

# University of Wisconsin-Madison

## Sequential Corn Herbicide Evaluation

Trial ID: 10ARLCN03 Protocol ID: 10ARLCN03  
Location: Arlington- 454 Study Director: T. L. Trower  
Project ID: Investigator: C. M. Boerboom  
Sponsor: Syngenta/AMVAC  
Contact:

## General Trial Information

**Study Director:** T. L. Trower **Title:** Sr. Outreach Specialist  
**Investigator:** C. M. Boerboom  
**Discipline:** H herbicide  
**Initiation Date:** Apr-28-2010

## Trial Location

**City:** Arlington  
**State/Prov.:** WI

## Personnel

**Study Director:** T. L. Trower **Title:** Sr. Outreach Specialist  
**Affiliation:** UW- Madison  
**Address:** 1575 Linden Drive  
**Location:** Madison, WI  
**Postal Code:** 53706 **E-mail:** tltrower@wisc.edu  
**Mobile No.:** (608) 393-3173  
**Investigator:** C. M. Boerboom

## Crop Description

**Crop 1:** ZEAMD Zea mays indentata Dent corn  
**Variety:** DKC 48-37 **Description:** glyphosate/glufosinate  
**BBCH Scale:** BCOR **Planting Date:** Apr-28-2010  
**Planting Method:** SEEDED seeded **Rate, Unit:** 325 S/A  
000  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN **Spacing Within Row, Unit:** 7 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** NORMAL normal **Emergence Date:** May-12-2010  
**Harvested Width, Unit:** 5 FT **Harvested Length, Unit:** 25 FT

## Pest Description

**Pest 1 Type:** W **Code:** ABUTH Abutilon theophrasti  
**Common Name:** Velvetleaf  
**Pest 2 Type:** W **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters  
**Pest 3 Type:** W **Code:** AMBEL Ambrosia artemisiifolia  
**Common Name:** Common ragweed  
**Pest 4 Type:** W **Code:** AMARE Amaranthus retroflexus  
**Common Name:** Redroot pigweed  
**Pest 5 Type:** W **Code:** TAROF Taraxacum officinale  
**Common Name:** Common dandelion  
**Pest 6 Type:** W **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail

## Site and Design

**Plot Width, Unit:** 10 FT **Site Type:** CROP  
**Plot Length, Unit:** 25 FT  
**Plot Area, Unit:** 250 FT<sup>2</sup> **Tillage Type:** CONTIL conventional-till  
**Replications:** 4 **Study Design:** RACOBL Randomized Complete Block (RCB)

## Soil Description

**Description Name:** Silt Loam  
**% Sand:** 6 **% OM:** 3.7 **Texture:** 2  
**% Silt:** 71 **pH:** 6.7 **Soil Name:** Silt Loam  
**% Clay:** 23 **CEC:** 12

## Additional Measured Elements

Element	Quantity	Unit
Phosphurs	22	ppm
potasium	103	ppm
Calcium	1596	ppm
Magnesium	474	ppm

**Application Description**

	A	B	C	D
<b>Application Date:</b>	Apr-28-2010	May-6-2010	Jun-5-2010	Jun-13-2010
<b>Time of Day:</b>	11:45p	2:30p	10:30a	1:30p
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	Preplt	Preemg	Post	Post
<b>Application Placement:</b>	Surface	Surface	Foliar	Foliar
<b>Applied By:</b>	T.L.Trower	T.L.Trower	T.L.Trower	T.L.Trower
<b>Air Temperature, Unit:</b>	57 F	66 F	79 F	72 F
<b>% Relative Humidity:</b>	34	42	61	81
<b>Wind Velocity, Unit:</b>	7 MPH	0 MPH	1.5 MPH	2 MPH
<b>Wind Direction:</b>	SSW		SSW	S
<b>Dew Presence (Y/N):</b>	N no	N no	N no	N no
<b>Soil Temperature, Unit:</b>	50 F	66 F	70 F	74 F
<b>Soil Moisture:</b>	Dry/Moist	Dry/Wet	WET	SLIWET
<b>% Cloud Cover:</b>	0	10	30	100

**Crop Stage At Each Application**

	A	B	C	D
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	0	03	14	36
<b>Height Minimum, Maximum:</b>			7 9	13 15

**Pest Stage At Each Application**

	A	B	C	D
<b>Pest 1 Code, Type, Scale:</b>	ABUTH W	ABUTH W	ABUTH W	ABUTH W
<b>Stage Majority, Percent:</b>		09	14	14
<b>Height, Unit:</b>		0.25 IN	IN	IN
<b>Height Minimum, Maximum:</b>			2 3	2 4
<b>Density, Unit:</b>		3 FT2	3 FT2	3 FT2
<b>Pest 2 Code, Type, Scale:</b>	CHEAL W	CHEAL W	CHEAL W	CHEAL W
<b>Stage Majority, Percent:</b>		09	17	
<b>Height, Unit:</b>		0.25 IN	IN	
<b>Height Minimum, Maximum:</b>			1 3	
<b>Density, Unit:</b>		3 FT2	4 FT2	
<b>Pest 3 Code, Type, Scale:</b>	AMBEL W	AMBEL W	AMBEL W	AMBEL W
<b>Stage Majority, Percent:</b>			17	16
<b>Height, Unit:</b>		IN	IN	
<b>Height Minimum, Maximum:</b>			2 4	2 4
<b>Density, Unit:</b>			4 FT2	4 FT2
<b>Pest 4 Code, Type, Scale:</b>	AMARE W	AMARE W	AMARE W	AMARE W
<b>Stage Majority, Percent:</b>			15	
<b>Height, Unit:</b>		IN		
<b>Height Minimum, Maximum:</b>			1 2	
<b>Density, Unit:</b>			1 FT2	
<b>Pest 5 Code, Type, Scale:</b>	TAROF W	TAROF W	TAROF W	TAROF W
<b>Pest 6 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W	SETFA W
<b>Stage Majority, Percent:</b>				13
<b>Height, Unit:</b>			IN	
<b>Height Minimum, Maximum:</b>				2 7
<b>Density, Unit:</b>				4 FT2

**Application Equipment**

	A	B	C	D
<b>Equipment Type:</b>	SPRBAC	SPRBAC	SPRBAC	SPRBAC
<b>Operating Pressure, Unit:</b>	23 PSI	23 PSI	23 PSI	23 PSI
<b>Nozzle Type:</b>	XR	XR	XR	XR
<b>Nozzle Size:</b>	8003	8003	8003	8003
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN	20 IN
<b>% Coverage:</b>	100.0	100	100	100
<b>Boom ID:</b>	20 GPA	20 GPA	20 GPA	20 GPA
<b>Boom Length, Unit:</b>	10 FT	10 FT	10 FT	10 FT
<b>Boom Height, Unit:</b>	19 IN	19 IN	19 IN	19 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	WATER	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	20 gal/ac	20 gal/ac	20 gal/ac	20 gal/ac
<b>Mix Size, Unit:</b>	2.2 liters	2.2 liters	2.2 liters	2.2 liters
<b>Propellant:</b>	COMCO2	COMCO2	COMCO2	COMCO2

**Sequential Corn Herbicide Evaluation**

Pest Name			Dent corn Jun-4-2010 PHYGEN %	Dent corn Jun-9-2010 PHYBLE %	Dent corn Jun-9-2010 PHYNEC %	Dent corn Jun-9-2010 PHYBLE %	Dent corn Jun-22-2010 PHYSTU %	Dent corn Jun-22-2010 PHYCHL %	
Rating Date			37 DA-A	42 DA-A	42 DA-A	42 DA-A	9 DA-D		
Rating Type									
Rating Unit									
Tri-Eval Interval									
Trt No.	Treatment Name	Rate Unit	Appl Code	1	7	8	9	10	11
1	Nontreated			0	0	0	0	0	0
2	Lumax	2 qt/a	B	0 a	0 a	0 c	0 b	1 d	0 a
	Touchdown Total	24 fl oz/a	D						
	AMS	2.5 lb/a	D						
3	Lexar	2.25 qt/a	B	0 a	0 a	0 c	0 b	0 d	0 a
	Touchdown Total	24 fl oz/a	D						
	AMS	2.5 lb/a	D						
4	Corvus	3 fl oz/a	B	0 a	0 a	0 c	0 b	1 cd	0 a
	atrazine	1 qt/a	B						
	Touchdown Total	24 fl oz/a	D						
	AMS	2.5 lb/a	D						
5	Integrity	13 fl oz/a	B	0 a	0 a	0 c	0 b	0 d	0 a
	Touchdown Total	24 fl oz/a	D						
	AMS	2.5 lb/a	D						
6	SureStart	1.75 qt/a	B	0 a	0 a	0 c	0 b	1 cd	0 a
	Durango DMA	24 fl oz/a	D						
	AMS	2 % v/v	D						
7	Balance Flexx	3 fl oz/a	B	0 a	0 a	0 c	0 b	0 d	0 a
	atrazine	1 qt/a	B						
	Touchdown Total	24 fl oz/a	D						
	AMS	2.5 lb/a	D						
8	Bicep II Magnum	1.3 qt/a	B	0 a	0 a	0 c	0 b	0 d	0 a
	Touchdown Total	24 fl oz/a	D						
	AMS	2.5 lb/a	D						
9	Bicep II Magnum	1.3 qt/a	B	0 a	0 a	0 c	0 b	1 cd	0 a
	Halex GT	3.6 pt/a	D						
	Activator 90	0.25 % v/v	D						
	AMS	2.5 lb/a	D						
10	Fierce	3 oz/a	A	0 a	0 a	0 c	0 b	2 bcd	0 a
	Touchdown Total	24 fl oz/a	D						
	AMS	2.5 lb/a	D						
11	Harness Xtra 6	1.25 qt/a	B	0 a	0 a	0 c	0 b	1 cd	0 a
	Roundup PowerMax	22 fl oz/a	D						
	AMS	17 lb/100 gal	D						
12	Nontreated			0 a	0 a	0 c	0 b	0 d	0 a
13	Dual II Magnum	0.75 pt/a	B	0 a	0 a	0 c	0 b	0 d	0 a
14	Dual II Magnum	0.75 pt/a	B	0 a	0 a	0 c	18 a	7 a	0 a
	Impact	0.75 fl oz/a	C						
	atrazine	1 pt/a	C						
	Meth Oil	1 % v/v	C						
	28% UAN	2.5 % v/v	C						
15	Dual II Magnum	0.75 pt/a	B	0 a	0 a	3 b	0 b	6 ab	0 a
	Impact	0.75 fl oz/a	C						
	Basagran	0.75 pt/a	C						
	Meth Oil	1 % v/v	C						
	28% UAN	2.5 % v/v	C						
16	Dual II Magnum	0.75 pt/a	B	0 a	0 a	9 a	0 b	6 abc	0 a
	Impact	0.75 fl oz/a	C						
	Cadet	0.5 fl oz/a	C						
	Crop Oil Concentrate	1 % v/v	C						
	28% UAN	2.5 % v/v	C						
17	Dual II Magnum	0.75 pt/a	B	0 a	0 a	0 c	0 b	3 a-d	0 a
	Laudis	3 fl oz/a	C						
	atrazine	1 pt/a	C						
	Meth Oil	1 % v/v	C						
	28% UAN	2.5 % v/v	C						
18	Dual II Magnum	0.75 pt/a	B	0 a	0 a	0 c	0 b	6 ab	0 a
	Impact	1 fl oz/a	C						
	Meth Oil	1 % v/v	C						
	28% UAN	2.5 % v/v	C						
19	Dual II Magnum	0.75 pt/a	B	0 a	0 a	0 c	0 b	2 bcd	0 a
	Roundup PowerMax	22 fl oz/a	C						
	AMS	8.5 lb/100 gal	C						
20	Dual II Magnum	0.75 pt/a	B	0 a	0 a	0 c	0 b	5 abc	0 a
	Impact	0.5 fl oz/a	C						
	Roundup PowerMax	22 fl oz/a	C						
	AMS	8.5 lb/100 gal	C						
21	Dual II Magnum	0.75 pt/a	B	0 a	0 a	0 c	0 b	3 a-d	0 a
	Impact	0.75 fl oz/a	C						
	Roundup PowerMax	11 fl oz/a	C						
	HSOC	0.5 % v/v	C						
	AMS	8.5 lb/100 gal	C						
LSD (P=.10)				0.0	0.0	0.5	1.3	4.6	0.0

**Sequential Corn Herbicide Evaluation**

Pest Name	Giant foxtail	Giant foxtail	Giant foxtail	Giant foxtail	yellow foxtail			
Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Rating Date	Jun-4-2010	Jun-22-2010	Jul-19-2010	Sep-14-2010	Sep-14-2010			
Rating Type	Control	control	control	control	control			
Rating Unit	%	%	%	%	%			
Plant-Eval Interval	37 DP-1	55 DP-1	82 DP-1	139 DP-1	139 DP-1			
Days After First/Last Applic.	37 29	55 9	82 36	139 93	139 93			
Trt No.	Treatment Name	Rate	Appl Code	2	12	17	23	29
1	Nontreated			0	0	0	0	0
2	Lumax	2 qt/a	B	97 a	100 a	100 a	99 ab	99 a
	Touchdown Total	24 fl oz/a	D					
	AMS	8.5 lb/100 gal	D					
3	Lexar	2.25 qt/a	B	98 a	100 a	100 a	100 ab	100 a
	Touchdown Total	24 fl oz/a	D					
	AMS	8.5 lb/100 gal	D					
4	Corvus	3 fl oz/a	B	94 a	100 a	100 a	98 abc	95 ab
	atrazine	1 qt/a	B					
	Touchdown Total	24 fl oz/a	D					
	AMS	8.5 lb/100 gal	D					
5	Integrity	13 fl oz/a	B	96 a	99 ab	99 ab	99 ab	98 a
	Touchdown Total	24 fl oz/a	D					
	AMS	8.5 lb/100 gal	D					
6	SureStart	1.75 qt/a	B	97 a	99 ab	100 a	98 abc	92 ab
	Durango DMA	24 fl oz/a	D					
	AMS	2 % v/v	D					
7	Balance Flexx	3 fl oz/a	B	87 a	99 ab	100 a	99 ab	93 ab
	atrazine	1 qt/a	B					
	Touchdown Total	24 fl oz/a	D					
	AMS	8.5 lb/100 gal	D					
8	Bicep II Magnum	1 qt/a	B	94 a	100 a	100 a	99 ab	98 a
	Touchdown Total	24 fl oz/a	D					
	AMS	8.5 lb/100 gal	D					
9	Bicep II Magnum	1 qt/a	B	93 a	98 ab	100 a	100 a	100 a
	Halex GT	3.6 pt/a	D					
	Activator 90	0.25 % v/v	D					
	Liquid AMS	2.5 % v/v	D					
10	Fierce	3 oz/a	A	91 a	97 abc	100 a	99 ab	96 a
	Touchdown Total	24 fl oz/a	D					
	AMS	8.5 lb/100 gal	D					
11	Harness Xtra 6	1.25 qt/a	B	100 a	100 a	100 a	98 abc	92 ab
	Roundup PowerMax	22 fl oz/a	D					
	AMS	8.5 lb/100 gal	D					
12	Nontreated			0 c	0 e	0 f	0 g	0 d
13	Dual II Magnum	0.75 pt/a	B	97 a	70 d	75 e	65 f	15 c
14	Dual II Magnum	0.75 pt/a	B	71 b	94 c	95 cd	93 cde	84 b
	Impact	0.75 fl oz/a	C					
	atrazine	1 pt/a	C					
	Meth Oil	1 % v/v	C					
	28% UAN	2.5 % v/v	C					
15	Dual II Magnum	0.75 pt/a	B	96 a	94 c	95 cd	95 b-e	92 ab
	Impact	0.75 fl oz/a	C					
	Basagran	0.75 pt/a	C					
	Meth Oil	1 % v/v	C					
	28% UAN	2.5 % v/v	C					
16	Dual II Magnum	0.75 pt/a	B	97 a	94 c	94 cd	93 cde	91 ab
	Impact	0.75 fl oz/a	C					
	Cadet	0.5 fl oz/a	C					
	Crop Oil Concentrate	1 % v/v	C					
	28% UAN	2.5 % v/v	C					
17	Dual II Magnum	0.75 pt/a	B	96 a	96 bc	94 d	91 e	97 a
	Laudis	3 fl oz/a	C					
	atrazine	1 pt/a	C					
	Meth Oil	1 % v/v	C					
	28% UAN	2.5 % v/v	C					
18	Dual II Magnum	0.75 pt/a	B	95 a	96 bc	96 bcd	97 a-d	85 b
	Impact	1 fl oz/a	C					
	Meth Oil	1 % v/v	C					
	28% UAN	2.5 % v/v	C					
19	Dual II Magnum	0.75 pt/a	B	96 a	98 ab	97 abc	92 de	95 ab
	Roundup PowerMax	22 fl oz/a	C					
	AMS	8.5 lb/100 gal	C					
20	Dual II Magnum	0.75 pt/a	B	98 a	100 a	99 ab	97 a-d	97 a
	Impact	0.5 fl oz/a	C					
	Roundup PowerMax	22 fl oz/a	C					
	AMS	8.5 lb/100 gal	C					
21	Dual II Magnum	0.75 pt/a	B	96 a	97 bc	97 abc	97 a-d	92 ab
	Impact	0.75 fl oz/a	C					
	Roundup PowerMax	11 fl oz/a	C					
	HSOC	0.5 % v/v	C					
	AMS	8.5 lb/100 gal	C					
LSD (P=.10)				13.0	3.0	3.3	5.5	10.9

**Sequential Corn Herbicide Evaluation**

Pest Name			Common lambsqu>	Common lambsqu>	Common lambsqu>	Common lambsqu>	
Crop Name							
Rating Date			Jun-4-2010	Jun-22-2010	Jul-19-2010	Sep-14-2010	
Rating Type			control	control	control	control	
Rating Unit			%	%	%	%	
Tri-Eval Interval			37 DA-A				
Tri	Treatment	Rate	Appl				
No.	Name	Rate Unit	Code	3	13	18	24
1	Nontreated			0	0	0	0
2	Lumax	2 qt/a	B	100 a	100 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
3	Lexar	2.25 qt/a	B	100 a	100 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
4	Corvus	3 fl oz/a	B	100 a	100 a	100 a	100 a
	atrazine	1 qt/a	B				
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
5	Integrity	13 fl oz/a	B	100 a	99 ab	100 a	100 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
6	SureStart	1.75 qt/a	B	100 a	100 a	100 a	100 a
	Durango DMA	24 fl oz/a	D				
	AMS	2 % v/v	D				
7	Balance Flexx	3 fl oz/a	B	100 a	100 a	100 a	99 ab
	atrazine	1 qt/a	B				
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
8	Bicep II Magnum	1.3 qt/a	B	100 a	100 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
9	Bicep II Magnum	1.3 qt/a	B	100 a	100 a	100 a	100 a
	Halex GT	3.6 pt/a	D				
	Activator 90	0.25 % v/v	D				
	AMS	2.5 lb/a	D				
10	Fierce	3 oz/a	A	99 a	100 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
11	Harness Xtra 6	1.25 qt/a	B	100 a	100 a	100 a	100 a
	Roundup PowerMax	22 fl oz/a	D				
	AMS	17 lb/100 gal	D				
12	Nontreated			0 d	0 c	0 c	0 d
13	Dual II Magnum	0.75 pt/a	B	76 b	0 c	0 c	0 d
14	Dual II Magnum	0.75 pt/a	B	56 c	100 a	100 a	100 a
	Impact	0.75 fl oz/a	C				
	atrazine	1 pt/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
15	Dual II Magnum	0.75 pt/a	B	78 b	99 b	99 ab	99 ab
	Impact	0.75 fl oz/a	C				
	Basagran	0.75 pt/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
16	Dual II Magnum	0.75 pt/a	B	78 b	100 a	99 ab	99 ab
	Impact	0.75 fl oz/a	C				
	Cadet	0.5 fl oz/a	C				
	Crop Oil Concentrate	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
17	Dual II Magnum	0.75 pt/a	B	78 b	100 a	100 a	100 a
	Laudis	3 fl oz/a	C				
	atrazine	1 pt/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
18	Dual II Magnum	0.75 pt/a	B	78 b	100 a	100 a	100 a
	Impact	1 fl oz/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
19	Dual II Magnum	0.75 pt/a	B	83 b	99 ab	99 b	98 bc
	Roundup PowerMax	22 fl oz/a	C				
	AMS	8.5 lb/100 gal	C				
20	Dual II Magnum	0.75 pt/a	B	83 b	100 a	100 a	99 abc
	Impact	0.5 fl oz/a	C				
	Roundup PowerMax	22 fl oz/a	C				
	AMS	8.5 lb/100 gal	C				
21	Dual II Magnum	0.75 pt/a	B	79 b	100 a	100 a	97 c
	Impact	0.75 fl oz/a	C				
	Roundup PowerMax	11 fl oz/a	C				
	HSOC	0.5 % v/v	C				
	AMS	8.5 lb/100 gal	C				
LSD (P=.10)				11.3	0.9	0.9	2.1

