz/a	A				
	AMS	1 % v/v	A				
		17 lb/100 gal	A				
12	Sharpen 2,4-D LVE	1 fl oz/a	A		45 def	58 cde	0 d
	Roundup PowerMax	32 fl oz/a	A				
	MSO	44 fl oz/a	A				
	AMS	1 % v/v	A				
		17 lb/100 gal	A				
13	Express 2,4-D LVE	0.25 oz/a	A		25 fgh	60 cde	8 d
	Roundup PowerMax	16 fl oz/a	A				
	Activator 90	22 fl oz/a	A				
	AMS	0.25 % v/v	A				
		17 lb/100 gal	A				

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Pest Name Rating Date Rating Type Rating Unit Plant-Eval Interval Crop Stage Majority					Common dandelion Nov-29-2010 Control % -197 DP-1	Common dandelion May-2-2011 Control % -43 DP-1 mature	Common dandelion May-2-2011 Control % -43 DP-1 seedling	Common dandelion May-17-2011 Control % -28 DP-1 mature
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4
14	Sharpen Express	1 fl oz/a	A		96 a	99 a	33 e-i	91 ab
	2,4-D LVE	0.25 oz/a	A					
	Roundup PowerMax	16 fl oz/a	A					
	Activator 90	22 fl oz/a	A					
	AMS	0.25 % v/v	A					
		17 lb/100 gal	A					
15	2,4-D LVE	32 fl oz/a	A		46 b	99 a	24 ghi	83 bcd
	Roundup PowerMax	44 fl oz/a	A					
	Activator 90	0.25 % v/v	A					
	AMS	17 lb/100 gal	A					
16	2,4-D LVE	32 fl oz/a	A		20 de	93 bc	34 e-h	76 def
	Roundup PowerMax	22 fl oz/a	A					
	Activator 90	0.25 % v/v	A					
	AMS	17 lb/100 gal	A					
17	2,4-D LVE	16 fl oz/a	A		35 bcd	80 e	0 i	73 ef
	COC	1 % v/v	A					
18	Princep	1 qt/a	A		23 cde	80 e	54 b-g	75 def
	2,4-D LVE	16 fl oz/a	A					
	COC	1 % v/v	A					
19	Princep	1 qt/a	A		15 e	97 a	87 ab	95 a
	2,4-D LVE	16 fl oz/a	A					
	Express	0.1875 oz/a	A					
	COC	1 % v/v	A					
20	Princep	1 qt/a	A		15 e	100 a	77 a-d	96 a
	2,4-D LVE	16 fl oz/a	A					
	Touchdown Total	24 fl oz/a	A					
	AMS	12 lb/100 gal	A					
21	Princep	1 qt/a	A		23 cde	76 f	63 b-f	73 ef
	2,4-D LVE	16 fl oz/a	A					
	COC	1 % v/v	A					
LSD (P=.10)					17.8	3.7	33.5	9.2

Means followed by same letter do not significantly differ (P=.10, LSD)

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

Untreated treatment(s) 1 excluded from analysis.

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Pest Name Rating Date Rating Type Rating Unit Plant-Eval Interval Crop Stage Majority					Common dandelion May-17-2011 Control % -28 DP-1 seedling	Common dandelion Jun-3-2011 Control % -11 DP-1 mature	Common dandelion Jun-3-2011 Control % -11 DP-1 seedling
Trt No.	Treatment Name	Rate	Unit	Appl Code	5	6	7
14	Sharpen	1 fl oz/a	A		8 gh	73 bc	0 d
	Express	0.25 oz/a	A				
	2,4-D LVE	16 fl oz/a	A				
	Roundup PowerMax	22 fl oz/a	A				
	Activator 90	0.25 % v/v	A				
	AMS	17 lb/100 gal	A				
15	2,4-D LVE	32 fl oz/a	A		0 h	61 cde	0 d
	Roundup PowerMax	44 fl oz/a	A				
	Activator 90	0.25 % v/v	A				
	AMS	17 lb/100 gal	A				
16	2,4-D LVE	32 fl oz/a	A		13 gh	45 e	0 d
	Roundup PowerMax	22 fl oz/a	A				
	Activator 90	0.25 % v/v	A				
	AMS	17 lb/100 gal	A				
17	2,4-D LVE	16 fl oz/a	A		0 h	48 de	0 d
	COC	1 % v/v	A				
18	Princep	1 qt/a	A		15 gh	56 cde	0 d
	2,4-D LVE	16 fl oz/a	A				
	COC	1 % v/v	A				
19	Princep	1 qt/a	A		76 abc	92 a	61 bc
	2,4-D LVE	16 fl oz/a	A				
	Express	0.1875 oz/a	A				
	COC	1 % v/v	A				
20	Princep	1 qt/a	A		82 ab	87 ab	76 ab
	2,4-D LVE	16 fl oz/a	A				
	Touchdown Total	24 fl oz/a	A				
	AMS	12 lb/100 gal	A				
21	Princep	1 qt/a	A		68 bcd	63 cd	54 bc
	2,4-D LVE	16 fl oz/a	A				
	COC	1 % v/v	A				
LSD (P=.10)					25.9	17.5	27.5