**Sequential Corn Herbicide Evaluation**

Pest Name			Velvetleaf	Velvetleaf	Velvetleaf	Velvetleaf
Crop Name						
Rating Date			Jun-4-2010	Jun-22-2010	Jul-19-2010	Sep-14-2010
Rating Type			control	control	control	control
Rating Unit			%	%	%	%
Trt-Eval Interval			37 DA-A			
Trt No.	Treatment	Rate	Appl Code			
	Name	Rate Unit				
1	Nontreated			0	0	0
2	Lumax	2 qt/a	B	100 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D			
	AMS	2.5 lb/a	D			
3	Lexar	2.25 qt/a	B	100 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D			
	AMS	2.5 lb/a	D			
4	Corvus	3 fl oz/a	B	100 a	100 a	100 a
	atrazine	1 qt/a	B			
	Touchdown Total	24 fl oz/a	D			
	AMS	2.5 lb/a	D			
5	Integrity	13 fl oz/a	B	100 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D			
	AMS	2.5 lb/a	D			
6	SureStart	1.75 qt/a	B	98 a	100 a	100 a
	Durango DMA	24 fl oz/a	D			
	AMS	2 % v/v	D			
7	Balance Flexx	3 fl oz/a	B	100 a	100 a	100 a
	atrazine	1 qt/a	B			
	Touchdown Total	24 fl oz/a	D			
	AMS	2.5 lb/a	D			
8	Bicep II Magnum	1.3 qt/a	B	55 c	98 b	100 a
	Touchdown Total	24 fl oz/a	D			
	AMS	2.5 lb/a	D			
9	Bicep II Magnum	1.3 qt/a	B	76 b	99 ab	100 a
	Halex GT	3.6 pt/a	D			
	Activator 90	0.25 % v/v	D			
	AMS	2.5 lb/a	D			
10	Fierce	3 oz/a	A	95 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D			
	AMS	2.5 lb/a	D			
11	Harness Xtra 6	1.25 qt/a	B	63 c	99 ab	100 a
	Roundup PowerMax	22 fl oz/a	D			
	AMS	17 lb/100 gal	D			
12	Nontreated			0 d	0 c	0 b
13	Dual II Magnum	0.75 pt/a	B	0 d	0 c	0 b
14	Dual II Magnum	0.75 pt/a	B	0 d	100 a	100 a
	Impact	0.75 fl oz/a	C			
	atrazine	1 pt/a	C			
	Meth Oil	1 % v/v	C			
	28% UAN	2.5 % v/v	C			
15	Dual II Magnum	0.75 pt/a	B	0 d	99 ab	100 a
	Impact	0.75 fl oz/a	C			
	Basagran	0.75 pt/a	C			
	Meth Oil	1 % v/v	C			
	28% UAN	2.5 % v/v	C			
16	Dual II Magnum	0.75 pt/a	B	0 d	100 a	100 a
	Impact	0.75 fl oz/a	C			
	Cadet	0.5 fl oz/a	C			
	Crop Oil Concentrate	1 % v/v	C			
	28% UAN	2.5 % v/v	C			
17	Dual II Magnum	0.75 pt/a	B	0 d	100 a	100 a
	Laudis	3 fl oz/a	C			
	atrazine	1 pt/a	C			
	Meth Oil	1 % v/v	C			
	28% UAN	2.5 % v/v	C			
18	Dual II Magnum	0.75 pt/a	B	0 d	100 a	100 a
	Impact	1 fl oz/a	C			
	Meth Oil	1 % v/v	C			
	28% UAN	2.5 % v/v	C			
19	Dual II Magnum	0.75 pt/a	B	0 d	100 a	100 a
	Roundup PowerMax	22 fl oz/a	C			
	AMS	8.5 lb/100 gal	C			
20	Dual II Magnum	0.75 pt/a	B	0 d	100 a	100 a
	Impact	0.5 fl oz/a	C			
	Roundup PowerMax	22 fl oz/a	C			
	AMS	8.5 lb/100 gal	C			
21	Dual II Magnum	0.75 pt/a	B	0 d	100 a	100 a
	Impact	0.75 fl oz/a	C			
	Roundup PowerMax	11 fl oz/a	C			
	HSOC	0.5 % v/v	C			
	AMS	8.5 lb/100 gal	C			
LSD (P=.10)				8.9	1.4	0.0
						0.7

**Sequential Corn Herbicide Evaluation**

Pest Name				Common ragweed	Common ragweed	Common ragweed	Common ragweed
Crop Name							
Rating Date				Jun-4-2010	Jun-22-2010	Jul-19-2010	Sep-14-2010
Rating Type				control	control	control	control
Rating Unit				%	%	%	%
Trt-Eval Interval				37 DA-A			
Trt No.	Treatment Name	Rate	Appl Code				
		Unit		5	15	20	26
1	Nontreated			0	0	0	0
2	Lumax	2 qt/a	B	100 a	100 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
3	Lexar	2.25 qt/a	B	99 a	100 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
4	Corvus	3 fl oz/a	B	100 a	100 a	100 a	100 a
	atrazine	1 qt/a	B				
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
5	Integrity	13 fl oz/a	B	86 b	99 ab	99 abc	100 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
6	SureStart	1.75 qt/a	B	97 a	100 a	100 a	99 a
	Durango DMA	24 fl oz/a	D				
	AMS	2 % v/v	D				
7	Balance Flexx	3 fl oz/a	B	100 a	100 a	99 ab	98 a
	atrazine	1 qt/a	B				
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
8	Bicep II Magnum	1.3 qt/a	B	93 ab	100 a	100 a	100 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
9	Bicep II Magnum	1.3 qt/a	B	91 ab	99 ab	100 a	100 a
	Halex GT	3.6 pt/a	D				
	Activator 90	0.25 % v/v	D				
	AMS	2.5 lb/a	D				
10	Fierce	3 oz/a	A	65 c	94 de	100 a	99 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
11	Harness Xttra 6	1.25 qt/a	B	70 c	100 a	100 a	99 a
	Roundup PowerMax	22 fl oz/a	D				
	AMS	17 lb/100 gal	D				
12	Nontreated			0 d	0 f	0 e	0 c
13	Dual II Magnum	0.75 pt/a	B	0 d	0 f	0 e	0 c
14	Dual II Magnum	0.75 pt/a	B	0 d	100 a	100 a	100 a
	Impact	0.75 fl oz/a	C				
	atrazine	1 pt/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
15	Dual II Magnum	0.75 pt/a	B	0 d	98 bc	98 cd	94 b
	Impact	0.75 fl oz/a	C				
	Basagran	0.75 pt/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
16	Dual II Magnum	0.75 pt/a	B	0 d	100 a	99 abc	98 a
	Impact	0.75 fl oz/a	C				
	Cadet	0.5 fl oz/a	C				
	Crop Oil Concentrate	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
17	Dual II Magnum	0.75 pt/a	B	0 d	100 a	100 a	100 a
	Laudis	3 fl oz/a	C				
	atrazine	1 pt/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
18	Dual II Magnum	0.75 pt/a	B	0 d	93 e	97 d	98 a
	Impact	1 fl oz/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
19	Dual II Magnum	0.75 pt/a	B	0 d	95 d	99 a-d	98 a
	Roundup PowerMax	22 fl oz/a	C				
	AMS	8.5 lb/100 gal	C				
20	Dual II Magnum	0.75 pt/a	B	0 d	98 abc	99 ab	99 a
	Impact	0.5 fl oz/a	C				
	Roundup PowerMax	22 fl oz/a	C				
	AMS	8.5 lb/100 gal	C				
21	Dual II Magnum	0.75 pt/a	B	0 d	96 cd	98 bcd	99 a
	Impact	0.75 fl oz/a	C				
	Roundup PowerMax	11 fl oz/a	C				
	HSOC	0.5 % v/v	C				
	AMS	8.5 lb/100 gal	C				
LSD (P=.10)				10.9	2.0	1.6	3.0

**Sequential Corn Herbicide Evaluation**

Pest Name				Common dandelion	Common dandelion	Common dandelion	Common dandelion
Crop Name				Jun-4-2010	Jun-22-2010	Jul-19-2010	Sep-14-2010
Rating Date				control	control	control	control
Rating Type				%	%	%	%
Rating Unit							
Trt-Eval Interval				37 DA-A			
Trt No.	Treatment Name	Rate	Appl Code	6	16	21	27
		Rate Unit					
1	Nontreated			0	0	0	0
2	Lumax	2 qt/a	B	97 a	95 a	97 a	89 ab
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
3	Lexar	2.25 qt/a	B	97 a	93 ab	93 ab	93 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
4	Corvus	3 fl oz/a	B	89 ab	89 a-d	89 abc	88 ab
	atrazine	1 qt/a	B				
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
5	Integrity	13 fl oz/a	B	87 b	88 b-e	92 ab	91 a
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
6	SureStart	1.75 qt/a	B	86 b	87 b-e	91 ab	91 a
	Durango DMA	24 fl oz/a	D				
	AMS	2 % v/v	D				
7	Balance Flexx	3 fl oz/a	B	94 ab	92 abc	93 ab	94 a
	atrazine	1 qt/a	B				
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
8	Bicep II Magnum	1.3 qt/a	B	50 d	84 d-g	92 ab	90 ab
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
9	Bicep II Magnum	1.3 qt/a	B	56 cd	86 c-f	95 ab	98 a
	Halex GT	3.6 pt/a	D				
	Activator 90	0.25 % v/v	D				
	AMS	2.5 lb/a	D				
10	Fierce	3 oz/a	A	53 d	83 d-g	87 bc	85 abc
	Touchdown Total	24 fl oz/a	D				
	AMS	2.5 lb/a	D				
11	Harness Xttra 6	1.25 qt/a	B	63 c	85 d-g	93 ab	94 a
	Roundup PowerMax	22 fl oz/a	D				
	AMS	17 lb/100 gal	D				
12	Nontreated			0 e	0 i	0 f	0 g
13	Dual II Magnum	0.75 pt/a	B	0 e	0 i	0 f	0 g
14	Dual II Magnum	0.75 pt/a	B	0 e	82 efg	80 cd	73 bcd
	Impact	0.75 fl oz/a	C				
	atrazine	1 pt/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
15	Dual II Magnum	0.75 pt/a	B	0 e	78 gh	64 e	48 f
	Impact	0.75 fl oz/a	C				
	Basagran	0.75 pt/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
16	Dual II Magnum	0.75 pt/a	B	0 e	79 gh	71 de	50 ef
	Impact	0.75 fl oz/a	C				
	Cadet	0.5 fl oz/a	C				
	Crop Oil Concentrate	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
17	Dual II Magnum	0.75 pt/a	B	0 e	92 abc	90 ab	86 abc
	Laudis	3 fl oz/a	C				
	atrazine	1 pt/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
18	Dual II Magnum	0.75 pt/a	B	0 e	72 h	63 e	60 def
	Impact	1 fl oz/a	C				
	Meth Oil	1 % v/v	C				
	28% UAN	2.5 % v/v	C				
19	Dual II Magnum	0.75 pt/a	B	0 e	88 b-e	86 bc	71 cd
	Roundup PowerMax	22 fl oz/a	C				
	AMS	8.5 lb/100 gal	C				
20	Dual II Magnum	0.75 pt/a	B	0 e	80 fg	76 d	67 de
	Impact	0.5 fl oz/a	C				
	Roundup PowerMax	22 fl oz/a	C				
	AMS	8.5 lb/100 gal	C				
21	Dual II Magnum	0.75 pt/a	B	0 e	86 c-f	72 de	58 def
	Impact	0.75 fl oz/a	C				
	Roundup PowerMax	11 fl oz/a	C				
	HSOC	0.5 % v/v	C				
	AMS	8.5 lb/100 gal	C				
LSD (P=.10)				8.3	6.6	9.6	17.0



**Sequential Corn Herbicide Evaluation**

Pest Name			Ladysthumb	Ladysthumb	
Crop Name					
Rating Date			Jul-19-2010	Sep-14-2010	
Rating Type			control	control	
Rating Unit			%	%	
Tri-Eval Interval					
Tri No.	Treatment Name	Rate Rate Unit	Appl Code	22	28
1	Nontreated			0	0
2	Lumax	2 qt/a	B	100 a	100 a
	Touchdown Total	24 fl oz/a	D		
	AMS	2.5 lb/a	D		
3	Lexar	2.25 qt/a	B	100 a	100 a
	Touchdown Total	24 fl oz/a	D		
	AMS	2.5 lb/a	D		
4	Corvus	3 fl oz/a	B	100 a	99 a
	atrazine	1 qt/a	B		
	Touchdown Total	24 fl oz/a	D		
	AMS	2.5 lb/a	D		
5	Integrity	13 fl oz/a	B	100 a	100 a
	Touchdown Total	24 fl oz/a	D		
	AMS	2.5 lb/a	D		
6	SureStart	1.75 qt/a	B	100 a	100 a
	Durango DMA	24 fl oz/a	D		
	AMS	2 % v/v	D		
7	Balance Flexx	3 fl oz/a	B	100 a	99 a
	atrazine	1 qt/a	B		
	Touchdown Total	24 fl oz/a	D		
	AMS	2.5 lb/a	D		
8	Bicep II Magnum	1.3 qt/a	B	100 a	100 a
	Touchdown Total	24 fl oz/a	D		
	AMS	2.5 lb/a	D		
9	Bicep II Magnum	1.3 qt/a	B	100 a	100 a
	Halex GT	3.6 pt/a	D		
	Activator 90	0.25 % v/v	D		
	AMS	2.5 lb/a	D		
10	Fierce	3 oz/a	A	100 a	100 a
	Touchdown Total	24 fl oz/a	D		
	AMS	2.5 lb/a	D		
11	Harness Xtra 6	1.25 qt/a	B	100 a	100 a
	Roundup PowerMax	22 fl oz/a	D		
	AMS	17 lb/100 gal	D		
12	Nontreated			0 d	0 d
13	Dual II Magnum	0.75 pt/a	B	0 d	0 d
14	Dual II Magnum	0.75 pt/a	B	89 b	75 b
	Impact	0.75 fl oz/a	C		
	atrazine	1 pt/a	C		
	Meth Oil	1 % v/v	C		
	28% UAN	2.5 % v/v	C		
15	Dual II Magnum	0.75 pt/a	B	86 b	79 b
	Impact	0.75 fl oz/a	C		
	Basagran	0.75 pt/a	C		
	Meth Oil	1 % v/v	C		
	28% UAN	2.5 % v/v	C		
16	Dual II Magnum	0.75 pt/a	B	75 c	60 c
	Impact	0.75 fl oz/a	C		
	Cadet	0.5 fl oz/a	C		
	Crop Oil Concentrate	1 % v/v	C		
	28% UAN	2.5 % v/v	C		
17	Dual II Magnum	0.75 pt/a	B	99 a	99 a
	Laudis	3 fl oz/a	C		
	atrazine	1 pt/a	C		
	Meth Oil	1 % v/v	C		
	28% UAN	2.5 % v/v	C		
18	Dual II Magnum	0.75 pt/a	B	84 b	71 bc
	Impact	1 fl oz/a	C		
	Meth Oil	1 % v/v	C		
	28% UAN	2.5 % v/v	C		
19	Dual II Magnum	0.75 pt/a	B	100 a	99 a
	Roundup PowerMax	22 fl oz/a	C		
	AMS	8.5 lb/100 gal	C		
20	Dual II Magnum	0.75 pt/a	B	97 a	97 a
	Impact	0.5 fl oz/a	C		
	Roundup PowerMax	22 fl oz/a	C		
	AMS	8.5 lb/100 gal	C		
21	Dual II Magnum	0.75 pt/a	B	96 a	95 a
	Impact	0.75 fl oz/a	C		
	Roundup PowerMax	11 fl oz/a	C		
	HSOC	0.5 % v/v	C		
	AMS	8.5 lb/100 gal	C		
LSD (P=.10)				6.7	11.7

**Sequ Coastal Corn Herbicide Evaluation**

Pest Name				Dent corn
Crop Name				Oct-14-2010
Rating Date				YIELD
Rating Type				BU
Rating Unit				
Trt-Eval Interval				
Trt No.	Treatment	Rate	Appl	
	Name	Rate Unit	Code	31
1	Nontreated			32
2	Lumax	2 qt/a	B	216 a-d
	Touchdown Total	24 fl oz/a	D	
	AMS	2.5 lb/a	D	
3	Lexar	2.25 qt/a	B	217 a-d
	Touchdown Total	24 fl oz/a	D	
	AMS	2.5 lb/a	D	
4	Corvus	3 fl oz/a	B	213 a-e
	atrazine	1 qt/a	B	
	Touchdown Total	24 fl oz/a	D	
	AMS	2.5 lb/a	D	
5	Integrity	13 fl oz/a	B	209 a-e
	Touchdown Total	24 fl oz/a	D	
	AMS	2.5 lb/a	D	
6	SureStart	1.75 qt/a	B	222 ab
	Durango DMA	24 fl oz/a	D	
	AMS	2 % v/v	D	
7	Balance Flexx	3 fl oz/a	B	229 a
	atrazine	1 qt/a	B	
	Touchdown Total	24 fl oz/a	D	
	AMS	2.5 lb/a	D	
8	Bicep II Magnum	1.3 qt/a	B	211 a-e
	Touchdown Total	24 fl oz/a	D	
	AMS	2.5 lb/a	D	
9	Bicep II Magnum	1.3 qt/a	B	200 b-e
	Halex GT	3.6 pt/a	D	
	Activator 90	0.25 % v/v	D	
	AMS	2.5 lb/a	D	
10	Fierce	3 oz/a	A	207 a-e
	Touchdown Total	24 fl oz/a	D	
	AMS	2.5 lb/a	D	
11	Harness Xtra 6	1.25 qt/a	B	220 abc
	Roundup PowerMax	22 fl oz/a	D	
	AMS	17 lb/100 gal	D	
12	Nontreated			24 g
13	Dual II Magnum	0.75 pt/a	B	57 f
14	Dual II Magnum	0.75 pt/a	B	209 a-e
	Impact	0.75 fl oz/a	C	
	atrazine	1 pt/a	C	
	Meth Oil	1 % v/v	C	
	28% UAN	2.5 % v/v	C	
15	Dual II Magnum	0.75 pt/a	B	192 e
	Impact	0.75 fl oz/a	C	
	Basagran	0.75 pt/a	C	
	Meth Oil	1 % v/v	C	
	28% UAN	2.5 % v/v	C	
16	Dual II Magnum	0.75 pt/a	B	199 cde
	Impact	0.75 fl oz/a	C	
	Cadet	0.5 fl oz/a	C	
	Crop Oil Concentrate	1 % v/v	C	
	28% UAN	2.5 % v/v	C	
17	Dual II Magnum	0.75 pt/a	B	202 b-e
	Laudis	3 fl oz/a	C	
	atrazine	1 pt/a	C	
	Meth Oil	1 % v/v	C	
	28% UAN	2.5 % v/v	C	
18	Dual II Magnum	0.75 pt/a	B	195 de
	Impact	1 fl oz/a	C	
	Meth Oil	1 % v/v	C	
	28% UAN	2.5 % v/v	C	
19	Dual II Magnum	0.75 pt/a	B	200 b-e
	Roundup PowerMax	22 fl oz/a	C	
	AMS	8.5 lb/100 gal	C	
20	Dual II Magnum	0.75 pt/a	B	209 a-e
	Impact	0.5 fl oz/a	C	
	Roundup PowerMax	22 fl oz/a	C	
	AMS	8.5 lb/100 gal	C	
21	Dual II Magnum	0.75 pt/a	B	208 a-e
	Impact	0.75 fl oz/a	C	
	Roundup PowerMax	11 fl oz/a	C	
	HSOC	0.5 % v/v	C	
	AMS	8.5 lb/100 gal	C	
LSD (P=.10)				22.4

# University of Wisconsin-Madison

## Soil-Applied Herbicide Evaluation on Field Corn

Trial ID: 10ARLCN04  
Location: Arlington-452  
Project ID:  
Protocol ID: 10ARLCN04  
Study Director:  
Investigator: C. M. Boerboom  
Sponsor  
Contact:

### General Trial Information

**Study Director:** T.L.Trower  
**Investigator:** C. M. Boerboom  
**Title:** Sr. Outreach Specialist

**Discipline:** H herbicide  
**Initiation Date:** Apr-28-2010

### Trial Location

**City:** Arlington  
**State/Prov.:** Wi

### Personnel

**Study Director:** T.L.Trower  
**Affiliation:** UW- Madison  
**Address:** 1575 Linden Dr.  
**Location:** Madison, WI  
**Postal Code:** 53706  
**Investigator:** C. M. Boerboom  
**Title:** Sr. Outreach Specialist  
**E-mail:** ttrower@wisc.edu  
**Mobile No.:** 608-393-3173

### Crop Description

**Crop 1:** ZEAMD Zea mays indentata Dent corn  
**Variety:** DKC 48-37  
**BBCH Scale:** BCOR  
**Planting Method:** SEEDED seeded  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** NORMAL normal  
**Harvest Date:** Oct-17-2010  
**Harvested Width, Unit:** 5 FT  
**Description:** VT3  
**Planting Date:** Apr-28-2010  
**Rate, Unit:** 32500 S/A  
**Spacing Within Row, Unit:** 7 IN  
**Emergence Date:** May-12-2010  
**Harvested Length, Unit:** 25 FT

### Pest Description

**Pest 1 Type:** W  
**Code:** ABUTH Abutilon theophrasti  
**Common Name:** Velvetleaf

**Pest 2 Type:** W  
**Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters

**Pest 3 Type:** W  
**Code:** AMBEL Ambrosia artemisiifolia  
**Common Name:** Common ragweed

**Pest 4 Type:** W  
**Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail

**Pest 5 Type:** W  
**Code:** AMARE Amaranthus retroflexus  
**Common Name:** Redroot pigweed

### Site and Design

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 25 FT  
**Plot Area, Unit:** 250 FT<sup>2</sup>  
**Replications:** 4  
**Site Type:** CROP  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOBL Randomized Complete Block (RCB)

### Soil Description

**Description Name:** Silt Loam  
**% Sand:** 6  
**% Silt:** 71  
**% Clay:** 23  
**% OM:** 3.7  
**pH:** 6.7  
**CEC:** 12  
**Texture:** 2  
**Soil Name:** SilPlano

**Additional Measured Elements**

Element	Quantity	Unit
Phosphorus	22	ppm
Potassium	103	ppm
Calcium	1596	ppm
Magnesium	474	ppm

**Application Description**

	A	B	C
<b>Application Date:</b>	Apr-28-2010	May-6-2010	Jun-13-2010
<b>Time of Day:</b>	11:45A	1:00P	2:30P
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	PREPLA	Preemg	Post
<b>Application Placement:</b>	Surface	Surface	Surface
<b>Applied By:</b>	T. Trower	T. Trower	T.Trower
<b>Air Temperature, Unit:</b>	57 F	66 F	72 F
<b>% Relative Humidity:</b>	34	42	81
<b>Wind Velocity, Unit:</b>	7 MPH	0 MPH	2 MPH
<b>Wind Direction:</b>	SSW		SE
<b>Dew Presence (Y/N):</b>	N no	N no	N no
<b>Soil Temperature, Unit:</b>	50 F	66 F	74 F
<b>Soil Moisture:</b>	DRY/MOIST	DRY/MOIST	MOIST
<b>% Cloud Cover:</b>	0	10	100

**Crop Stage At Each Application**

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	PREPLT	PREEMG	POSTEMG
<b>Stage Minimum, Percent:</b>			V5
<b>Stage Maximum, Percent:</b>			V6
<b>Height, Unit:</b>			14 IN
<b>Height Minimum, Maximum:</b>			13 15

**Pest Stage At Each Application**

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	ABUTH W	ABUTH W	ABUTH W
<b>Stage Majority, Percent:</b>		COTY	3 lvs
<b>Stage Minimum, Percent:</b>			4 lvs
<b>Height, Unit:</b>		0.25 IN	3 IN
<b>Height Minimum, Maximum:</b>			2 4
<b>Density, Unit:</b>		3 FT2	
<b>Pest 2 Code, Type, Scale:</b>	CHEAL W	CHEAL W	CHEAL W
<b>Stage Majority, Percent:</b>		COTY	
<b>Height, Unit:</b>		0.25 IN	
<b>Density, Unit:</b>		3 FT2	
<b>Pest 3 Code, Type, Scale:</b>	AMBEL W	AMBEL W	AMBEL W
<b>Stage Majority, Percent:</b>			4 lvs
<b>Stage Minimum, Percent:</b>			6 lvs
<b>Height, Unit:</b>			3 IN
<b>Height Minimum, Maximum:</b>			2 4
<b>Pest 4 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Pest 5 Code, Type, Scale:</b>	AMARE W	AMARE W	AMARE W

**Application Equipment**

	A	B	C
<b>Equipment Type:</b>	SPRBAC	SPRBAC	SPRBAC
<b>Operating Pressure, Unit:</b>	23 PSI	23 PSI	23 PSI
<b>Nozzle Type:</b>	XR	XR	XR
<b>Nozzle Size:</b>	8003	8003	8003
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN
<b>% Coverage:</b>	100.0	100	100
<b>Boom ID:</b>	20 GPA	20 GPA	20 GPA
<b>Boom Length, Unit:</b>	10 FT	10 FT	10 FT
<b>Boom Height, Unit:</b>	19 IN	19 IN	19 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	20 gal/ac	20 gal/ac	20 gal/ac
<b>Mix Size, Unit:</b>	2.2 liters	2.2 liters	2.2 liters
<b>Propellant:</b>	COMCO2	COMCO2	COMCO2

**Soil-Applied Herbicide Evaluation on Field Corn**

Pest Name			Dent corn	Dent corn	Dent corn	Dent corn	
Pest Type			Jun-4-2010	Jun-21-2010	Jun-21-2010	Oct-17-2010	
Crop Name			PHYGEN	PHYCHL	PHYSTU	YIELD	
Rating Date			%	%	%	BU	
Rating Type							
Rating Unit							
Trt-Eval Interval			37 DA-A				
Trt No.	Treatment	Rate	Appl				
	Name	Rate Unit	Code	1	7	8	
1	Nontreated			0 a	0 a	0 a	59 b
2	Lumax	2.5 qt/a	B	0 a	0 a	0 a	225 a
3	Lexar	3 qt/a	B	0 a	0 a	0 a	220 a
4	Corvus	5.6 fl oz/a	B	0 a	0 a	0 a	212 a
	atrazine	1 qt/a	B				
5	Integrity	20 fl oz/a	B	0 a	0 a	0 a	216 a
6	Integrity	13 fl oz/a	B	0 a	0 a	0 a	207 a
7	Sharpen	2.5 fl oz/a	B	0 a	0 a	0 a	217 a
	G-Max Lite	3.3 pt/a	B				
8	Fierce	3 oz/a	A	0 a	0 a	0 a	210 a
	atrazine	1 qt/a	A				
9	G-Max Lite	3.33 pt/a	B	0 a	0 a	0 a	220 a
10	Integrity	16 fl oz/a	B	0 a	0 a	0 a	219 a
	G-Max Lite	1 pt/a	B				
11	Integrity	13 fl oz/a	B	0 a	0 a	0 a	227 a
	G-Max Lite	1.5 pt/a	B				
12	Integrity	13 fl oz/a	B	0 a	0 a	0 a	212 a
	Outlook	9 fl oz/a	B				
13	Integrity	13 fl oz/a	B	0 a	0 a	0 a	226 a
	Roundup						
	PowerMax	22 fl oz/a	C				
	AMS	17 lb/100 gal	C				
14	Integrity	13 fl oz/a	B	0	0	0	223
	Status	2.5 oz/a	B				
	Roundup						
	PowerMax	22 fl oz/a	C				
	AMS	17 lb/100 gal	C				
15	Sharpen	2.5 fl oz/a	B	0 a	0 a	0 a	227 a
	Harness Xtra	2.5 qt/a	B				
LSD (P=.10)				0.0	0.0	0.0	21.5

**Soil-Applied Herbicide Evaluation on Field Corn**

Pest Name			Common lambsqu>	Common lambsqu>	Common lambsqu>	Common lambsqu>	
Pest Type			W Weed	W Weed	W Weed	W Weed	
Crop Name							
Rating Date			Jun-4-2010	Jun-21-2010	Jul-12-2010	Oct-14-2010	
Rating Type			control	control	control	control	
Rating Unit			%	%	%	%	
Trt-Eval Interval			37 DA-A				
Trt	Treatment	Rate	Appl				
No.	Name	Rate Unit	Code	3	10	15	21
1	Nontreated			0 c	0 d	0 c	0 c
2	Lumax	2.5 qt/a	B	100 a	100 a	100 a	100 a
3	Lexar	3 qt/a	B	100 a	100 a	100 a	100 a
4	Corvus atrazine	5.6 fl oz/a 1 qt/a	B B	100 a	100 a	100 a	100 a
5	Integrity	20 fl oz/a	B	100 a	99 ab	99 ab	99 b
6	Integrity	13 fl oz/a	B	100 a	97 c	99 b	100 a
7	Sharpen G-Max Lite	2.5 fl oz/a 3.3 pt/a	B B	100 a	100 a	100 a	100 a
8	Fierce atrazine	3 oz/a 1 qt/a	A A	100 a	98 bc	100 a	100 a
9	G-Max Lite	3.3 3 pt/a	B	100 a	100 ab	99 ab	99 b
10	Integrity G-Max Lite	16 fl oz/a 1 pt/a	B B	100 a	100 a	100 a	100 a
11	Integrity G-Max Lite	13 fl oz/a 1.5 pt/a	B B	100 a	100 a	100 a	100 a
12	Integrity Outlook	13 fl oz/a 9 fl oz/a	B B	100 a	100 a	100 a	100 a
13	Integrity Roundup PowerMax AMS	13 fl oz/a 22 fl oz/a 17 lb/100 gal	B C C	99 b	100 a	100 a	100 a
14	Integrity Status Roundup PowerMax AMS	13 fl oz/a 2.5 oz/a 22 fl oz/a 17 lb/100 gal	B B C C	99	100	100	100
15	Sharpen Harness Xtra	2.5 fl oz/a 2.5 qt/a	B B	100 a	100 a	100 a	100 a
LSD (P=.10)				0.8	2.2	1.0	1.1

**Soil-Applied Herbicide Evaluation on Field Corn**

Pest Name			Common dandelion	Common dandelion	Common dandelion	Common dandelion		
Pest Type			W Weed	W Weed	W Weed	W Weed		
Crop Name								
Rating Date			Jun-4-2010	Jun-21-2010	Jul-12-2010	Oct-14-2010		
Rating Type			control	control	control	control		
Rating Unit			%	%	%	%		
Trt-Eval Interval			37 DA-A					
Trt No.	Treatment Name	Rate	Appl Unit	Code				
1	Nontreated				6	13	18	25
2	Lumax	2.5 qt/a		B	0 f	0 f	0 f	0 g
3	Lexar	3 qt/a		B	94 ab	92 a	83 a	77 abc
4	Corvus	5.6 fl oz/a		B	97 ab	85 ab	91 a	90 a
	atrazine	1 qt/a		B	98 a	86 ab	85 a	84 ab
5	Integrity	20 fl oz/a		B	91 abc	82 ab	71 a-d	72 a-e
6	Integrity	13 fl oz/a		B	79 cd	71 bc	58 b-e	43 ef
7	Sharpen	2.5 fl oz/a		B	71 d	63 cd	53 de	45 def
	G-Max Lite	3.3 pt/a		B				
8	Fierce	3 oz/a		A	55 e	40 e	35 e	30 f
	atrazine	1 qt/a		A				
9	G-Max Lite	3.33 pt/a		B	53 e	51 de	50 de	49 c-f
10	Integrity	16 fl oz/a		B	82 cd	66 c	77 abc	74 a-d
	G-Max Lite	1 pt/a		B				
11	Integrity	13 fl oz/a		B	85 bc	59 cd	55 cde	57 b-f
	G-Max Lite	1.5 pt/a		B				
12	Integrity	13 fl oz/a		B	78 cd	58 cd	79 ab	72 a-e
	Outlook	9 fl oz/a		B				
13	Integrity	13 fl oz/a		B	71 d	86 a	88 a	87 a
	Roundup PowerMax	22 fl oz/a		C				
	AMS	17 lb/100 gal		C				
14	Integrity	13 fl oz/a		B	70	88	94	92
	Status	2.5 oz/a		B				
	Roundup PowerMax	22 fl oz/a		C				
	AMS	17 lb/100 gal		C				
15	Sharpen	2.5 fl oz/a		B	90 abc	82 ab	86 a	83 ab
	Harness Xtra	2.5 qt/a		B				
LSD (P=.10)					12.3	14.7	23.4	29.4

**Soil-Applied Herbicide Evaluation on Field Corn**

Pest Name			Giant foxtail	Giant foxtail	Giant foxtail	Giant foxtail	
Pest Type			W Weed	W Weed	W Weed	W Weed	
Crop Name							
Rating Date			Jun-4-2010	Jun-21-2010	Jul-12-2010	Oct-14-2010	
Rating Type			control	control	control	control	
Rating Unit			%	%	%	%	
Trt-Eval Interval			37 DA-A				
Trt No.	Treatment Name	Rate	Appl Code				
		Unit					
1	Nontreated			0 e	0 g	0 f	0 d
2	Lumax	2.5 qt/a	B	98 bcd	93 cde	93 bcd	92 ab
3	Lexar	3 qt/a	B	99 abc	94 bcd	95 abc	95 ab
4	Corvus	5.6 fl oz/a	B	97 cd	96 a-d	97 ab	99 a
	atrazine	1 qt/a	B				
5	Integrity	20 fl oz/a	B	99 ab	94 bcd	93 bcd	85 b
6	Integrity	13 fl oz/a	B	97 d	83 f	76 e	58 c
7	Sharpen	2.5 fl oz/a	B	100 a	93 cde	96 abc	98 a
	G-Max Lite	3.3 pt/a	B				
8	Fierce	3 oz/a	A	99 abc	88 ef	88 d	86 b
	atrazine	1 qt/a	A				
9	G-Max Lite	3.33 pt/a	B	100 a	98 abc	97 abc	96 a
10	Integrity	16 fl oz/a	B	100 a	91 de	94 abc	95 ab
	G-Max Lite	1 pt/a	B				
11	Integrity	13 fl oz/a	B	100 a	99 ab	97 abc	96 a
	G-Max Lite	1.5 pt/a	B				
12	Integrity	13 fl oz/a	B	99 ab	85 f	92 cd	94 ab
	Outlook	9 fl oz/a	B				
13	Integrity	13 fl oz/a	B	98 bcd	100 a	99 a	100 a
	Roundup PowerMax	22 fl oz/a	C				
	AMS	17 lb/100 gal	C				
14	Integrity	13 fl oz/a	B	94	100	100	100
	Status	2.5 oz/a	B				
	Roundup PowerMax	22 fl oz/a	C				
	AMS	17 lb/100 gal	C				
15	Sharpen	2.5 fl oz/a	B	100 a	95 bcd	95 abc	97 a
	Harness Xtra	2.5 qt/a	B				
LSD (P=.10)				1.9	5.4	5.6	10.1



**Soil-Applied Herbicide Evaluation on Field Corn**

Pest Name			Redroot pigweed	Redroot pigweed
Pest Type			W Weed	W Weed
Crop Name				
Rating Date			Jul-12-2010	Oct-14-2010
Rating Type			control	control
Rating Unit			%	%
Trt-Eval Interval				
Trt No.	Treatment Name	Rate	Appl Code	
		Rate Unit		
1	Nontreated			0 c
2	Lumax	2.5 qt/a	B	100 a
3	Lexar	3 qt/a	B	100 a
4	Corvus	5.6 fl oz/a	B	100 a
	atrazine	1 qt/a	B	100 a
5	Integrity	20 fl oz/a	B	98 ab
6	Integrity	13 fl oz/a	B	100 a
7	Sharpen	2.5 fl oz/a	B	100 a
	G-Max Lite	3.3 pt/a	B	100 a
8	Fierce	3 oz/a	A	95 b
	atrazine	1 qt/a	A	100 a
9	G-Max Lite	3.33 pt/a	B	98 ab
10	Integrity	16 fl oz/a	B	100 a
	G-Max Lite	1 pt/a	B	100 a
11	Integrity	13 fl oz/a	B	100 a
	G-Max Lite	1.5 pt/a	B	100 a
12	Integrity	13 fl oz/a	B	95 b
	Outlook	9 fl oz/a	B	100 a
13	Integrity	13 fl oz/a	B	100 a
	Roundup PowerMax	22 fl oz/a	C	
	AMS	17 lb/100 gal	C	
14	Integrity	13 fl oz/a	B	100
	Status	2.5 oz/a	B	
	Roundup PowerMax	22 fl oz/a	C	
	AMS	17 lb/100 gal	C	
15	Sharpen	2.5 fl oz/a	B	100 a
	Harness Xtra	2.5 qt/a	B	100 a
LSD (P=.10)				4.3
				0.0

**Soil-Applied Herbicide Evaluation on Field Corn**

Pest Name			Common ragweed	Common ragweed	Common ragweed	Common ragweed		
Pest Type			W Weed	W Weed	W Weed	W Weed		
Crop Name								
Rating Date			Jun-4-2010	Jun-21-2010	Jul-12-2010	Oct-14-2010		
Rating Type			control	control	control	control		
Rating Unit			%	%	%	%		
Trt-Eval Interval			37 DA-A					
Trt No.	Treatment Name	Rate	Appl Unit	Code				
5					5	12	17	23
1	Nontreated				0 d	0 d	0 d	0 d
2	Lumax	2.5 qt/a		B	99 a	100 a	100 a	100 a
3	Lexar	3 qt/a		B	100 a	100 a	100 a	100 a
4	Corvus	5.6 fl oz/a		B	100 a	100 a	100 a	100 a
	atrazine	1 qt/a		B				
5	Integrity	20 fl oz/a		B	100 a	97 ab	96 abc	95 abc
6	Integrity	13 fl oz/a		B	97 a	92 bc	97 ab	100 a
7	Sharpen	2.5 fl oz/a		B	100 a	98 ab	99 a	100 a
	G-Max Lite	3.3 pt/a		B				
8	Fierce	3 oz/a		A	95 ab	91 c	91 bc	91 c
	atrazine	1 qt/a		A				
9	G-Max Lite	3.33 pt/a		B	97 a	98 ab	95 abc	95 abc
10	Integrity	16 fl oz/a		B	99 a	99 a	100 a	99 ab
	G-Max Lite	1 pt/a		B				
11	Integrity	13 fl oz/a		B	98 a	98 a	98 a	99 ab
	G-Max Lite	1.5 pt/a		B				
12	Integrity	13 fl oz/a		B	91 b	90 c	91 c	93 bc
	Outlook	9 fl oz/a		B				
13	Integrity	13 fl oz/a		B	83 c	100 a	100 a	100 a
	Roundup PowerMax	22 fl oz/a		C				
	AMS	17 lb/100 gal		C				
14	Integrity	13 fl oz/a		B	84	100	100	100
	Status	2.5 oz/a		B				
	Roundup PowerMax	22 fl oz/a		C				
	AMS	17 lb/100 gal		C				
15	Sharpen	2.5 fl oz/a		B	100 a	100 a	100 a	100 a
	Harness Xtra	2.5 qt/a		B				
LSD (P=.10)					6.2	5.8	6.2	7.1

**Soil-Applied Herbicide Evaluation on Field Corn**

Pest Name			Velvetleaf	Velvetleaf	Velvetleaf	Velvetleaf	
Pest Type			W Weed	W Weed	W Weed	W Weed	
Crop Name							
Rating Date			Jun-4-2010	Jun-21-2010	Jul-12-2010	Oct-14-2010	
Rating Type			control	control	control	control	
Rating Unit			%	%	%	%	
Trt-Eval Interval			37 DA-A				
Trt No.	Treatment Name	Rate	Appl Code				
		Rate Unit					
1	Nontreated			4	11	16	22
				0 d	0 d	0 c	0 c
2	Lumax	2.5 qt/a	B	99 ab	99 ab	99 a	100 a
3	Lexar	3 qt/a	B	100 a	100 a	100 a	100 a
4	Corvus	5.6 fl oz/a	B	98 ab	100 a	100 a	100 a
	atrazine	1 qt/a	B				
5	Integrity	20 fl oz/a	B	100 a	99 ab	99 a	100 a
6	Integrity	13 fl oz/a	B	99 ab	96 ab	99 a	100 a
7	Sharpen	2.5 fl oz/a	B	100 a	97 ab	98 a	98 a
	G-Max Lite	3.3 pt/a	B				
8	Fierce	3 oz/a	A	97 ab	95 b	97 a	99 a
	atrazine	1 qt/a	A				
9	G-Max Lite	3.33 pt/a	B	76 c	86 c	45 b	35 b
10	Integrity	16 fl oz/a	B	99 ab	100 a	100 a	100 a
	G-Max Lite	1 pt/a	B				
11	Integrity	13 fl oz/a	B	99 ab	99 ab	99 a	99 a
	G-Max Lite	1.5 pt/a	B				
12	Integrity	13 fl oz/a	B	100 a	100 a	100 a	100 a
	Outlook	9 fl oz/a	B				
13	Integrity	13 fl oz/a	B	91 b	100 a	100 a	100 a
	Roundup PowerMax	22 fl oz/a	C				
	AMS	17 lb/100 gal	C				
14	Integrity	13 fl oz/a	B	97	100	100	100
	Status	2.5 oz/a	B				
	Roundup PowerMax	22 fl oz/a	C				
	AMS	17 lb/100 gal	C				
15	Sharpen	2.5 fl oz/a	B	100 a	99 ab	100 a	100 a
	Harness Xtra	2.5 qt/a	B				
LSD (P=.10)				8.4	4.3	9.8	8.3

# University of Wisconsin-Madison

## Callisto Xtra: Postemergence Evaluation on Field Corn

### Personnel

**Study Director:** T.L. Trower  
**Title:** Sr. Outreach Specialist  
**Affiliation:** UW-Madison  
**Address:** 1575 Linden Dr  
**Location:** Madison, WI  
**Postal Code:** 53706  
**E-mail:** tltrower@wisc.edu  
**Mobile No.:** 608-393-3173

### Crop Description

**Crop 1:** ZEAMD Zea mays indentata Dent corn  
**Variety:** Northrup King N39Z 3000GT  
**Description:** glyphosate/glufosinate  
**BBCH Scale:** BCOR  
**Planting Date:** Apr-28-2010  
**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 Temperature, Unit:** 52 F  
**Soil Moisture:** NORMAL normal  
**Emergence Date:** Jun-8-2010  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 25 FT

### Site and Design

**Plot Width, Unit:** 10 FT  
**Site Type:** CROP  
**Plot Length, Unit:** 25 FT  
**Plot Area, Unit:** 250 FT<sup>2</sup>  
**Tillage Type:** CONTIL conventional-till  
**Replications:** 4  
**Study Design:** RACOBL Randomized Complete Block (RCB)

### Soil Description

**Description Name:** Plano Silt Loam  
**% Sand:** 7  
**% OM:** 3.9  
**Texture:** SIL silt loam  
**% Silt:** 70  
**pH:** 5.9  
**Soil Name:** Plano  
**% Clay:** 23  
**Fert. Level:** E excellent

### Application Description

	A	B	C
<b>Application Date:</b>	May-4-2010	Jun-1-2010	Jun-13-2010
<b>Time of Day:</b>	1:00P	8:00A	2:30p
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	Pre	EPost	Post
<b>Application Placement:</b>	Surface	Foliar	Foliar
<b>Applied By:</b>	T. Trower	T. Trower	T. Trower
<b>Air Temperature, Unit:</b>	76 F	72 F	72 F
<b>% Relative Humidity:</b>	43	55	81
<b>Wind Velocity, Unit:</b>	7 MPH	3 MPH	1 MPH
<b>Wind Direction:</b>	S	S	SE
<b>Dew Presence (Y/N):</b>	N no	N no	N no
<b>Soil Temperature, Unit:</b>	62 F	68 F	74 F
<b>Soil Moisture:</b>	DRY/MOIST	DRY/MOIST	SLIWET
<b>% Cloud Cover:</b>	0	0	100