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Pest Name Rating Date Rating Type Rating Unit Plant-Eval Interval					Faber's foxtail Jun-3-2011 Control % -11 DP-1	Velvetleaf Jun-3-2011 Control % -11 DP-1	Common lambsqu> Jun-3-2011 Control % -11 DP-1	Pink shepherd'> Jun-3-2011 Control % -11 DP-1
Trt No.	Treatment Name	Rate	Unit	Appl Code	8	9	10	11
1	Nontreated				0	0	0	0
2	Autumn Roundup Original Max	0.3	oz/a	A	5 g	0 b	0 b	40 cde
	COC	1	qt/a	A				
	AMS	1	% v/v	A				
	AMS	8.5	lb/100 gal	A				
3	Autumn Super 2,4-D LVE	0.5	oz/a	A	73 ab	73 a	75 a	50 bcd
	COC	1	pt/a	A				
	COC	1	% v/v	A				
	AMS	8.5	lb/100 gal	A				
4	Autumn Super Roundup Original Max	0.5	oz/a	A	60 bc	75 a	72 a	30 c-f
	COC	1	qt/a	A				
	COC	1	% v/v	A				
	AMS	8.5	lb/100 gal	A				
5	Autumn Super Sencor DF	0.5	oz/a	A	53 cd	70 a	90 a	58 bc
	COC	6	oz/a	A				
	COC	1	% v/v	A				
	AMS	8.5	lb/100 gal	A				
6	Canopy EX 2,4-D LVE	1.85	oz/a	A	83 a	100 a	100 a	100 a
	COC	1	pt/a	A				
	COC	1	% v/v	A				
7	Basis Express 2,4-D LVE	0.33	oz/a	A	79 ab	98 a	100 a	100 a
	COC	0.2	oz/a	A				
	COC	1	pt/a	A				
	COC	1	% v/v	A				
8	2,4-D LVE Roundup PowerMax	1	pt/a	A	0 g	0 b	0 b	0 f
	AMS	28	fl oz/a	A				
9	Distinct 2,4-D LVE	2	oz/a	A	0 g	0 b	0 b	0 f
	AMS	1	pt/a	A				
	AMS	22	fl oz/a	A				
	AMS	0.25	% v/v	A				
	AMS	17	lb/100 gal	A				
10	Distinct 2,4-D LVE	3	oz/a	A	0 g	0 b	0 b	10 ef
	AMS	32	fl oz/a	A				
	AMS	44	fl oz/a	A				
	AMS	0.25	% v/v	A				
	AMS	17	lb/100 gal	A				
11	Sharpen 2,4-D LVE	1	fl oz/a	A	0 g	0 b	0 b	0 f
	AMS	1	pt/a	A				
	AMS	22	fl oz/a	A				
	AMS	1	% v/v	A				
	AMS	17	lb/100 gal	A				
12	Sharpen 2,4-D LVE	1	fl oz/a	A	0 g	0 b	0 b	0 f
	AMS	32	fl oz/a	A				
	AMS	44	fl oz/a	A				
	AMS	1	% v/v	A				
	AMS	17	lb/100 gal	A				
13	Express 2,4-D LVE	0.25	oz/a	A	15 fg	25 b	25 b	21 def
	AMS	16	fl oz/a	A				
	AMS	22	fl oz/a	A				
	AMS	0.25	% v/v	A				
	AMS	17	lb/100 gal	A				

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Pest Name Rating Date Rating Type Rating Unit Plant-Eval Interval					Faber's foxtail Jun-3-2011 Control % -11 DP-1	Velvetleaf Jun-3-2011 Control % -11 DP-1	Common lambsqu> Jun-3-2011 Control % -11 DP-1	Pink shepherdd> Jun-3-2011 Control % -11 DP-1
Trt	Treatment	Rate	Unit	Appl				
No.	Name			Code	8	9	10	11
14	Sharpen	1 fl oz/a	A		0 g	25 b	25 b	0 f
	Express	0.25 oz/a	A					
	2,4-D LVE	16 fl oz/a	A					
	Roundup PowerMax	22 fl oz/a	A					
	Activator 90	0.25 % v/v	A					
	AMS	17 lb/100 gal	A					
15	2,4-D LVE	32 fl oz/a	A		0 g	0 b	0 b	0 f
	Roundup PowerMax	44 fl oz/a	A					
	Activator 90	0.25 % v/v	A					
	AMS	17 lb/100 gal	A					
16	2,4-D LVE	32 fl oz/a	A		0 g	0 b	0 b	0 f
	Roundup PowerMax	22 fl oz/a	A					
	Activator 90	0.25 % v/v	A					
	AMS	17 lb/100 gal	A					
17	2,4-D LVE	16 fl oz/a	A		0 g	0 b	0 b	0 f
	COC	1 % v/v	A					
18	Princep	1 qt/a	A		5 g	0 b	0 b	24 c-f
	2,4-D LVE	16 fl oz/a	A					
	COC	1 % v/v	A					
19	Princep	1 qt/a	A		50 cd	25 b	25 b	48 bcd
	2,4-D LVE	16 fl oz/a	A					
	Express	0.1875 oz/a	A					
	COC	1 % v/v	A					
20	Princep	1 qt/a	A		28 ef	70 a	75 a	78 ab
	2,4-D LVE	16 fl oz/a	A					
	Touchdown Total	24 fl oz/a	A					
	AMS	12 lb/100 gal	A					
21	Princep	1 qt/a	A		40 de	24 b	25 b	45 bcd
	2,4-D LVE	16 fl oz/a	A					
	COC	1 % v/v	A					
LSD (P=.10)					19.1	36.3	33.7	33.9

Means followed by same letter do not significantly differ (P=.10, LSD)

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

Untreated treatment(s) 1 excluded from analysis.