### Application Equipment

	A	B	C
<b>Equipment Type:</b>	SPRBAC	SPRBAC	SPRBAC
<b>Operating Pressure, Unit:</b>	23 PSI	23 PSI	23 PSI
<b>Nozzle Type:</b>	Flat Fan	Flat Fan	Flat Fan
<b>Nozzle Size:</b>	XR 8003	XR 8003	XR 8003
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN
<b>% Coverage:</b>	100.0	100	100
<b>Boom ID:</b>	20 GPA	20 GPA	20 GPA
<b>Boom Length, Unit:</b>	10 FT	10 FT	10 FT
<b>Boom Height, Unit:</b>	19 IN	19 IN	19 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	20 gal/ac	20 gal/ac	20 gal/ac
<b>Mix Size, Unit:</b>	2.2 liters	2.2 liters	2.2 liters
<b>Propellant:</b>	COMCO2	COMCO2	COMCO2

**Callisto Xtra: Postemergence Evaluation on Field Corn**

Pest Name			Giant foxtail Jun-1-2010 control %	Giant foxtail Jun-18-2010 control %	Giant foxtail Jul-2-2010 control %	Giant foxtail Sep-3-2010 control %		
Rating Date								
Rating Type								
Rating Unit								
Trt evaluation interval			28 DA-A	5 DA-C	19 DA-C	82 DA-C		
Trt No.	Treatment Name	Rate	Appl Unit	Code				
1	Nontreated				5	14	21	26
					0	0	0	0
2	Callisto Xtra	16 fl oz/a	B		0 c	100 a	95 cd	94 bc
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
3	Callisto Xtra	20 fl oz/a	B		0 c	100 a	96 cd	94 bc
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
4	Callisto Xtra	24 fl oz/a	B		0 c	100 a	93 d	91 cde
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
5	Laudis	2 fl oz/a	B		0 c	100 a	94 cd	89 de
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
6	Impact	0.5 fl oz/a	B		0 c	100 a	97 bc	87 e
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
7	Status	2.5 oz/a	B		0 c	100 a	99 ab	95 bc
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
8	Touchdown Total	24 fl oz/a	B		0 c	100 a	95 cd	89 de
	AMS	2 lb/a	B					
9	Callisto Xtra	20 fl oz/a	B		0 c	38 g	43 e	55 f
	Crop Oil Concentrate	1 % v/v	B					
	AMS	2 lb/a	B					
10	Laudis	2 fl oz/a	B		0 c	100 a	96 bc	92 cd
	atrazine	1 pt/a	B					
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
11	Impact	0.5 fl oz/a	B		0 c	100 a	100 a	97 ab
	atrazine	1 pt/a	B					
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
12	Status	2.5 oz/a	B		0 c	100 a	100 a	98 ab
	atrazine	1 pt/a	B					
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
13	Realm Q	4 oz/a			0 c	73 e	100 a	98 ab
	Crop Oil Concentrate	1 % v/v	B					
	AMS	2 lb/a	B					
14	Cinch ATZ	1 qt/a	A		95 a	94 b	100 a	100 a
	Realm Q	4 oz/a						
	Crop Oil Concentrate	1 % v/v	C					
	AMS	2 lb/a	C					
15	Cinch ATZ	1 qt/a	A		0 c	69 f	100 a	99 a
	Realm Q	4 oz/a						
	Abundit	32 fl oz/a	B					
	AMS	2 lb/a	B					
16	Realm Q	4 oz/a			0 c	83 c	100 a	98 ab
	Ignite 280	22 fl oz/a	B					
	AMS	2 lb/a	B					
17	Realm Q	4 oz/a			0 c	69 f	100 a	98 ab
	atrazine	0.5 lb ai/a	B					
	Crop Oil Concentrate	1 % v/v	B					
	AMS	2 lb/a	B					
18	Prequel	1.66 fl oz/a			100 a	95 b	100 a	100 a
	Realm Q	4 oz/a						
	Crop Oil Concentrate	1 % v/v	C					
	AMS	2 lb/a	C					
19	Steadfast	1.5 oz/a	B		25 b	76 d	100 a	99 a
	isoxadifen-ethyl	0.125 oz ai/a	B					
	mesotrione	1.25 oz ai/a	B					
	Crop Oil Concentrate	1 % v/v	B					
	AMS	2 lb/a	B					
20	Nontreated				0	0	0	0
	LSD (P=.10)				13.9	3.0	3.1	4.6

**Callisto Xtra: Postemergence Evaluation on Field Corn**

Pest Name				Common lambsqu>	Common lambsqu>	Common lambsqu>	Common lambsqu>
Rating Date				Jun-1-2010	Jun-18-2010	Jul-2-2010	Sep-3-2010
Rating Type				control	control	control	control
Rating Unit				%	%	%	%
Trt evaluation interval				28 DA-A	5 DA-C	19 DA-C	82 DA-C
Trt Treatment	Rate	Unit	Appl Code				
No. Name				6	15	22	27
1 Nontreated				0	0	0	0
2 Callisto Xtra	16 fl oz/a	B		0 b	100 a	100 a	100 a
Touchdown Total	24 fl oz/a	B					
AMS	2 lb/a	B					
3 Callisto Xtra	20 fl oz/a	B		0 b	100 a	100 a	100 a
Touchdown Total	24 fl oz/a	B					
AMS	2 lb/a	B					
4 Callisto Xtra	24 fl oz/a	B		0 b	100 a	100 a	100 a
Touchdown Total	24 fl oz/a	B					
AMS	2 lb/a	B					
5 Laudis	2 fl oz/a	B		0 b	100 a	97 b	99 a
Touchdown Total	24 fl oz/a	B					
AMS	2 lb/a	B					
6 Impact	0.5 fl oz/a	B		0 b	100 a	98 ab	99 a
Touchdown Total	24 fl oz/a	B					
AMS	2 lb/a	B					
7 Status	2.5 oz/a	B		0 b	100 a	96 b	100 a
Touchdown Total	24 fl oz/a	B					
AMS	2 lb/a	B					
8 Touchdown Total	24 fl oz/a	B		0 b	100 a	96 b	100 a
AMS	2 lb/a	B					
9 Callisto Xtra	20 fl oz/a	B		0 b	100 a	100 a	100 a
Crop Oil Concentrate	1 % v/v	B					
AMS	2 lb/a	B					
10 Laudis	2 fl oz/a	B		0 b	100 a	100 a	100 a
atrazine	1 pt/a	B					
Touchdown Total	24 fl oz/a	B					
AMS	2 lb/a	B					
11 Impact	0.5 fl oz/a	B		0 b	100 a	99 a	100 a
atrazine	1 pt/a	B					
Touchdown Total	24 fl oz/a	B					
AMS	2 lb/a	B					
12 Status	2.5 oz/a	B		0 b	100 a	100 a	100 a
atrazine	1 pt/a	B					
Touchdown Total	24 fl oz/a	B					
AMS	2 lb/a	B					
13 Realm Q	4 oz/a			0 b	83 c	100 a	100 a
Crop Oil Concentrate	1 % v/v	B					
AMS	2 lb/a	B					
14 Cinch ATZ	1 qt/a	A		100 a	88 b	100 a	100 a
Realm Q	4 oz/a						
Crop Oil Concentrate	1 % v/v	C					
AMS	2 lb/a	C					
15 Cinch ATZ	1 qt/a	A		0 b	63 d	99 a	99 a
Realm Q	4 oz/a						
Abundit	32 fl oz/a	B					
AMS	2 lb/a	B					
16 Realm Q	4 oz/a			0 b	85 c	100 a	100 a
Ignite 280	22 fl oz/a	B					
AMS	2 lb/a	B					
17 Realm Q	4 oz/a			0 b	86 bc	100 a	100 a
atrazine	0.5 lb ai/a	B					
Crop Oil Concentrate	1 % v/v	B					
AMS	2 lb/a	B					
18 Prequel	1.66 fl oz/a			100 a	100 a	100 a	100 a
Realm Q	4 oz/a						
Crop Oil Concentrate	1 % v/v	C					
AMS	2 lb/a	C					
19 Steadfast	1.5 oz/a	B		0 b	85 bc	100 a	100 a
isoxadifen-ethyl	0.125 oz ai/a	B					
mesotrione	1.25 oz ai/a	B					
Crop Oil Concentrate	1 % v/v	B					
AMS	2 lb/a	B					
20 Nontreated				0	0	0	0
LSD (P=.10)				0.0	3.3	2.1	1.2

**Callisto Xtra: Postemergence Evaluation on Field Corn**

Pest Name		Velvetleaf Jun-1-2010 control %	Velvetleaf Jun-18-2010 control %	Velvetleaf Jul-2-2010 control %	Velvetleaf Sep-3-2010 control %
Rating Date					
Rating Type					
Rating Unit					
Trt evaluation interval		28 DA-A	5 DA-C	19 DA-C	82 DA-C
Trt No.	Treatment Name	Rate	Unit	Appl Code	
1	Nontreated				0
2	Callisto Xtra	16 fl oz/a	B		0 c
	Touchdown Total	24 fl oz/a	B		16
	AMS	2 lb/a	B		23
3	Callisto Xtra	20 fl oz/a	B		0 c
	Touchdown Total	24 fl oz/a	B		16
	AMS	2 lb/a	B		23
4	Callisto Xtra	24 fl oz/a	B		0 c
	Touchdown Total	24 fl oz/a	B		16
	AMS	2 lb/a	B		23
5	Laudis	2 fl oz/a	B		0 c
	Touchdown Total	24 fl oz/a	B		16
	AMS	2 lb/a	B		23
6	Impact	0.5 fl oz/a	B		0 c
	Touchdown Total	24 fl oz/a	B		16
	AMS	2 lb/a	B		23
7	Status	2.5 oz/a	B		0 c
	Touchdown Total	24 fl oz/a	B		16
	AMS	2 lb/a	B		23
8	Touchdown Total	24 fl oz/a	B		0 c
	AMS	2 lb/a	B		16
9	Callisto Xtra	20 fl oz/a	B		0 c
	Crop Oil Concentrate	1 % v/v	B		16
	AMS	2 lb/a	B		23
10	Laudis	2 fl oz/a	B		0 c
	atrazine	1 pt/a	B		16
	Touchdown Total	24 fl oz/a	B		23
	AMS	2 lb/a	B		100 a
11	Impact	0.5 fl oz/a	B		0 c
	atrazine	1 pt/a	B		16
	Touchdown Total	24 fl oz/a	B		23
	AMS	2 lb/a	B		100 a
12	Status	2.5 oz/a	B		0 c
	atrazine	1 pt/a	B		16
	Touchdown Total	24 fl oz/a	B		23
	AMS	2 lb/a	B		100 a
13	Realm Q	4 oz/a	B		0 c
	Crop Oil Concentrate	1 % v/v	B		95 b
	AMS	2 lb/a	B		100 a
14	Cinch ATZ	1 qt/a	A		81 b
	Realm Q	4 oz/a	A		92 c
	Crop Oil Concentrate	1 % v/v	C		100 a
	AMS	2 lb/a	C		100 a
15	Cinch ATZ	1 qt/a	A		0 c
	Realm Q	4 oz/a	A		92 c
	Abundit	32 fl oz/a	B		100 a
	AMS	2 lb/a	B		100 a
16	Realm Q	4 oz/a	B		0 c
	Ignite 280	22 fl oz/a	B		83 d
	AMS	2 lb/a	B		100 a
17	Realm Q	4 oz/a	B		0 c
	atrazine	0.5 lb ai/a	B		96 b
	Crop Oil Concentrate	1 % v/v	B		100 a
	AMS	2 lb/a	B		100 a
18	Prequel	1.66 fl oz/a	B		100 a
	Realm Q	4 oz/a	A		100 a
	Crop Oil Concentrate	1 % v/v	C		100 a
	AMS	2 lb/a	C		100 a
19	Steadfast	1.5 oz/a	B		0 c
	isoxadifen-ethyl	0.125 oz ai/a	B		91 c
	mesotrione	1.25 oz ai/a	B		100 a
	Crop Oil Concentrate	1 % v/v	B		100 a
	AMS	2 lb/a	B		100 a
20	Nontreated				0
	LSD (P=.10)				0.4
					1.7
					0.0
					0.1





**Callisto Xtra: Postemergence Evaluation on Field Corn**

Pest Name	Rating Date	Rating Type	Rating Unit	Trt evaluation interval	Common dandelion Jun-1-2010 control %	Common dandelion Jun-18-2010 control %	Common dandelion Jul-2-2010 control %	Common dandelion Sep-3-2010 control %
					28 DA-A	5 DA-C	19 DA-C	82 DA-C
Trt No.	Treatment Name	Rate	Unit	Appl Code	9	18	25	30
1	Nontreated				0	0	0	0
2	Callisto Xtra	16 fl oz/a	B		0 c	93 a-d	94 bcd	97 a-d
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
3	Callisto Xtra	20 fl oz/a	B		0 c	93 a-d	94 bcd	96 a-d
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
4	Callisto Xtra	24 fl oz/a	B		0 c	97 abc	97 ab	97 a-d
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
5	Laudis	2 fl oz/a	B		0 c	92 bcd	90 de	92 ef
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
6	Impact	0.5 fl oz/a	B		0 c	91 d	91 cde	92 f
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
7	Status	2.5 oz/a	B		0 c	95 a-d	94 bcd	93 def
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
8	Touchdown Total	24 fl oz/a	B		0 c	95 a-d	90 de	91 f
	AMS	2 lb/a	B					
9	Callisto Xtra	20 fl oz/a	B		0 c	92 cd	90 de	99 abc
	Crop Oil Concentrate	1 % v/v	B					
	AMS	2 lb/a	B					
10	Laudis	2 fl oz/a	B		0 c	90 d	93 b-e	97 a-d
	atrazine	1 pt/a	B					
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
11	Impact	0.5 fl oz/a	B		0 c	98 ab	96 ab	96 a-d
	atrazine	1 pt/a	B					
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
12	Status	2.5 oz/a	B		0 c	96 a-d	96 abc	96 bcd
	atrazine	1 pt/a	B					
	Touchdown Total	24 fl oz/a	B					
	AMS	2 lb/a	B					
13	Realm Q	4 oz/a			0 c	60 g	88 e	99 abc
	Crop Oil Concentrate	1 % v/v	B					
	AMS	2 lb/a	B					
14	Cinch ATZ	1 qt/a	A		35 b	83 e	93 bcd	100 a
	Realm Q	4 oz/a						
	Crop Oil Concentrate	1 % v/v	C					
	AMS	2 lb/a	C					
15	Cinch ATZ	1 qt/a	A		0 c	64 g	95 bc	96 cde
	Realm Q	4 oz/a						
	Abundit	32 fl oz/a	B					
	AMS	2 lb/a	B					
16	Realm Q	4 oz/a			0 c	76 f	96 abc	97 abc
	Ignite 280	22 fl oz/a	B					
	AMS	2 lb/a	B					
17	Realm Q	4 oz/a			0 c	74 f	95 bc	99 abc
	atrazine	0.5 lb ai/a	B					
	Crop Oil Concentrate	1 % v/v	B					
	AMS	2 lb/a	B					
18	Prequel	1.66 fl oz/a			100 a	99 a	100 a	100 ab
	Realm Q	4 oz/a						
	Crop Oil Concentrate	1 % v/v	C					
	AMS	2 lb/a	C					
19	Steadfast	1.5 oz/a	B		0 c	63 g	93 bcd	97 abc
	isoxadifen-ethyl	0.125 oz ai/a	B					
	mesotrione	1.25 oz ai/a	B					
	Crop Oil Concentrate	1 % v/v	B					
	AMS	2 lb/a	B					
20	Nontreated				0	0	0	0
LSD (P=.10)					2.8	6.0	5.0	3.9

**Callisto Xtra: Postemergence Evaluation on Field Corn**

Pest Name			Eastern black >			
Rating Date			Sep-3-2010	Oct-12-2010		
Rating Type			control	YIELD		
Rating Unit			%	BU		
Trt evaluation interval			82 DA-C	167 DP-1		
Trt No.	Treatment Name	Rate	Unit	Appl Code	31	33
1	Nontreated				0	148
2	Callisto Xtra	16 fl oz/a	B		100 a	218 a
	Touchdown Total	24 fl oz/a	B			
	AMS	2 lb/a	B			
3	Callisto Xtra	20 fl oz/a	B		100 a	216 a
	Touchdown Total	24 fl oz/a	B			
	AMS	2 lb/a	B			
4	Callisto Xtra	24 fl oz/a	B		100 a	212 a
	Touchdown Total	24 fl oz/a	B			
	AMS	2 lb/a	B			
5	Laudis	2 fl oz/a	B		98 a	217 a
	Touchdown Total	24 fl oz/a	B			
	AMS	2 lb/a	B			
6	Impact	0.5 fl oz/a	B		100 a	214 a
	Touchdown Total	24 fl oz/a	B			
	AMS	2 lb/a	B			
7	Status	2.5 oz/a	B		15 c	211 a
	Touchdown Total	24 fl oz/a	B			
	AMS	2 lb/a	B			
8	Touchdown Total	24 fl oz/a	B		37 b	205 a
	AMS	2 lb/a	B			
9	Callisto Xtra	20 fl oz/a	B		100 a	207 a
	Crop Oil Concentrate	1 % v/v	B			
	AMS	2 lb/a	B			
10	Laudis	2 fl oz/a	B		99 a	216 a
	atrazine	1 pt/a	B			
	Touchdown Total	24 fl oz/a	B			
	AMS	2 lb/a	B			
11	Impact	0.5 fl oz/a	B		100 a	204 a
	atrazine	1 pt/a	B			
	Touchdown Total	24 fl oz/a	B			
	AMS	2 lb/a	B			
12	Status	2.5 oz/a	B		100 a	215 a
	atrazine	1 pt/a	B			
	Touchdown Total	24 fl oz/a	B			
	AMS	2 lb/a	B			
13	Realm Q	4 oz/a	B		97 a	203 a
	Crop Oil Concentrate	1 % v/v	B			
	AMS	2 lb/a	B			
14	Cinch ATZ	1 qt/a	A		100 a	213 a
	Realm Q	4 oz/a	B			
	Crop Oil Concentrate	1 % v/v	C			
	AMS	2 lb/a	C			
15	Cinch ATZ	1 qt/a	A		100 a	213 a
	Realm Q	4 oz/a	B			
	Abundit	32 fl oz/a	B			
	AMS	2 lb/a	B			
16	Realm Q	4 oz/a	B		100 a	212 a
	Ignite 280	22 fl oz/a	B			
	AMS	2 lb/a	B			
17	Realm Q	4 oz/a	B		100 a	219 a
	atrazine	0.5 lb ai/a	B			
	Crop Oil Concentrate	1 % v/v	B			
	AMS	2 lb/a	B			
18	Prequel	1.66 fl oz/a	B		100 a	209 a
	Realm Q	4 oz/a	B			
	Crop Oil Concentrate	1 % v/v	C			
	AMS	2 lb/a	C			
19	Steadfast	1.5 oz/a	B		100 a	211 a
	isoxadifen-ethyl	0.125 oz ai/a	B			
	mesotrione	1.25 oz ai/a	B			
	Crop Oil Concentrate	1 % v/v	B			
	AMS	2 lb/a	B			
20	Nontreated				0	151
LSD (P=.10)					14.9	11.2

# University of Wisconsin-Madison

## Corn Herbicide/Fungicide Evaluation

Trial ID: 10ARLCN07      Protocol ID: 10ARLCN07  
Location:                      Study Director:  
Project ID:                    Investigator: C. M. Boerboom  
Sponsor Contact:

### General Trial Information

**Study Director:** T.L.Trower                      **Title:** Sr. Outreach Specialist  
**Investigator:** C. M. Boerboom  
**Discipline:** H herbicide

### Trial Location

**City:** Arlington  
**State/Prov.:** WI

### Personnel

**Study Director:** T.L.Trower                      **Title:** Sr. Outreach Specialist  
**Affiliation:** UW-Madison  
**Address:** 1575 Linden Dr.  
**Location:** Madison, WI  
**Postal Code:** 53706                      **E-mail:** tltrower@wisc.edu  
**Mobile No.:** 608-393-3173  
**Investigator:** C. M. Boerboom

### Crop Description

**Crop 1:** ZEAMD Zea mays indentata Dent corn  
**Variety:** DKC 45-79                      **Description:** RR VT3  
**BBCH Scale:** BCOR                      **Planting Date:** May-17-2010  
**Planting Method:** SEEDED seeded  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN                      **Spacing Within Row, Unit:** 7 IN  
**Seed Bed:** SMOOTH smooth  
**Soil Moisture:** NORMAL normal                      **Emergence Date:** May-31-2010  
**Harvested Width, Unit:** 7.5 FT                      **Harvested Length, Unit:** 25 FT

### Site and Design

**Plot Width, Unit:** 10 FT                      **Site Type:** CROP  
**Plot Length, Unit:** 25 FT  
**Plot Area, Unit:** 25 FT  
0 2  
**Replications:** 4                      **Study Design:** RACOB L Randomized Complete Block (RCB)

### Soil Description

**Description Name:** Silt Loam field 371  
**% Sand:** 10      **% OM:** 3.5                      **Texture:** SIL silt loam  
**% Silt:** 67      **pH:** 6.8                      **Soil Name:** silt loam  
**% Clay:** 23      **CEC:** 13

### Additional Measured Elements

Element	Quantity	Unit
Phosphorus	19	ppm
Potassium	75	ppm
Calcium	1666	ppm
Magnesium	523	ppm

### Application Description

	A
<b>Application Date:</b>	Jun-18-2010
<b>Time of Day:</b>	8:40A
<b>Application Method:</b>	Broadcast
<b>Application Timing:</b>	Post
<b>Application Placement:</b>	Foliar
<b>Applied By:</b>	T. Trower
<b>Air Temperature, Unit:</b>	74 F
<b>% Relative Humidity:</b>	83
<b>Wind Velocity, Unit:</b>	3 MPH
<b>Wind Direction:</b>	NNE
<b>Dew Presence (Y/N):</b>	N no
<b>Soil Temperature, Unit:</b>	72 F
<b>Soil Moisture:</b>	WET
<b>% Cloud Cover:</b>	0

**Crop Stage At Each Application**

	<b>A</b>
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMD BCOR
<b>Stage Scale Used:</b>	BBCH
<b>Stage Majority, Percent:</b>	V5
<b>Stage Maximum, Percent:</b>	V6
<b>Height, Unit:</b>	18 IN
<b>Height Minimum, Maximum:</b>	15

**Application Equipment**

	<b>A</b>
<b>Equipment Type:</b>	SPRBAC
<b>Operating Pressure, Unit:</b>	23 PSI
<b>Nozzle Type:</b>	XR
<b>Nozzle Size:</b>	8003
<b>Nozzle Spacing, Unit:</b>	20 IN
<b>% Coverage:</b>	100
<b>Boom ID:</b>	20 GPA
<b>Boom Length, Unit:</b>	10 FT
<b>Boom Height, Unit:</b>	19 IN
<b>Ground Speed, Unit:</b>	3 MPH
<b>Carrier:</b>	WATER
<b>Spray Volume, Unit:</b>	20 gal/ac
<b>Mix Size, Unit:</b>	2.2 liters
<b>Propellant:</b>	COMCO2

**Corn Herbicide/Fungicide Evaluation**

Crop Name				Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	
Rating Date				Jun-21-2010	Jun-21-2010	Jun-21-2010	Jun-28-2010	Jun-28-2010	Jun-28-2010	
Rating Type				PHYSTU	PHYNLS	PHYNLM	PHYSTU	PHYNLS	PHYNLM	
Rating Unit				%	%	%	%	%	%	
Tri-Eval Interval				3 DA-A	3 DA-A	3 DA-A	10 DA-A	10 DA-A	10 DA-A	
Days After Emergence				21 DE-	21 DE-	21 DE-	28 DE-	28 DE-	28 DE-	
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4	5	6
1	Camix	2.4	qt/a	A	0	0	0	0	0	0
	Princip	1	lb ai/a	A						
	Quadris	6	fl oz/a	B						
2	Camix	2.4	qt/a	A	0 a	0 cd	0 a	0 a	0 c	0 a
	Princip	1	lb ai/a	A						
	Halex GT	3.6	pt/a	B						
	Activator 90	0.25	% v/v	B						
	AMS	2	lb/a	B						
3	Camix	2.4	qt/a	A	0 a	0 d	0 a	0 a	0 c	0 a
	Princip	1	lb ai/a	A						
	Callisto	3	fl oz/a	B						
	Crop Oil Concentrate	1	% v/v	B						
	AMS	2	lb/a	B						
4	Camix	2.4	qt/a	A	0 a	0 d	0 a	0 a	0 c	0 a
	Princip	1	lb ai/a	A						
	Touchdown Total	24	fl oz/a	B						
	AMS	2	lb/a	B						
5	Camix	2.4	qt/a	A	0 a	0 d	0 a	0 a	0 c	0 a
	Princip	1	lb ai/a	A						
	N-Pact	1	gal/a	B						
6	Camix	2.4	qt/a	A	0 a	0 cd	0 a	0 a	0 c	0 a
	Princip	1	lb ai/a	A						
	CoRoN	1	gal/a	B						
7	Camix	2.4	qt/a	A	0 a	0 d	1 a	0 a	0 c	0 a
	Princip	1	lb ai/a	A						
	Halex GT	3.6	pt/a	B						
	Quadris	6	fl oz/a	B						
	Activator 90	0.25	% v/v	B						
	AMS	2	lb/a	B						
8	Camix	2.4	qt/a	A	0 a	0 d	0 a	0 a	0 c	0 a
	Princip	1	lb ai/a	A						
	Callisto	3	fl oz/a	B						
	Quadris	6	fl oz/a	B						
	Crop Oil Concentrate	1	% v/v	B						
	AMS	2	lb/a	B						
9	Camix	2.4	qt/a	A	0 a	0 d	1 a	0 a	0 c	0 a
	Princip	1	lb ai/a	A						
	Touchdown Total	24	fl oz/a	B						
	Quadris	6	fl oz/a	B						
	AMS	2	lb/a	B						
10	Camix	2.4	qt/a	A	0 a	2 b	0 a	0 a	1 bc	0 a
	Princip	1	lb ai/a	A						
	Halex GT	3.6	pt/a	B						
	Quadris	6	fl oz/a	B						
	N-Pact	1	gal/a	B						
	Activator 90	0.25	% v/v	B						
	AMS	2	lb/a	B						
11	Camix	2.4	qt/a	A	0 a	3 b	0 a	0 a	1 b	0 a
	Princip	1	lb ai/a	A						
	Callisto	3	fl oz/a	B						
	Quadris	6	fl oz/a	B						
	N-Pact	1	gal/a	B						
	Crop Oil Concentrate	1	% v/v	B						
	AMS	2	lb/a	B						
12	Camix	2.4	qt/a	A	0 a	0 cd	1 a	0 a	0 c	0 a
	Princip	1	lb ai/a	A						
	Touchdown Total	24	fl oz/a	B						
	Quadris	6	fl oz/a	B						
	N-Pact			B						
	AMS	2	lb/a	B						
13	Camix	2.4	qt/a	A	0 a	1 cd	0 a	0 a	0 c	0 a
	Princip	1	lb ai/a	A						
	Halex GT	3.6	pt/a	B						
	Quadris	6	fl oz/a	B						
	CoRoN	1	gal/a	B						
	Activator 90	0.25	% v/v	B						
	AMS	2	lb/a	B						
14	Camix	2.4	qt/a	A	0 a	6 a	0 a	0 a	3 a	0 a
	Princip	1	lb ai/a	A						
	Callisto	3	fl oz/a	B						
	Quadris	6	fl oz/a	B						
	CoRoN	1	gal/a	B						
	Crop Oil Concentrate	1	% v/v	B						
	AMS	2	lb/a	B						
15	Camix	2.4	qt/a	A	0 a	1 c	1 a	0 a	0 bc	1 a
	Princip	1	lb ai/a	A						
	Touchdown Total	24	fl oz/a	B						
	Quadris	6	fl oz/a	B						
	CoRoN	1	gal/a	B						
	AMS	2	lb/a	B						
LSD (P=.10)					0.0	1.0	1.0	0.0	0.8	0.5

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.

**Corn Herbicide/Fungicide Evaluation**

Crop Name				Dent corn	Dent corn	Dent corn	Dent corn	
Rating Date				Jul-5-2010	Jul-5-2010	Jul-5-2010	Oct-6-2010	
Rating Type				PHYSTU	PHYNLS	PHYNLM	YIELD	
Rating Unit				%	%	%	BU	
Tri-Eval Interval				17 DA-A	17 DA-A	17 DA-A	110 DA-A	
Days After Emergence				35 DE-	35 DE-	35 DE-	128 DE	
Trt No.	Treatment Name	Rate	Unit	Appl Code	7	8	9	11
1	Camix	2.4	qt/a	A	0	0	0	169
	Princip	1	lb ai/a	A				
	Quadris	6	fl oz/a	B				
2	Camix	2.4	qt/a	A	0 a	0 a	0 a	167 a
	Princip	1	lb ai/a	A				
	Halex GT	3.6	pt/a	B				
	Activator 90	0.25	% v/v	B				
	AMS	2	lb/a	B				
3	Camix	2.4	qt/a	A	0 a	0 a	0 a	160 a
	Princip	1	lb ai/a	A				
	Callisto	3	fl oz/a	B				
	Crop Oil Concentrate	1	% v/v	B				
	AMS	2	lb/a	B				
4	Camix	2.4	qt/a	A	0 a	0 a	0 a	165 a
	Princip	1	lb ai/a	A				
	Touchdown Total	24	fl oz/a	B				
	AMS	2	lb/a	B				
5	Camix	2.4	qt/a	A	0 a	0 a	0 a	166 a
	Princip	1	lb ai/a	A				
	N-Pact	1	gal/a	B				
6	Camix	2.4	qt/a	A	0 a	0 a	0 a	164 a
	Princip	1	lb ai/a	A				
	CoRoN	1	gal/a	B				
7	Camix	2.4	qt/a	A	0 a	0 a	0 a	167 a
	Princip	1	lb ai/a	A				
	Halex GT	3.6	pt/a	B				
	Quadris	6	fl oz/a	B				
	Activator 90	0.25	% v/v	B				
	AMS	2	lb/a	B				
8	Camix	2.4	qt/a	A	0 a	0 a	0 a	164 a
	Princip	1	lb ai/a	A				
	Callisto	3	fl oz/a	B				
	Quadris	6	fl oz/a	B				
	Crop Oil Concentrate	1	% v/v	B				
	AMS	2	lb/a	B				
9	Camix	2.4	qt/a	A	0 a	0 a	0 a	161 a
	Princip	1	lb ai/a	A				
	Touchdown Total	24	fl oz/a	B				
	Quadris	6	fl oz/a	B				
	AMS	2	lb/a	B				
10	Camix	2.4	qt/a	A	0 a	0 a	0 a	158 a
	Princip	1	lb ai/a	A				
	Halex GT	3.6	pt/a	B				
	Quadris	6	fl oz/a	B				
	N-Pact	1	gal/a	B				
	Activator 90	0.25	% v/v	B				
	AMS	2	lb/a	B				
11	Camix	2.4	qt/a	A	0 a	0 a	0 a	160 a
	Princip	1	lb ai/a	A				
	Callisto	3	fl oz/a	B				
	Quadris	6	fl oz/a	B				
	N-Pact	1	gal/a	B				
	Crop Oil Concentrate	1	% v/v	B				
	AMS	2	lb/a	B				
12	Camix	2.4	qt/a	A	0 a	0 a	0 a	163 a
	Princip	1	lb ai/a	A				
	Touchdown Total	24	fl oz/a	B				
	Quadris	6	fl oz/a	B				
	N-Pact			B				
	AMS	2	lb/a	B				
13	Camix	2.4	qt/a	A	0 a	0 a	0 a	159 a
	Princip	1	lb ai/a	A				
	Halex GT	3.6	pt/a	B				
	Quadris	6	fl oz/a	B				
	CoRoN	1	gal/a	B				
	Activator 90	0.25	% v/v	B				
	AMS	2	lb/a	B				
14	Camix	2.4	qt/a	A	0 a	0 a	0 a	165 a
	Princip	1	lb ai/a	A				
	Callisto	3	fl oz/a	B				
	Quadris	6	fl oz/a	B				
	CoRoN	1	gal/a	B				
	Crop Oil Concentrate	1	% v/v	B				
	AMS	2	lb/a	B				
15	Camix	2.4	qt/a	A	0 a	0 a	0 a	168 a
	Princip	1	lb ai/a	A				
	Touchdown Total	24	fl oz/a	B				
	Quadris	6	fl oz/a	B				
	CoRoN	1	gal/a	B				
	AMS	2	lb/a	B				
LSD (P=.10)					0.0	0.0	0.0	8.8

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.

# University of Wisconsin-Madison

## Postemergence Herbicide Evaluation

Trial ID: 10ARLCN09      Protocol ID: 10ARLCN09  
Location: Arlington      Study Director: T. L. Trower  
Project ID:      Investigator: C. M. Boerboom  
Sponsor Contact:

### General Trial Information

**Study Director:** T.L.Trower      **Title:** Sr. Outreach Specialist  
**Investigator:** C. M. Boerboom

**Discipline:** H herbicide  
**Initiation Date:** May-5-2010

### Trial Location

**City:** Arlington  
**State/Prov.:** WI

### Personnel

**Study Director:** T.L.Trower      **Title:** Sr. Outreach Specialist

**Affiliation:** UW-Madison  
**Address:** 1575 Linden Dr.  
**Location:** Madison, WI

**Postal Code:** 53706      **E-mail:** tltrower@wisc.edu  
**Mobile No.:** 608-393-3173

**Investigator:** C. M. Boerboom

### Crop Description

**Crop 1:** ZEAMD Zea mays indentata      Dent corn  
**Variety:** DKC 48-37      **Description:** VT3  
**BBCH Scale:** BCOR      **Planting Date:** May-3-2010  
**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      **Emergence Date:** May-17-2010  
**Harvested Width, Unit:** 5 FT      **Harvested Length, Unit:** 25 FT

### Pest Description

**Pest 1 Type:** W      **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail

**Pest 2 Type:** W      **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters

**Pest 3 Type:** W      **Code:** AMARE Amaranthus retroflexus  
**Common Name:** Redroot pigweed

**Pest 4 Type:** W      **Code:** ABUTH Abutilon theophrasti  
**Common Name:** Velvetleaf

**Pest 5 Type:** W      **Code:** POLPE Polygonum persicaria  
**Common Name:** Ladysthumb

### Site and Design

**Plot Width, Unit:** 10 FT      **Site Type:** CROP  
**Plot Length, Unit:** 25 FT  
**Plot Area, Unit:** 250 FT2      **Tillage Type:** CONTIL conventional-till  
**Replications:** 4      **Study Design:** RACOB� Randomized Complete Block (RCB)

### Soil Description

**Description Name:** Plano Silt Loam  
**% Sand:** 4      **% OM:** 3.8      **Texture:** SIL silt loam  
**% Silt:** 71      **pH:** 6.5      **Soil Name:** Plano  
**% Clay:** 25      **CEC:** 11

### Additional Measured Elements

Element	Quantity	Unit
Phosphorus	28	ppm
Potassium	143	ppm
Calcium	1496	ppm
Magnesium	447	ppm

**Application Description**

	<b>A</b>
Application Date:	Jun-9-2010
Time of Day:	9:30 am
Application Method:	Broadcast
Application Timing:	Post
Application Placement:	Foliar
Applied By:	T. Trower
Air Temperature, Unit:	72 F
% Relative Humidity:	83
Wind Velocity, Unit:	6.8 MPH
Wind Direction:	SW
Dew Presence (Y/N):	Y yes
Soil Temperature, Unit:	65 F
Soil Moisture:	SLIWET
% Cloud Cover:	0

**Crop Stage At Each Application**

	<b>A</b>
Crop 1 Code, BBCH Scale:	ZEAMD BCOR
Stage Scale Used:	BBCH
Stage Majority, Percent:	V4
Height, Unit:	10 IN
Height Minimum, Maximum:	8 10

**Pest Stage At Each Application**

	<b>A</b>
Pest 1 Code, Type, Scale:	SETFA W
Stage Minimum, Percent:	3 lvs
Stage Maximum, Percent:	4 lvs
Height, Unit:	4 IN
Height Minimum, Maximum:	3 8
Density, Unit:	7 FT2
Pest 2 Code, Type, Scale:	CHEAL W
Stage Minimum, Percent:	8 lvs
Height, Unit:	4 IN
Height Minimum, Maximum:	2 5
Density, Unit:	9 FT2
Pest 3 Code, Type, Scale:	AMARE W
Stage Majority, Percent:	4 lvs
Height, Unit:	2 IN
Height Minimum, Maximum:	1 3
Density, Unit:	1 FT2
Pest 4 Code, Type, Scale:	ABUTH W
Stage Minimum, Percent:	5 lvs
IN	
Height Minimum, Maximum:	1 3
Density, Unit:	1 FT2
Pest 5 Code, Type, Scale:	POLPE W
Stage Majority, Percent:	4 lvs
Height, Unit:	4 IN
Height Minimum, Maximum:	2 5
Density, Unit:	3 FT2

**Application Equipment**

	<b>A</b>
Equipment Type:	SPRBAC
Operating Pressure, Unit:	23 PSI
Nozzle Type:	Flat Fan
Nozzle Size:	XR 8003
Nozzle Spacing, Unit:	20 IN
% Coverage:	100
Boom ID:	20 GPA
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:	COMCO2

Date	By	Notes
Jun-9-2010	T. Trower	85% ground cover at application



**Postemergence Herbicide Evaluation**

Pest Type								
Pest Name								
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn			
Rating Date	Jun-23-2010	Jun-23-2010	Jun-30-2010	Jun-30-2010	Oct-5-2010			
Rating Type	PHYSTU	PHYCHL	PHYSTU	PHYCHL	YIELD			
Rating Unit	%	%	%	%	BU			
Trt-Eval Interval	14 DA-A	14 DA-A	21 DA-A	21 DA-A	118 DA-A			
Plant-Eval Interval	51 DP-1	51 DP-1	58 DP-1	58 DP-1	155 DP-1			
Trt No.	Treatment Name	Rate	Appl Code	1	2	8	9	26
		Rate Unit						
1	Nontreated		A	0	0	0	0	177
2	Laudis	3 fl oz/a	A	0 a	0 a	0 a	0 a	234 a
	atrazine	1 pt/a	A					
	MSO Concentrate	1 % v/v	A					
	AMS	8.5 lb/100 gal	A					
3	Impact	0.75 fl oz/a	A	0 a	0 a	0 a	0 a	238 a
	atrazine	1 pt/a	A					
	MSO Concentrate	1 % v/v	A					
	AMS	8.5 lb/100 gal	A					
4	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	231 a
	atrazine	1 pt/a	A					
	COC	1 % v/v	A					
	AMS	8.5 lb/100 gal	A					
5	Laudis	3 fl oz/a	A	0 a	1 a	0 a	0 a	232 a
	atrazine	1 pt/a	A					
	MSO Concentrate	1 % v/v	A					
	Weather Guard Complete	2 qt/100 gal	A					
6	Laudis	3 fl oz/a	A	0 a	0 a	0 a	0 a	236 a
	atrazine	1 pt/a	A					
	Destiny HC	0.5 % v/v	A					
	Class Act NG	5 qt/100 gal	A					
	Interlock	4 oz/a	A					
7	Laudis	3 fl oz/a	A	0 a	0 a	0 a	0 a	231 a
	atrazine	1 pt/a	A					
	DYNE-AMIC	2 qt/100 gal	A					
	Request	2 qt/100 gal	A					
	Grounded	1 gal/100 gal	A					
8	Laudis	3 fl oz/a	A	0 a	1 a	0 a	0 a	235 a
	atrazine	1 pt/a	A					
	Sundance II	1.5 pt/a	A					
	Array	9 lb/100 gal	A					
9	Laudis	3 fl oz/a	A	0 a	0 a	0 a	0 a	229 a
	atrazine	1 pt/a	A					
	Soy-Stik	1.5 pt/a	A					
	Gardian Plus	2 qt/100 gal	A					
10	Laudis	3 fl oz/a	A	0 a	0 a	0 a	0 a	229 a
	atrazine	1 pt/a	A					
	Succeed	1.5 pt/a	A					
	Doubledown	2.5 gal/100 gal	A					
11	Laudis	3 fl oz/a	A	0 a	1 a	0 a	0 a	222 a
	atrazine	1 pt/a	A					
	Persist Ultra	1.5 pt/a	A					
	Border Xtra 6L	2.5 gal/100 gal	A					
12	Laudis	3 fl oz/a	A	0 a	0 a	0 a	0 a	227 a
	atrazine	1 pt/a	A					
	Superspread MSO	1.5 pt/a	A					
	Bronc Max E.D.T.	2 qt/100 gal	A					
LSD (P=.10)				0.0	0.9	0.0	0.0	8.0

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.

**Postemergence Herbicide Evaluation**

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Name	Common lambsqu>	Common lambsqu>	Common lambsqu>	Common lambsqu>
Crop Name				
Rating Date	Jun-23-2010	Jun-30-2010	Jul-23-2010	Aug-27-2010
Rating Type	control	control	control	control
Rating Unit	%	%	%	%
Trt-Eval Interval	14 DA-A	21 DA-A	44 DA-A	79 DA-A
Plant-Eval Interval	51 DP-1	58 DP-1	81 DP-1	116 DP-1
Trt No.	Treatment Name	Rate	Appl Code	
		Rate Unit		
				4
1	Nontreated			0
2	Laudis	3 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	MSO Concentrate	1 % v/v	A	
	AMS	8.5 lb/100 gal	A	
3	Impact	0.75 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	MSO Concentrate	1 % v/v	A	
	AMS	8.5 lb/100 gal	A	
4	Capreno	3 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	COC	1 % v/v	A	
	AMS	8.5 lb/100 gal	A	
5	Laudis	3 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	MSO Concentrate	1 % v/v	A	
	Weather Guard Complete	2 qt/100 gal	A	
6	Laudis	3 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	Destiny HC	0.5 % v/v	A	
	Class Act NG	5 qt/100 gal	A	
	Interlock	4 oz/a	A	
7	Laudis	3 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	DYNE-AMIC	2 qt/100 gal	A	
	Request	2 qt/100 gal	A	
	Grounded	1 gal/100 gal	A	
8	Laudis	3 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	Sundance II	1.5 pt/a	A	
	Array	9 lb/100 gal	A	
9	Laudis	3 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	Soy-Stik	1.5 pt/a	A	
	Gardian Plus	2 qt/100 gal	A	
10	Laudis	3 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	Succeed	1.5 pt/a	A	
	Doubledown	2.5 gal/100 gal	A	
11	Laudis	3 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	Persist Ultra	1.5 pt/a	A	
	Border Xtra 6L	2.5 gal/100 gal	A	
12	Laudis	3 fl oz/a	A	100 a
	atrazine	1 pt/a	A	
	Superspread MSO	1.5 pt/a	A	
	Bronc Max E.D.T.	2 qt/100 gal	A	
	LSD (P=.10)			0.0

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.

**Postemergence Herbicide Evaluation**

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Name	Giant foxtail	Giant foxtail	Giant foxtail	Giant foxtail			
Crop Name							
Rating Date	Jun-23-2010	Jun-30-2010	Jul-23-2010	Aug-27-2010			
Rating Type	control	control	control	control			
Rating Unit	%	%	%	%			
Trt-Eval Interval	14 DA-A	21 DA-A	44 DA-A	79 DA-A			
Plant-Eval Interval	51 DP-1	58 DP-1	81 DP-1	116 DP-1			
Trt No.	Treatment Name	Rate	Appl Code	3	10	15	20
		Rate Unit					
1	Nontreated		A	0	0	0	0
2	Laudis	3 fl oz/a	A	91 a	93 a	94 a	94 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
3	Impact	0.75 fl oz/a	A	97 a	98 a	98 a	98 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
4	Capreno	3 fl oz/a	A	98 a	99 a	100 a	100 a
	atrazine	1 pt/a	A				
	COC	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
5	Laudis	3 fl oz/a	A	92 a	93 a	92 a	93 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	Weather Guard Complete	2 qt/100 gal	A				
6	Laudis	3 fl oz/a	A	96 a	97 a	97 a	98 a
	atrazine	1 pt/a	A				
	Destiny HC	0.5 % v/v	A				
	Class Act NG	5 qt/100 gal	A				
	Interlock	4 oz/a	A				
7	Laudis	3 fl oz/a	A	93 a	98 a	98 a	97 a
	atrazine	1 pt/a	A				
	DYNE-AMIC	2 qt/100 gal	A				
	Request	2 qt/100 gal	A				
	Grounded	1 gal/100 gal	A				
8	Laudis	3 fl oz/a	A	95 a	97 a	97 a	97 a
	atrazine	1 pt/a	A				
	Sundance II	1.5 pt/a	A				
	Array	9 lb/100 gal	A				
9	Laudis	3 fl oz/a	A	96 a	96 a	96 a	95 a
	atrazine	1 pt/a	A				
	Soy-Stik	1.5 pt/a	A				
	Gardian Plus	2 qt/100 gal	A				
10	Laudis	3 fl oz/a	A	93 a	94 a	94 a	94 a
	atrazine	1 pt/a	A				
	Succeed	1.5 pt/a	A				
	Doubledown	2.5 gal/100 gal	A				
11	Laudis	3 fl oz/a	A	92 a	95 a	94 a	94 a
	atrazine	1 pt/a	A				
	Persist Ultra	1.5 pt/a	A				
	Border Xtra 6L	2.5 gal/100 gal	A				
12	Laudis	3 fl oz/a	A	94 a	95 a	94 a	95 a
	atrazine	1 pt/a	A				
	Superspread MSO	1.5 pt/a	A				
	Bronc Max E.D.T.	2 qt/100 gal	A				
	LSD (P=.10)			6.2	5.8	6.4	6.0

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.

**Postemergence Herbicide Evaluation**

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Name	Ladysthumb	Ladysthumb	Ladysthumb	Ladysthumb			
Crop Name							
Rating Date	Jun-23-2010	Jun-30-2010	Jul-23-2010	Aug-27-2010			
Rating Type	control	control	control	control			
Rating Unit	%	%	%	%			
Trt-Eval Interval	14 DA-A	21 DA-A	44 DA-A	79 DA-A			
Plant-Eval Interval	51 DP-1	58 DP-1	81 DP-1	116 DP-1			
Trt No.	Treatment Name	Rate	Appl Code	7	14	19	24
Rate Unit							
1	Nontreated		A	0	0	0	0
2	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
3	Impact	0.75 fl oz/a	A	96 b	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
4	Capreno	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	COC	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
5	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	Weather Guard Complete	2 qt/100 gal	A				
6	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Destiny HC	0.5 % v/v	A				
	Class Act NG	5 qt/100 gal	A				
	Interlock	4 oz/a	A				
7	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	DYNE-AMIC	2 qt/100 gal	A				
	Request	2 qt/100 gal	A				
	Grounded	1 gal/100 gal	A				
8	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Sundance II	1.5 pt/a	A				
	Array	9 lb/100 gal	A				
9	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Soy-Stik	1.5 pt/a	A				
	Gardian Plus	2 qt/100 gal	A				
10	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Succeed	1.5 pt/a	A				
	Doubledown	2.5 gal/100 gal	A				
11	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Persist Ultra	1.5 pt/a	A				
	Border Xtra 6L	2.5 gal/100 gal	A				
12	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Superspread MSO	1.5 pt/a	A				
	Bronc Max E.D.T.	2 qt/100 gal	A				
LSD (P=.10)				1.1	0.0	0.0	0.0

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.

**Postemergence Herbicide Evaluation**

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Name	Redroot pigweed	Redroot pigweed	Redroot pigweed	Redroot pigweed			
Crop Name							
Rating Date	Jun-23-2010	Jun-30-2010	Jul-23-2010	Aug-27-2010			
Rating Type	control	control	control	control			
Rating Unit	%	%	%	%			
Trt-Eval Interval	14 DA-A	21 DA-A	44 DA-A	79 DA-A			
Plant-Eval Interval	51 DP-1	58 DP-1	81 DP-1	116 DP-1			
Trt No.	Treatment Name	Rate	Appl Code	5	12	17	22
Rate Unit							
1	Nontreated		A	0	0	0	0
2	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
3	Impact	0.75 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
4	Capreno	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	COC	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
5	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	Weather Guard Complete	2 qt/100 gal	A				
6	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Destiny HC	0.5 % v/v	A				
	Class Act NG	5 qt/100 gal	A				
	Interlock	4 oz/a	A				
7	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	DYNE-AMIC	2 qt/100 gal	A				
	Request	2 qt/100 gal	A				
	Grounded	1 gal/100 gal	A				
8	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Sundance II	1.5 pt/a	A				
	Array	9 lb/100 gal	A				
9	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Soy-Stik	1.5 pt/a	A				
	Gardian Plus	2 qt/100 gal	A				
10	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Succeed	1.5 pt/a	A				
	Doubledown	2.5 gal/100 gal	A				
11	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Persist Ultra	1.5 pt/a	A				
	Border Xtra 6L	2.5 gal/100 gal	A				
12	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Superspread MSO	1.5 pt/a	A				
	Bronc Max E.D.T.	2 qt/100 gal	A				
LSD (P=.10)				0.0	0.0	0.0	0.0

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.

**Postemergence Herbicide Evaluation**

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Name	Velvetleaf	Velvetleaf	Velvetleaf	Velvetleaf			
Crop Name							
Rating Date	Jun-23-2010	Jun-30-2010	Jul-23-2010	Aug-27-2010			
Rating Type	control	control	control	control			
Rating Unit	%	%	%	%			
Trt-Eval Interval	14 DA-A	21 DA-A	44 DA-A	79 DA-A			
Plant-Eval Interval	51 DP-1	58 DP-1	81 DP-1	116 DP-1			
Trt No.	Treatment Name	Rate	Appl Code	6	13	18	23
		Rate Unit					
1	Nontreated		A	0	0	0	0
2	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
3	Impact	0.75 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
4	Capreno	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	COC	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
5	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	MSO Concentrate	1 % v/v	A				
	Weather Guard Complete	2 qt/100 gal	A				
6	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Destiny HC	0.5 % v/v	A				
	Class Act NG	5 qt/100 gal	A				
	Interlock	4 oz/a	A				
7	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	DYNE-AMIC	2 qt/100 gal	A				
	Request	2 qt/100 gal	A				
	Grounded	1 gal/100 gal	A				
8	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Sundance II	1.5 pt/a	A				
	Array	9 lb/100 gal	A				
9	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Soy-Stik	1.5 pt/a	A				
	Gardian Plus	2 qt/100 gal	A				
10	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Succeed	1.5 pt/a	A				
	Doubledown	2.5 gal/100 gal	A				
11	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Persist Ultra	1.5 pt/a	A				
	Border Xtra 6L	2.5 gal/100 gal	A				
12	Laudis	3 fl oz/a	A	100 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Superspread MSO	1.5 pt/a	A				
	Bronc Max E.D.T.	2 qt/100 gal	A				
	LSD (P=.10)			0.0	0.0	0.0	0.0

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.

# University of Wisconsin-Madison

## Capreno- Adjuvant Evaluation

Trial ID: 10ARLCN08 Protocol ID: 10ARLCN08  
Location: Arlington Study Director:  
Project ID: Investigator: C. M. Boerboom  
Sponsor  
Contact: Bayer

### General Trial Information

**Study Director:** T.L.Trower **Title:** Sr. Outreach Specialist  
**Investigator:** C. M. Boerboom

**Discipline:** H herbicide  
**Initiation Date:** Apr-28-2010

### Trial Location

**City:** Arlington  
**State/Prov.:** WI

### Personnel

**Study Director:** T.L.Trower **Title:** Sr. Outreach Specialist  
**Affiliation:** UW-Madison  
**Address:** 1575 Linden Dr.  
**Location:** Madison, WI  
**Postal Code:** 53706 **E-mail:** tltrower@wisc.edu  
**Mobile No.:** 608-393-3173  
**Investigator:** C. M. Boerboom

### Crop Description

**Crop 1:** ZEAMD Zea mays indentata Dent corn  
**Variety:** DKC 48-37 **Description:** VT3  
**BBCH Scale:** BCOR **Planting Date:** Apr-28-2010  
**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 **Emergence Date:** May-12-2010  
**Harvested Width, Unit:** 5 FT **Harvested Length, Unit:** 25 FT

### Pest Description

**Pest 1 Type:** W **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail  
**Pest 2 Type:** W **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters  
**Pest 3 Type:** W **Code:** ABUTH Abutilon theophrasti  
**Common Name:** Velvetleaf  
**Pest 4 Type:** W **Code:** AMBEL Ambrosia artemisiifolia  
**Common Name:** Common ragweed  
**Pest 5 Type:** W **Code:** AMARE Amaranthus retroflexus  
**Common Name:** Redroot pigweed  
**Pest 6 Type:** W **Code:** POLPE Polygonum persicaria  
**Common Name:** Ladysthumb

### Site and Design

**Plot Width, Unit:** 10 FT **Site Type:** CROP  
**Plot Length, Unit:** 25 FT  
**Plot Area, Unit:** 250 FT<sup>2</sup> **Tillage Type:** CONTIL conventional-till  
**Replications:** 4 **Study Design:** RACOBL Randomized Complete Block (RCB)

### Soil Description

**Description Name:** Silt Loam  
**% Sand:** 6 **% OM:** 3.7 **Texture:** SIL silt loam  
**% Silt:** 71 **pH:** 6.7 **Soil Name:** Plano  
**% Clay:** 23 **CEC:** 12

### Additional Measured Elements

Element	Quantity	Unit
Phosphorus	22	ppm
Potassium	103	ppm
Calcium	1596	ppm
Magnesium	474	ppm

### Application Description

	A
Application Date:	Jun-2-2010
Time of Day:	12:00p
Application Method:	Broadcast
Application Timing:	Post
Application Placement:	Foliar
Applied By:	T. Trower
Air Temperature, Unit:	76 F
% Relative Humidity:	59
Wind Velocity, Unit:	3.5 MPH
Wind Direction:	N
Dew Presence (Y/N):	N no
Soil Temperature, Unit:	76 F
Soil Moisture:	DRY/MOIST
% Cloud Cover:	100

### Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMD BCOR
Stage Scale Used:	BBCH
Stage Majority, Percent:	V3
Stage Maximum, Percent:	V4
Height, Unit:	9 IN
Height Minimum, Maximum:	8 9

### Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	SETFA W
Stage Majority, Percent:	3 lvs
Stage Minimum, Percent:	4 lvs
Height, Unit:	6 IN
Height Minimum, Maximum:	5 8
Density, Unit:	10 FT2
Pest 2 Code, Type, Scale:	CHEAL W
Stage Minimum, Percent:	6 lvs
Stage Maximum, Percent:	7 lvs
Height, Unit:	3 IN
Height Minimum, Maximum:	2 3
Density, Unit:	4 FT2
Pest 3 Code, Type, Scale:	ABUTH W
Stage Minimum, Percent:	3 lvs
Stage Maximum, Percent:	4 lvs
Height, Unit:	3 IN
Height Minimum, Maximum:	3 4
Density, Unit:	7 FT2
Pest 4 Code, Type, Scale:	AMBEL W
Stage Minimum, Percent:	4 lvs
Stage Maximum, Percent:	6 lvs
Height, Unit:	3 IN
Height Minimum, Maximum:	2 4
Density, Unit:	1 FT2
Pest 5 Code, Type, Scale:	AMARE W
Stage Majority, Percent:	7 lvs
Height, Unit:	3 IN
Density, Unit:	2 FT2
Pest 6 Code, Type, Scale:	POLPE W
Stage Majority, Percent:	14
Height, Unit:	3 IN
Density, Unit:	1 FT2

### Application Equipment

	A
Equipment Type:	SPRBAC
Operating Pressure, Unit:	23 PSI
Nozzle Type:	Flat Fan
Nozzle Size:	XR 8003
Nozzle Spacing, Unit:	20 IN
% Coverage:	100
Boom ID:	20 GPA
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:	COMCO2

Date	By	Notes
Jun-2-2010	T. Trower	80% ground cover at application.



**Capreno- Adjuvant Evaluation**

Pest Type								
Pest Name								
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn			
Rating Date	Jun-9-2010	Jun-9-2010	Jun-17-2010	Jun-17-2010	Oct-13-2010			
Rating Type	PHYSTU	PHYCHL	PHYSTU	PHYSTU	YIELD			
Rating Unit	%	%	%	%	BU			
Trt-Eval Interval	7 DA-A	7 DA-A	15 DA-A	15 DA-A	133 DA-A			
Plant-Eval Interval	42 DP-1	42 DP-1	50 DP-1	50 DP-1	168 DP-1			
Trt No.	Treatment Name	Rate	Appl Code	1	2	9	10	30
		Rate Unit						
1	Nontreated			0	0	0	0	123
2	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	220 a
	atrazine	1 pt/a	A					
	Herbimax	1 % v/v	A					
	AMS	8.5 lb/100 gal	A					
3	Halex GT	3.6 pt/a	A	0 a	0 a	0 a	0 a	221 a
	Activator 90	0.25 % v/v	A					
	AMS	8.5 lb/100 gal	A					
4	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	224 a
	atrazine	1 pt/a	A					
	Roundup PowerMax	22 fl oz/a	A					
	Superb HC	0.5 % v/v	A					
	AMS	8.5 lb/100 gal	A					
5	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	217 a
	atrazine	1 pt/a	A					
	Herbimax	1 % v/v	A					
	Weather Guard Complete	2 qt/100 gal	A					
6	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	234 a
	atrazine	1 pt/a	A					
	Superb HC	0.5 % v/v	A					
	Class Act	5 qt/100 gal	A					
	Interlock	4 fl oz/a	A					
7	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	226 a
	atrazine	1 pt/a	A					
	Herbimax	2 qt/100 gal	A					
	Hel-Fire	1 qt/100 gal	A					
	Grounded	1 gal/100 gal	A					
8	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	220 a
	atrazine	1 pt/a	A					
	Herbimax	1.5 pt/a	A					
	Array	9 lb/100 gal	A					
9	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	225 a
	atrazine	1 pt/a	A					
	Trophy Gold	1 qt/100 gal	A					
	Gardian Plus	2 qt/100 gal	A					
10	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	229 a
	atrazine	1 pt/a	A					
	Herbimax	1 % v/v	A					
	Doubledown	2.5 gal/100 gal	A					
11	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	223 a
	atrazine	1 pt/a	A					
	Herbimax	0.375 % v/v	A					
	Border Xtra 8L	2.5 gal/100 gal	A					
12	Capreno	3 fl oz/a	A	0 a	0 a	0 a	0 a	234 a
	atrazine	1 pt/a	A					
	Herbimax	1.5 pt/a	A					
	Bronc Max E.D.T	2 qt/100 gal	A					
LSD (P=.10)				0.0	0.0	0.0	0.0	13.1

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.

**Capreno- Adjuvant Evaluation**

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Name	Common lambsqu>	Common lambsqu>	Common lambsqu>	Common lambsqu>
Crop Name				
Rating Date	Jun-9-2010	Jun-17-2010	Jul-12-2010	Aug-27-2010
Rating Type	control	control	control	control
Rating Unit	%	%	%	%
Trt-Eval Interval	7 DA-A	15 DA-A	40 DA-A	86 DA-A
Plant-Eval Interval	42 DP-1	50 DP-1	75 DP-1	121 DP-1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	5	12
1 Nontreated			0	0
2 Capreno	3 fl oz/a	A	86 a	100 a
atrazine	1 pt/a	A		
Herbimax	1 % v/v	A		
AMS	8.5 lb/100 gal	A		
3 Halex GT	3.6 pt/a	A	81 a	100 a
Activator 90	0.25 % v/v	A		
AMS	8.5 lb/100 gal	A		
4 Capreno	3 fl oz/a	A	86 a	100 a
atrazine	1 pt/a	A		
Roundup PowerMax	22 fl oz/a	A		
Superb HC	0.5 % v/v	A		
AMS	8.5 lb/100 gal	A		
5 Capreno	3 fl oz/a	A	91 a	100 a
atrazine	1 pt/a	A		
Herbimax	1 % v/v	A		
Weather Guard Complete	2 qt/100 gal	A		
6 Capreno	3 fl oz/a	A	81 a	100 a
atrazine	1 pt/a	A		
Superb HC	0.5 % v/v	A		
Class Act	5 qt/100 gal	A		
Interlock	4 fl oz/a	A		
7 Capreno	3 fl oz/a	A	82 a	100 a
atrazine	1 pt/a	A		
Herbimax	2 qt/100 gal	A		
Hel-Fire	1 qt/100 gal	A		
Grounded	1 gal/100 gal	A		
8 Capreno	3 fl oz/a	A	84 a	100 a
atrazine	1 pt/a	A		
Herbimax	1.5 pt/a	A		
Array	9 lb/100 gal	A		
9 Capreno	3 fl oz/a	A	85 a	100 a
atrazine	1 pt/a	A		
Trophy Gold	1 qt/100 gal	A		
Gardian Plus	2 qt/100 gal	A		
10 Capreno	3 fl oz/a	A	86 a	100 a
atrazine	1 pt/a	A		
Herbimax	1 % v/v	A		
Doubledown	2.5 gal/100 gal	A		
11 Capreno	3 fl oz/a	A	88 a	100 a
atrazine	1 pt/a	A		
Herbimax	0.375 % v/v	A		
Border Xtra 8L	2.5 gal/100 gal	A		
12 Capreno	3 fl oz/a	A	85 a	100 a
atrazine	1 pt/a	A		
Herbimax	1.5 pt/a	A		
Bronc Max E.D.T	2 qt/100 gal	A		
LSD (P=.10)			7.4	0.0

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.

**Capreno- Adjuvant Evaluation**

				W Weed	W Weed	W Weed	W Weed
				Common ragweed	Common ragweed	Common ragweed	Common ragweed
				Jun-9-2010	Jun-17-2010	Jul-12-2010	Aug-27-2010
				control	control	control	control
				%	%	%	%
				7 DA-A	15 DA-A	40 DA-A	86 DA-A
				42 DP-1	50 DP-1	75 DP-1	121 DP-1
Trt No.	Treatment Name	Rate	Appl Code	7	14	20	26
		Rate Unit					
1	Nontreated			0	0	0	0
2	Capreno	3 fl oz/a	A	79 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
3	Halex GT	3.6 pt/a	A	90 a	100 a	100 a	100 a
	Activator 90	0.25 % v/v	A				
	AMS	8.5 lb/100 gal	A				
4	Capreno	3 fl oz/a	A	91 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Roundup PowerMax	22 fl oz/a	A				
	Superb HC	0.5 % v/v	A				
	AMS	8.5 lb/100 gal	A				
5	Capreno	3 fl oz/a	A	81 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	Weather Guard Complete	2 qt/100 gal	A				
6	Capreno	3 fl oz/a	A	75 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Superb HC	0.5 % v/v	A				
	Class Act	5 qt/100 gal	A				
	Interlock	4 fl oz/a	A				
7	Capreno	3 fl oz/a	A	79 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	2 qt/100 gal	A				
	Hel-Fire	1 qt/100 gal	A				
	Grounded	1 gal/100 gal	A				
8	Capreno	3 fl oz/a	A	72 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1.5 pt/a	A				
	Array	9 lb/100 gal	A				
9	Capreno	3 fl oz/a	A	75 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Trophy Gold	1 qt/100 gal	A				
	Gardian Plus	2 qt/100 gal	A				
10	Capreno	3 fl oz/a	A	73 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	Doubledown	2.5 gal/100 gal	A				
11	Capreno	3 fl oz/a	A	76 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	0.375 % v/v	A				
	Border Xtra 8L	2.5 gal/100 gal	A				
12	Capreno	3 fl oz/a	A	92 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1.5 pt/a	A				
	Bronc Max E.D.T	2 qt/100 gal	A				
LSD (P=.10)				14.3	0.0	0.0	0.0

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.

**Capreno- Adjuvant Evaluation**

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Name	Giant foxtail	Giant foxtail	Giant foxtail	Giant foxtail			
Crop Name							
Rating Date	Jun-9-2010	Jun-17-2010	Jul-12-2010	Aug-27-2010			
Rating Type	control	control	control	control			
Rating Unit	%	%	%	%			
Trt-Eval Interval	7 DA-A	15 DA-A	40 DA-A	86 DA-A			
Plant-Eval Interval	42 DP-1	50 DP-1	75 DP-1	121 DP-1			
Trt No.	Treatment Name	Rate	Appl Code	4	11	17	23
Rate Unit	Unit	Code					
1	Nontreated			0	0	0	0
2	Capreno	3 fl oz/a	A	63 bc	94 c	93 bcd	90 bcd
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
3	Halex GT	3.6 pt/a	A	74 ab	100 a	99 a	99 a
	Activator 90	0.25 % v/v	A				
	AMS	8.5 lb/100 gal	A				
4	Capreno	3 fl oz/a	A	81 a	100 a	99 a	99 a
	atrazine	1 pt/a	A				
	Roundup PowerMax	22 fl oz/a	A				
	Superb HC	0.5 % v/v	A				
	AMS	8.5 lb/100 gal	A				
5	Capreno	3 fl oz/a	A	61 cd	91 d	90 d	88 d
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	Weather Guard Complete	2 qt/100 gal	A				
6	Capreno	3 fl oz/a	A	53 cd	96 bc	93 cd	93 bc
	atrazine	1 pt/a	A				
	Superb HC	0.5 % v/v	A				
	Class Act	5 qt/100 gal	A				
	Interlock	4 fl oz/a	A				
7	Capreno	3 fl oz/a	A	58 cd	98 ab	96 abc	95 ab
	atrazine	1 pt/a	A				
	Herbimax	2 qt/100 gal	A				
	Hel-Fire	1 qt/100 gal	A				
	Grounded	1 gal/100 gal	A				
8	Capreno	3 fl oz/a	A	50 cd	95 bc	90 d	89 cd
	atrazine	1 pt/a	A				
	Herbimax	1.5 pt/a	A				
	Array	9 lb/100 gal	A				
9	Capreno	3 fl oz/a	A	55 cd	99 a	97 abc	94 ab
	atrazine	1 pt/a	A				
	Trophy Gold	1 qt/100 gal	A				
	Gardian Plus	2 qt/100 gal	A				
10	Capreno	3 fl oz/a	A	59 cd	94 c	93 bcd	90 bcd
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	Doubledown	2.5 gal/100 gal	A				
11	Capreno	3 fl oz/a	A	49 d	97 abc	96 abc	92 bcd
	atrazine	1 pt/a	A				
	Herbimax	0.375 % v/v	A				
	Border Xtra 8L	2.5 gal/100 gal	A				
12	Capreno	3 fl oz/a	A	63 bc	99 a	98 ab	95 ab
	atrazine	1 pt/a	A				
	Herbimax	1.5 pt/a	A				
	Bronc Max E.D.T	2 qt/100 gal	A				
LSD (P=.10)				13.1	3.1	5.0	4.8

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.

**Capreno- Adjuvant Evaluation**

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Name	Ladysthumb	Ladysthumb	Ladysthumb	Ladysthumb			
Crop Name							
Rating Date	Jun-9-2010	Jun-17-2010	Jul-12-2010	Aug-27-2010			
Rating Type	control	control	control	control			
Rating Unit	%	%	%	%			
Trt-Eval Interval	7 DA-A	15 DA-A	40 DA-A	86 DA-A			
Plant-Eval Interval	42 DP-1	50 DP-1	75 DP-1	121 DP-1			
Trt No.	Treatment Name	Rate	Appl Code	3	16	22	28
Rate Unit	Unit	Code					
1	Nontreated			0	0	0	0
2	Capreno	3 fl oz/a	A	70 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
3	Halex GT	3.6 pt/a	A	45 a	100 a	97 b	97 b
	Activator 90	0.25 % v/v	A				
	AMS	8.5 lb/100 gal	A				
4	Capreno	3 fl oz/a	A	69 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Roundup PowerMax	22 fl oz/a	A				
	Superb HC	0.5 % v/v	A				
	AMS	8.5 lb/100 gal	A				
5	Capreno	3 fl oz/a	A	45 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	Weather Guard Complete	2 qt/100 gal	A				
6	Capreno	3 fl oz/a	A	74 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Superb HC	0.5 % v/v	A				
	Class Act	5 qt/100 gal	A				
	Interlock	4 fl oz/a	A				
7	Capreno	3 fl oz/a	A	48 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	2 qt/100 gal	A				
	Hel-Fire	1 qt/100 gal	A				
	Grounded	1 gal/100 gal	A				
8	Capreno	3 fl oz/a	A	21 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1.5 pt/a	A				
	Array	9 lb/100 gal	A				
9	Capreno	3 fl oz/a	A	70 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Trophy Gold	1 qt/100 gal	A				
	Gardian Plus	2 qt/100 gal	A				
10	Capreno	3 fl oz/a	A	71 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	Doubledown	2.5 gal/100 gal	A				
11	Capreno	3 fl oz/a	A	70 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	0.375 % v/v	A				
	Border Xtra 8L	2.5 gal/100 gal	A				
12	Capreno	3 fl oz/a	A	72 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1.5 pt/a	A				
	Bronc Max E.D.T	2 qt/100 gal	A				
LSD (P=.10)				31.8	0.0	0.9	1.0

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.

**Capreno- Adjuvant Evaluation**

Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Name	Redroot pigweed	Redroot pigweed	Redroot pigweed	Redroot pigweed				
Crop Name								
Rating Date	Jun-9-2010	Jun-17-2010	Jul-12-2010	Aug-27-2010				
Rating Type	control	control	control	control				
Rating Unit	%	%	%	%				
Trt-Eval Interval	7 DA-A	15 DA-A	40 DA-A	86 DA-A				
Plant-Eval Interval	42 DP-1	50 DP-1	75 DP-1	121 DP-1				
Trt No.	Treatment Name	Rate	Unit	Appl Code	8	15	21	27
1	Nontreated				0	0	0	0
2	Capreno	3 fl oz/a	A		99 a	100 a	100 a	100 a
	atrazine	1 pt/a	A					
	Herbimax	1 % v/v	A					
	AMS	8.5 lb/100 gal	A					
3	Halex GT	3.6 pt/a	A		90 a	100 a	100 a	100 a
	Activator 90	0.25 % v/v	A					
	AMS	8.5 lb/100 gal	A					
4	Capreno	3 fl oz/a	A		97 a	100 a	100 a	100 a
	atrazine	1 pt/a	A					
	Roundup PowerMax	22 fl oz/a	A					
	Superb HC	0.5 % v/v	A					
	AMS	8.5 lb/100 gal	A					
5	Capreno	3 fl oz/a	A		95 a	100 a	100 a	100 a
	atrazine	1 pt/a	A					
	Herbimax	1 % v/v	A					
	Weather Guard Complete	2 qt/100 gal	A					
6	Capreno	3 fl oz/a	A		95 a	100 a	100 a	100 a
	atrazine	1 pt/a	A					
	Superb HC	0.5 % v/v	A					
	Class Act	5 qt/100 gal	A					
	Interlock	4 fl oz/a	A					
7	Capreno	3 fl oz/a	A		94 a	100 a	100 a	100 a
	atrazine	1 pt/a	A					
	Herbimax	2 qt/100 gal	A					
	Hel-Fire	1 qt/100 gal	A					
	Grounded	1 gal/100 gal	A					
8	Capreno	3 fl oz/a	A		97 a	100 a	100 a	100 a
	atrazine	1 pt/a	A					
	Herbimax	1.5 pt/a	A					
	Array	9 lb/100 gal	A					
9	Capreno	3 fl oz/a	A		95 a	100 a	100 a	100 a
	atrazine	1 pt/a	A					
	Trophy Gold	1 qt/100 gal	A					
	Gardian Plus	2 qt/100 gal	A					
10	Capreno	3 fl oz/a	A		98 a	100 a	100 a	100 a
	atrazine	1 pt/a	A					
	Herbimax	1 % v/v	A					
	Doubledown	2.5 gal/100 gal	A					
11	Capreno	3 fl oz/a	A		98 a	100 a	100 a	100 a
	atrazine	1 pt/a	A					
	Herbimax	0.375 % v/v	A					
	Border Xtra 8L	2.5 gal/100 gal	A					
12	Capreno	3 fl oz/a	A		95 a	100 a	100 a	100 a
	atrazine	1 pt/a	A					
	Herbimax	1.5 pt/a	A					
	Bronc Max E.D.T	2 qt/100 gal	A					
LSD (P=.10)					8.1	0.0	0.0	0.0

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.

**Capreno- Adjuvant Evaluation**

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Name	Velvetleaf	Velvetleaf	Velvetleaf	Velvetleaf			
Crop Name							
Rating Date	Jun-9-2010	Jun-17-2010	Jul-12-2010	Aug-27-2010			
Rating Type	control	control	control	control			
Rating Unit	%	%	%	%			
Trt-Eval Interval	7 DA-A	15 DA-A	40 DA-A	86 DA-A			
Plant-Eval Interval	42 DP-1	50 DP-1	75 DP-1	121 DP-1			
Trt No.	Treatment Name	Rate	Appl Code	6	13	19	25
		Rate Unit					
1	Nontreated			0	0	0	0
2	Capreno	3 fl oz/a	A	83 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	AMS	8.5 lb/100 gal	A				
3	Halex GT	3.6 pt/a	A	89 a	100 a	100 a	100 a
	Activator 90	0.25 % v/v	A				
	AMS	8.5 lb/100 gal	A				
4	Capreno	3 fl oz/a	A	94 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Roundup PowerMax	22 fl oz/a	A				
	Superb HC	0.5 % v/v	A				
	AMS	8.5 lb/100 gal	A				
5	Capreno	3 fl oz/a	A	79 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	Weather Guard Complete	2 qt/100 gal	A				
6	Capreno	3 fl oz/a	A	74 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Superb HC	0.5 % v/v	A				
	Class Act	5 qt/100 gal	A				
	Interlock	4 fl oz/a	A				
7	Capreno	3 fl oz/a	A	82 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	2 qt/100 gal	A				
	Hel-Fire	1 qt/100 gal	A				
	Grounded	1 gal/100 gal	A				
8	Capreno	3 fl oz/a	A	82 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1.5 pt/a	A				
	Array	9 lb/100 gal	A				
9	Capreno	3 fl oz/a	A	75 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Trophy Gold	1 qt/100 gal	A				
	Gardian Plus	2 qt/100 gal	A				
10	Capreno	3 fl oz/a	A	82 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1 % v/v	A				
	Doubledown	2.5 gal/100 gal	A				
11	Capreno	3 fl oz/a	A	75 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	0.375 % v/v	A				
	Border Xtra 8L	2.5 gal/100 gal	A				
12	Capreno	3 fl oz/a	A	84 a	100 a	100 a	100 a
	atrazine	1 pt/a	A				
	Herbimax	1.5 pt/a	A				
	Bronc Max E.D.T	2 qt/100 gal	A				
LSD (P=.10)				11.7	0.0	0.0	0.0

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.

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Code				W Weed	W Weed	W Weed		
Pest Scientific Name				SETFA	CHEAL	ABUTH		
Pest Name				Setaria faberi	Chenopodium al>	Abutilon theop>		
Crop Code	GLXMA	GLXMA	GLXMA	Giant foxtail	Common lambsqu>	Velvetleaf		
BBCH Scale	BSOY	BSOY	BSOY					
Crop Scientific Name	Glycine max	Glycine max	Glycine max					
Crop Name	Soybean	Soybean	Soybean					
Rating Date	Jun-29-2010	Jun-29-2010	Jun-29-2010	Jun-29-2010	Jun-29-2010	Jun-29-2010		
Rating Type	PHYSTU	PHYNEC	puckering	control	control	control		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Days After First/Last Applic.	34 6	34 6	34 6	34 6	34 6	34 6		
Trt-Eval Interval	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B		
Plant-Eval Interval	35 DP-1	35 DP-1	35 DP-1	35 DP-1	35 DP-1	35 DP-1		
Days After Emergence	27 DE-	27 DE-	27 DE-	27 DE-	27 DE-	27 DE-		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	1	2	3	4	5	6
1 Nontreated			0 f	0 c	0 d	0 e	0 c	0 d
2 Prefix	2 pt/a	A	1 f	0 c	0 d	92 a	93 a	35 c
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
3 Ignite 280	22 fl oz/a	B	0 f	0 c	1 d	94 a	99 a	100 a
AMS	8.5 lb/100 gal	B						
4 Ignite 280	22 fl oz/a	B	18 a	10 a	33 a	97 a	100 a	100 a
Prefix	2 pt/a	B						
AMS	8.5 lb/100 gal	B						
5 Ignite 280	22 fl oz/a	B	6 cde	6 b	31 ab	96 a	100 a	99 a
Dual II Magnum	1.33 pt/a	B						
AMS	8.5 lb/100 gal	B						
6 Ignite 280	22 fl oz/a	B	3 ef	0 c	3 d	97 a	100 a	100 a
AMS	8.5 lb/100 gal	B						
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
7 Ignite 280	22 fl oz/a	B	1 f	0 c	8 d	96 a	100 a	100 a
MON 63410	3 pt/a	B						
AMS	8.5 lb/100 gal	B						
8 Ignite 280	22 fl oz/a	B	9 c	0 c	8 d	97 a	100 a	99 a
Pursuit	4 fl oz/a	B						
AMS	8.5 lb/100 gal	B						
9 Ignite 280	22 fl oz/a	B	7 cd	6 b	5 d	97 a	100 a	100 a
Outlook	16 fl oz/a	B						
AMS	8.5 lb/100 gal	B						
10 Ignite 280	22 fl oz/a	B	19 a	0 c	23 bc	97 a	99 a	100 a
Firstrate	0.6 oz/a	B						
AMS	8.5 lb/100 gal	B						
11 Ignite 280	22 fl oz/a	B	7 cd	7 b	20 c	96 a	100 a	100 a
Harness	1.29 pt/a	B						
AMS	8.5 lb/100 gal	B						
12 Nontreated			0 f	0 c	0 d	0 e	0 c	0 d
13 Authority Broadlaef	4 oz/a	A	0 f	0 c	0 d	75 c	100 a	90 a
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
14 Authority First	4 oz/a	A	0 f	0 c	0 d	64 d	93 a	100 a
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
15 Authority Assist	6 fl oz/a	A	2 f	0 c	0 d	84 b	100 a	95 a
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
16 Valor SX	2 oz/a	A	13 b	0 c	3 d	93 a	100 a	100 a



Ignite 280  
AMS

22 fl oz/a C  
8.5 lb/100 gal C

--	--	--	--	--	--	--	--

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type				W Weed	W Weed	W Weed		
Pest Code				SETFA	CHEAL	ABUTH		
Pest Scientific Name				Setaria faberi	Chenopodium al>	Abutilon theop>		
Pest Name				Giant foxtail	Common lambsqu>	Velvetleaf		
Crop Code	GLXMA	GLXMA	GLXMA					
BBCH Scale	BSOY	BSOY	BSOY					
Crop Scientific Name	Glycine max	Glycine max	Glycine max					
Crop Name	Soybean	Soybean	Soybean					
Rating Date	Jun-29-2010	Jun-29-2010	Jun-29-2010	Jun-29-2010	Jun-29-2010	Jun-29-2010		
Rating Type	PHYSTU	PHYNEC	puckering	control	control	control		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Days After First/Last Applic.	34 6	34 6	34 6	34 6	34 6	34 6		
Trt-Eval Interval	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B		
Plant-Eval Interval	35 DP-1	35 DP-1	35 DP-1	35 DP-1	35 DP-1	35 DP-1		
Days After Emergence	27 DE-	27 DE-	27 DE-	27 DE-	27 DE-	27 DE-		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	1	2	3	4	5	6
17 Enlite			4 def	0 c	0 d	77 c	94 a	100 a
chlorimuron ethyl	0.08 oz ai/a	A						
thifensulfuron	0.25 oz ai/a	A						
valor SX	1 oz/a	A						
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
18 Sharpen	1 oz/a	A	0 f	0 c	0 d	0 e	70 b	51 b
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
19 Op-Till	2 oz/a	A	0 f	0 c	1 d	86 b	100 a	100 a
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
LSD (P=.10)			4.2	2.3	9.2	5.8	13.2	12.0
Standard Deviation			3.5	2.0	7.8	4.9	11.1	10.1
CV			75.79	132.94	110.15	6.5	12.86	12.26
Bartlett's X2			11.364	17.65	38.075	55.726	43.206	50.137
P(Bartlett's X2)			0.413	0.001*	0.001*	0.001*	0.001*	0.001*
Replicate F			4.344	0.932	0.244	0.344	2.605	3.247
Replicate Prob(F)			0.0082	0.4314	0.8656	0.7939	0.0611	0.0288
Treatment F			11.658	9.683	7.892	200.808	31.651	45.486
Treatment Prob(F)			0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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.

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type	W Weed	W Weed			W Weed
Pest Code	AMARE	AMBEL			SETFA
Pest Scientific Name	Amaranthus ret->	Ambrosia artem->			Setaria faberi
Pest Name	Redroot pigweed	Common ragweed			Giant foxtail
Crop Code			GLXMA	GLXMA	GLXMA
BBCH Scale			BSOY	BSOY	BSOY
Crop Scientific Name			Glycine max	Glycine max	Glycine max
Crop Name			Soybean	Soybean	Soybean
Rating Date	Jun-29-2010	Jun-29-2010	Jul-2-2010	Jul-6-2010	Jul-6-2010
Rating Type	control	control	crop height	PHYNEC	PHYSTU
Rating Unit	%	%	cm	%	%
Number of Subsamples	1	1	6	1	1
Days After First/Last Applic.	34 6	34 6	37 9	41 13	41 13
Trt-Eval Interval	6 DA-B	6 DA-B	9 DA-B	13 DA-B	13 DA-B
Plant-Eval Interval	35 DP-1	35 DP-1	38 DP-1	42 DP-1	42 DP-1
Days After Emergence	27 DE-	27 DE-	30 DE-	34 DE-	34 DE-
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	7	8	9
1 Nontreated			0 c	0 c	29 a
2 Prefix	2 pt/a	A	99 a	97 b	20 a
Ignite 280	22 fl oz/a	C			0 f
AMS	8.5 lb/100 gal	C			0 e
3 Ignite 280	22 fl oz/a	B	100 a	100 a	20 a
AMS	8.5 lb/100 gal	B			3 de
4 Ignite 280	22 fl oz/a	B	100 a	100 a	18 a
Prefix	2 pt/a	B			19 a
AMS	8.5 lb/100 gal	B			7 a
5 Ignite 280	22 fl oz/a	B	100 a	100 a	20 a
Dual II Magnum	1.33 pt/a	B			7 c
AMS	8.5 lb/100 gal	B			2 cd
6 Ignite 280	22 fl oz/a	B	99 a	100 a	21 a
AMS	8.5 lb/100 gal	B			0 f
Ignite 280	22 fl oz/a	C			0 e
AMS	8.5 lb/100 gal	C			99 a
7 Ignite 280	22 fl oz/a	B	100 a	100 a	29 a
MON 63410	3 pt/a	B			6 cd
AMS	8.5 lb/100 gal	B			1 de
8 Ignite 280	22 fl oz/a	B	100 a	100 a	20 a
Pursuit	4 fl oz/a	B			0 f
AMS	8.5 lb/100 gal	B			2 cd
9 Ignite 280	22 fl oz/a	B	100 a	100 a	20 a
Outlook	16 fl oz/a	B			5 cd
AMS	8.5 lb/100 gal	B			1 de
10 Ignite 280	22 fl oz/a	B	100 a	100 a	19 a
Firstrate	0.6 oz/a	B			0 f
AMS	8.5 lb/100 gal	B			1 cde
11 Ignite 280	22 fl oz/a	B	100 a	100 a	20 a
Harness	1.29 pt/a	B			14 b
AMS	8.5 lb/100 gal	B			2 bc
12 Nontreated			0 c	0 c	21 a
13 Authority Broadlaef	4 oz/a	A	100 a	100 a	21 a
Ignite 280	22 fl oz/a	C			1 ef
AMS	8.5 lb/100 gal	C			0 e
14 Authority First	4 oz/a	A	98 a	100 a	20 a
Ignite 280	22 fl oz/a	C			1 ef
AMS	8.5 lb/100 gal	C			0 e
15 Authority Assist	6 fl oz/a	A	100 a	100 a	21 a
Ignite 280	22 fl oz/a	C			2 ef
AMS	8.5 lb/100 gal	C			0 e
16 Valor SX	2 oz/a	A	100 a	100 a	18 a
					1 ef
					3 b
					91 b

Ignite 280  
AMS

22 fl oz/a C  
8.5 lb/100 gal C

--	--	--	--	--	--	--	--

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type	W Weed	W Weed				W Weed
Pest Code	AMARE	AMBEL				SETFA
Pest Scientific Name	Amaranthus ret>	Ambrosia artem>				Setaria faberi
Pest Name	Redroot pigweed	Common ragweed				Giant foxtail
Crop Code			GLXMA	GLXMA	GLXMA	
BBCH Scale			BSOY	BSOY	BSOY	
Crop Scientific Name			Glycine max	Glycine max	Glycine max	
Crop Name			Soybean	Soybean	Soybean	
Rating Date	Jun-29-2010	Jun-29-2010	Jul-2-2010	Jul-6-2010	Jul-6-2010	Jul-6-2010
Rating Type	control	control	crop height	PHYNEC	PHYSTU	control
Rating Unit	%	%	cm	%	%	%
Number of Subsamples	1	1	6	1	1	1
Days After First/Last Applic.	34 6	34 6	37 9	41 13	41 13	41 13
Trt-Eval Interval	6 DA-B	6 DA-B	9 DA-B	13 DA-B	13 DA-B	13 DA-B
Plant-Eval Interval	35 DP-1	35 DP-1	38 DP-1	42 DP-1	42 DP-1	42 DP-1
Days After Emergence	27 DE-	27 DE-	30 DE-	34 DE-	34 DE-	34 DE-
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code	7	8	9	10
17 Enlite			100 a	100 a	19 a	3 def
chlorimuron ethyl	0.08 oz ai/a	A				0 e
thifensulfuron	0.25 oz ai/a	A				
valor SX	1 oz/a	A				
Ignite 280	22 fl oz/a	C				
AMS	8.5 lb/100 gal	C				80 c
18 Sharpen	1 oz/a	A	81 b	100 a	21 a	0 f
Ignite 280	22 fl oz/a	C				0 e
AMS	8.5 lb/100 gal	C				0 e
19 Op-Till	2 oz/a	A	100 a	100 a	19 a	3 de
Ignite 280	22 fl oz/a	C				1 de
AMS	8.5 lb/100 gal	C				88 b
LSD (P=.10)			7.8	1.8	6.8	2.8
Standard Deviation			6.6	1.5	5.7	2.4
CV			7.48	1.67	27.57	72.64
Bartlett's X2			25.976	0.0	129.934	13.646
P(Bartlett's X2)			0.001*	.	0.001*	0.253
Replicate F			0.995	1.000	1.073	1.533
Replicate Prob(F)			0.4024	0.4000	0.3683	0.2166
Treatment F			90.465	1782.460	1.132	17.865
Treatment Prob(F)			0.0001	0.0001	0.3492	0.0001

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type	W	Weed	W	Weed	W	Weed	W	Weed	
Pest Code		ABUTH		AMBEL		AMARE		CHEAL	
Pest Scientific Name		Abutilon theop>		Ambrosia artem>		Amaranthus ret>		Chenopodium al>	
Pest Name		Velvetleaf		Common ragweed		Redroot pigweed		Common lambsqu>	
Crop Code									GLXMA
BBCH Scale									BSOY
Crop Scientific Name									Glycine max
Crop Name									Soybean
Rating Date		Jul-6-2010		Jul-6-2010		Jul-6-2010		Jul-6-2010	Jul-16-2010
Rating Type		control		control		control		control	PHYNEC
Rating Unit		%		%		%		%	%
Number of Subsamples		1		1		1		1	1
Days After First/Last Applic.		41 13		41 13		41 13		41 13	51 4
Trt-Eval Interval		13 DA-B		13 DA-B		13 DA-B		13 DA-B	4 DA-C
Plant-Eval Interval		42 DP-1		42 DP-1		42 DP-1		42 DP-1	52 DP-1
Days After Emergence		34 DE-		34 DE-		34 DE-		34 DE-	44 DE-
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	13	14	15	16	17		
1 Nontreated			0 f	0 c	0 c	0 c	0 a		
2 Prefix	2 pt/a	A	83 e	98 b	99 ab	92 b	0 a		
Ignite 280	22 fl oz/a	C							
AMS	8.5 lb/100 gal	C							
3 Ignite 280	22 fl oz/a	B	99 abc	100 a	99 ab	100 a	0 a		
AMS	8.5 lb/100 gal	B							
4 Ignite 280	22 fl oz/a	B	100 ab	100 a	100 a	100 a	0 a		
Prefix	2 pt/a	B							
AMS	8.5 lb/100 gal	B							
5 Ignite 280	22 fl oz/a	B	97 a-d	100 a	99 b	100 a	0 a		
Dual II Magnum	1.33 pt/a	B							
AMS	8.5 lb/100 gal	B							
6 Ignite 280	22 fl oz/a	B	99 abc	100 a	99 ab	100 a	0 a		
AMS	8.5 lb/100 gal	B							
Ignite 280	22 fl oz/a	C							
AMS	8.5 lb/100 gal	C							
7 Ignite 280	22 fl oz/a	B	97 a-d	100 a	99 ab	100 a	0 a		
MON 63410	3 pt/a	B							
AMS	8.5 lb/100 gal	B							
8 Ignite 280	22 fl oz/a	B	100 a	100 a	100 a	100 a	0 a		
Pursuit	4 fl oz/a	B							
AMS	8.5 lb/100 gal	B							
9 Ignite 280	22 fl oz/a	B	96 bcd	100 a	99 ab	100 a	0 a		
Outlook	16 fl oz/a	B							
AMS	8.5 lb/100 gal	B							
10 Ignite 280	22 fl oz/a	B	100 a	100 a	100 a	100 a	0 a		
Firstrate	0.6 oz/a	B							
AMS	8.5 lb/100 gal	B							
11 Ignite 280	22 fl oz/a	B	98 abc	100 a	99 ab	100 a	0 a		
Harness	1.29 pt/a	B							
AMS	8.5 lb/100 gal	B							
12 Nontreated			0 f	0 c	0 c	0 c	0 a		
13 Authority Broadlaef	4 oz/a	A	94 d	100 a	100 a	100 a	0 a		
Ignite 280	22 fl oz/a	C							
AMS	8.5 lb/100 gal	C							
14 Authority First	4 oz/a	A	96 cd	100 a	99 b	98 a	0 a		
Ignite 280	22 fl oz/a	C							
AMS	8.5 lb/100 gal	C							
15 Authority Assist	6 fl oz/a	A	96 bcd	99 ab	100 a	100 a	0 a		
Ignite 280	22 fl oz/a	C							
AMS	8.5 lb/100 gal	C							
16 Valor SX	2 oz/a	A	100 a	100 a	100 a	98 a	0 a		

Ignite 280  
AMS

22 fl oz/a C  
8.5 lb/100 gal C

--	--	--	--	--	--

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	ABUTH	AMBEL	AMARE	CHEAL	
Pest Scientific Name	Abutilon theop>	Ambrosia artem>	Amaranthus ret>	Chenopodium al>	
Pest Name	Velvetleaf	Common ragweed	Redroot pigweed	Common lambsqu>	
Crop Code					GLXMA
BBCH Scale					BSOY
Crop Scientific Name					Glycine max
Crop Name					Soybean
Rating Date	Jul-6-2010	Jul-6-2010	Jul-6-2010	Jul-6-2010	Jul-16-2010
Rating Type	control	control	control	control	PHYNEC
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	41 13	41 13	41 13	41 13	51 4
Trt-Eval Interval	13 DA-B	13 DA-B	13 DA-B	13 DA-B	4 DA-C
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1	52 DP-1
Days After Emergence	34 DE-	34 DE-	34 DE-	34 DE-	44 DE-
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	13	14	15
17 Enlite			96 bcd	100 a	100 a
chlorimuron ethyl	0.08 oz ai/a	A			
thifensulfuron	0.25 oz ai/a	A			
valor SX	1 oz/a	A			
Ignite 280	22 fl oz/a	C			
AMS	8.5 lb/100 gal	C			
18 Sharpen	1 oz/a	A	0 f	0 c	0 c
Ignite 280	22 fl oz/a	C			
AMS	8.5 lb/100 gal	C			
19 Op-Till	2 oz/a	A	98 abc	100 a	100 a
Ignite 280	22 fl oz/a	C			
AMS	8.5 lb/100 gal	C			
LSD (P=.10)			3.7	1.0	1.2
Standard Deviation			3.1	0.9	1.0
CV			3.83	1.05	1.24
Bartlett's X2			24.998	1.92	2.168
P(Bartlett's X2)			0.015*	0.166	0.95
Replicate F			5.024	0.749	0.949
Replicate Prob(F)			0.0038	0.5279	0.4236
Treatment F			546.064	7237.243	5119.122
Treatment Prob(F)			0.0001	0.0001	0.0001
					0.478
					0.6992
					1370.653
					0.000
					1.000



# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type				W Weed	W Weed	W Weed		
Pest Code				SETFA	ABUTH	AMBEL		
Pest Scientific Name				Setaria faberi	Abutilon theop>	Ambrosia artem>		
Pest Name				Giant foxtail	Velvetleaf	Common ragweed		
Crop Code	GLXMA	GLXMA	GLXMA					
BBCH Scale	BSOY	BSOY	BSOY					
Crop Scientific Name	Glycine max	Glycine max	Glycine max					
Crop Name	Soybean	Soybean	Soybean					
Rating Date	Jul-16-2010	Jul-23-2010	Jul-23-2010	Jul-23-2010	Jul-23-2010	Jul-23-2010		
Rating Type	PHYSTU	PHYNEC	PHYSTU	control	control	control		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Days After First/Last Applic.	51 4	58 11	58 11	58 11	58 11	58 11		
Trt-Eval Interval	4 DA-C	11 DA-C	11 DA-C	11 DA-C	11 DA-C	11 DA-C		
Plant-Eval Interval	52 DP-1	59 DP-1	59 DP-1	59 DP-1	59 DP-1	59 DP-1		
Days After Emergence	44 DE-	51 DE-	51 DE-	51 DE-	51 DE-	51 DE-		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	18	19	20	21	22	23
1 Nontreated			0 b	0 a	0 a	0 d	0 b	0 b
2 Prefix	2 pt/a	A	0 b	0 a	0 a	100 a	100 a	100 a
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
3 Ignite 280	22 fl oz/a	B	0 b	0 a	0 a	98 b	100 a	100 a
AMS	8.5 lb/100 gal	B						
4 Ignite 280	22 fl oz/a	B	4 a	0 a	0 a	99 ab	100 a	100 a
Prefix	2 pt/a	B						
AMS	8.5 lb/100 gal	B						
5 Ignite 280	22 fl oz/a	B	0 b	0 a	0 a	99 ab	100 a	100 a
Dual II Magnum	1.33 pt/a	B						
AMS	8.5 lb/100 gal	B						
6 Ignite 280	22 fl oz/a	B	0 b	0 a	0 a	100 a	100 a	100 a
AMS	8.5 lb/100 gal	B						
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
7 Ignite 280	22 fl oz/a	B	0 b	0 a	0 a	98 ab	100 a	100 a
MON 63410	3 pt/a	B						
AMS	8.5 lb/100 gal	B						
8 Ignite 280	22 fl oz/a	B	0 b	0 a	0 a	100 a	100 a	100 a
Pursuit	4 fl oz/a	B						
AMS	8.5 lb/100 gal	B						
9 Ignite 280	22 fl oz/a	B	0 b	0 a	0 a	99 ab	100 a	100 a
Outlook	16 fl oz/a	B						
AMS	8.5 lb/100 gal	B						
10 Ignite 280	22 fl oz/a	B	0 b	0 a	0 a	100 a	100 a	100 a
Firstrate	0.6 oz/a	B						
AMS	8.5 lb/100 gal	B						
11 Ignite 280	22 fl oz/a	B	0 b	0 a	0 a	99 ab	100 a	100 a
Harness	1.29 pt/a	B						
AMS	8.5 lb/100 gal	B						
12 Nontreated			0 b	0 a	0 a	0 d	0 b	0 b
13 Authority Broadlaef	4 oz/a	A	0 b	0 a	0 a	100 a	100 a	100 a
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
14 Authority First	4 oz/a	A	0 b	0 a	0 a	100 a	100 a	100 a
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
15 Authority Assist	6 fl oz/a	A	0 b	0 a	0 a	100 a	100 a	100 a
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
16 Valor SX	2 oz/a	A	0 b	0 a	0 a	100 a	100 a	100 a

Ignite 280  
AMS

22 fl oz/a C  
8.5 lb/100 gal C

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type				W Weed	W Weed	W Weed		
Pest Code				SETFA	ABUTH	AMBEL		
Pest Scientific Name				Setaria faberi	Abutilon theop>	Ambrosia artem>		
Pest Name				Giant foxtail	Velvetleaf	Common ragweed		
Crop Code	GLXMA	GLXMA	GLXMA					
BBCH Scale	BSOY	BSOY	BSOY					
Crop Scientific Name	Glycine max	Glycine max	Glycine max					
Crop Name	Soybean	Soybean	Soybean					
Rating Date	Jul-16-2010	Jul-23-2010	Jul-23-2010	Jul-23-2010	Jul-23-2010	Jul-23-2010		
Rating Type	PHYSTU	PHYNEC	PHYSTU	control	control	control		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Days After First/Last Applic.	51 4	58 11	58 11	58 11	58 11	58 11		
Trt-Eval Interval	4 DA-C	11 DA-C	11 DA-C	11 DA-C	11 DA-C	11 DA-C		
Plant-Eval Interval	52 DP-1	59 DP-1	59 DP-1	59 DP-1	59 DP-1	59 DP-1		
Days After Emergence	44 DE-	51 DE-	51 DE-	51 DE-	51 DE-	51 DE-		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	18	19	20	21	22	23
17 Enlite			0 b	0 a	0 a	99 ab	100 a	100 a
chlorimuron ethyl	0.08 oz ai/a	A						
thifensulfuron	0.25 oz ai/a	A						
valor SX	1 oz/a	A						
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
18 Sharpen			0 b	0 a	0 a	95 c	100 a	100 a
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
19 Op-Till			0 b	0 a	0 a	100 a	100 a	100 a
Ignite 280	22 fl oz/a	C						
AMS	8.5 lb/100 gal	C						
LSD (P=.10)			0.8	0.0	0.0	2.0	0.0	0.0
Standard Deviation			0.7	0.0	0.0	1.7	0.0	0.0
CV			347.09	0.0	0.0	1.89	0.0	0.0
Bartlett's X2			0.0	0.0	0.0	13.316	0.0	0.0
P(Bartlett's X2)			.	.	.	0.101	.	.
Replicate F			1.000	0.000	0.000	0.117	0.000	0.000
Replicate Prob(F)			0.4000	1.0000	1.0000	0.9495	1.0000	1.0000
Treatment F			6.308	0.000	0.000	1397.230	0.000	0.000
Treatment Prob(F)			0.0001	1.0000	1.0000	0.0001	1.0000	1.0000

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMARE	CHEAL	SETFA	ABUTH	AMBEL		
Pest Scientific Name	Amaranthus ret>	Chenopodium al>	Setaria faberi	Abutilon theop>	Ambrosia artem>		
Pest Name	Redroot pigweed	Common lambsqu>	Giant foxtail	Velvetleaf	Common ragweed		
Crop Code							
BBCH Scale							
Crop Scientific Name							
Crop Name							
Rating Date	Jul-23-2010	Jul-23-2010	Jul-23-2010	Aug-30-2010	Aug-30-2010		
Rating Type	control	control	control	control	control		
Rating Unit	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1		
Days After First/Last Applic.	58 11	58 11	58 11	96 49	96 49		
Trt-Eval Interval	11 DA-C	11 DA-C	11 DA-C	49 DA-C	49 DA-C		
Plant-Eval Interval	59 DP-1	59 DP-1	59 DP-1	97 DP-1	97 DP-1		
Days After Emergence	51 DE-	51 DE-	51 DE-	89 DE-	89 DE-		
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code	24	25	26	27	28
1 Nontreated			0 b	0 b	0 f	0 b	0 b
2 Prefix	2 pt/a	A	100 a	100 a	100 a	100 a	100 a
Ignite 280	22 fl oz/a	C					
AMS	8.5 lb/100 gal	C					
3 Ignite 280	22 fl oz/a	B	100 a	100 a	99 ab	100 a	100 a
AMS	8.5 lb/100 gal	B					
4 Ignite 280	22 fl oz/a	B	100 a	100 a	98 abc	100 a	100 a
Prefix	2 pt/a	B					
AMS	8.5 lb/100 gal	B					
5 Ignite 280	22 fl oz/a	B	100 a	100 a	99 ab	100 a	100 a
Dual II Magnum	1.33 pt/a	B					
AMS	8.5 lb/100 gal	B					
6 Ignite 280	22 fl oz/a	B	100 a	100 a	100 a	100 a	100 a
AMS	8.5 lb/100 gal	B					
Ignite 280	22 fl oz/a	C					
AMS	8.5 lb/100 gal	C					
7 Ignite 280	22 fl oz/a	B	100 a	100 a	95 de	100 a	100 a
MON 63410	3 pt/a	B					
AMS	8.5 lb/100 gal	B					
8 Ignite 280	22 fl oz/a	B	100 a	100 a	99 ab	100 a	100 a
Pursuit	4 fl oz/a	B					
AMS	8.5 lb/100 gal	B					
9 Ignite 280	22 fl oz/a	B	100 a	100 a	99 abc	100 a	100 a
Outlook	16 fl oz/a	B					
AMS	8.5 lb/100 gal	B					
10 Ignite 280	22 fl oz/a	B	100 a	100 a	100 a	100 a	100 a
Firstrate	0.6 oz/a	B					
AMS	8.5 lb/100 gal	B					
11 Ignite 280	22 fl oz/a	B	100 a	100 a	97 cd	100 a	100 a
Harness	1.29 pt/a	B					
AMS	8.5 lb/100 gal	B					
12 Nontreated			0 b	0 b	0 f	0 b	0 b
13 Authority Broadlaef	4 oz/a	A	100 a	100 a	98 bc	100 a	100 a
Ignite 280	22 fl oz/a	C					
AMS	8.5 lb/100 gal	C					
14 Authority First	4 oz/a	A	100 a	100 a	99 ab	100 a	100 a
Ignite 280	22 fl oz/a	C					
AMS	8.5 lb/100 gal	C					
15 Authority Assist	6 fl oz/a	A	100 a	100 a	100 a	100 a	100 a
Ignite 280	22 fl oz/a	C					
AMS	8.5 lb/100 gal	C					
16 Valor SX	2 oz/a	A	100 a	100 a	100 a	100 a	100 a

Ignite 280  
AMS

22 fl oz/a C  
8.5 lb/100 gal C

--	--	--	--	--	--

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMARE	CHEAL	SETFA	ABUTH	AMBEL
Pest Scientific Name	Amaranthus ret>	Chenopodium al>	Setaria faberi	Abutilon theop>	Ambrosia artem>
Pest Name	Redroot pigweed	Common lambsqu>	Giant foxtail	Velvetleaf	Common ragweed
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jul-23-2010	Jul-23-2010	Jul-23-2010	Aug-30-2010	Aug-30-2010
Rating Type	control	control	control	control	control
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	58 11	58 11	58 11	96 49	96 49
Trt-Eval Interval	11 DA-C	11 DA-C	11 DA-C	49 DA-C	49 DA-C
Plant-Eval Interval	59 DP-1	59 DP-1	59 DP-1	97 DP-1	97 DP-1
Days After Emergence	51 DE-	51 DE-	51 DE-	89 DE-	89 DE-
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	24	25	26
17 Enlite			100 a	100 a	99 ab
chlorimuron ethyl	0.08 oz ai/a	A			
thifensulfuron	0.25 oz ai/a	A			
valor SX	1 oz/a	A			
Ignite 280	22 fl oz/a	C			
AMS	8.5 lb/100 gal	C			
18 Sharpen	1 oz/a	A	100 a	100 a	95 e
Ignite 280	22 fl oz/a	C			
AMS	8.5 lb/100 gal	C			
19 Op-Till	2 oz/a	A	100 a	100 a	99 ab
Ignite 280	22 fl oz/a	C			
AMS	8.5 lb/100 gal	C			
LSD (P=.10)	0.0	0.0	1.9	0.0	0.0
Standard Deviation	0.0	0.0	1.6	0.0	0.0
CV	0.0	0.0	1.83	0.0	0.0
Bartlett's X2	0.0	0.0	7.979	0.0	0.0
P(Bartlett's X2)	.	.	0.631	.	.
Replicate F	0.000	0.000	0.517	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	0.6725	1.0000	1.0000
Treatment F	0.000	0.000	1485.860	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	0.0001	1.0000	1.0000

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type	W Weed	W Weed
Pest Code	AMARE	CHEAL
Pest Scientific Name	Amaranthus ret>	Chenopodium al>
Pest Name	Redroot pigweed	Common lambsqu>
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Rating Date	Aug-30-2010	Aug-30-2010
Rating Type	control	control
Rating Unit	%	%
Number of Subsamples	1	1
Days After First/Last Applic.	96 49	96 49
Trt-Eval Interval	49 DA-C	49 DA-C
Plant-Eval Interval	97 DP-1	97 DP-1
Days After Emergence	89 DE-	89 DE-
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	29	30
1 Nontreated		0 c
2 Prefix	2 pt/a A	100 a
Ignite 280	22 fl oz/a C	99 ab
AMS	8.5 lb/100 gal C	
3 Ignite 280	22 fl oz/a B	99 b
AMS	8.5 lb/100 gal B	
4 Ignite 280	22 fl oz/a B	100 a
Prefix	2 pt/a B	
AMS	8.5 lb/100 gal B	
5 Ignite 280	22 fl oz/a B	100 a
Dual II Magnum	1.33 pt/a B	99 b
AMS	8.5 lb/100 gal B	
6 Ignite 280	22 fl oz/a B	100 a
AMS	8.5 lb/100 gal B	
Ignite 280	22 fl oz/a C	
AMS	8.5 lb/100 gal C	
7 Ignite 280	22 fl oz/a B	100 a
MON 63410	3 pt/a B	99 ab
AMS	8.5 lb/100 gal B	
8 Ignite 280	22 fl oz/a B	100 a
Pursuit	4 fl oz/a B	99 ab
AMS	8.5 lb/100 gal B	
9 Ignite 280	22 fl oz/a B	100 a
Outlook	16 fl oz/a B	99 ab
AMS	8.5 lb/100 gal B	
10 Ignite 280	22 fl oz/a B	100 a
Firstrate	0.6 oz/a B	100 a
AMS	8.5 lb/100 gal B	
11 Ignite 280	22 fl oz/a B	100 a
Harness	1.29 pt/a B	100 a
AMS	8.5 lb/100 gal B	
12 Nontreated		0 c
13 Authority Broadlaef	4 oz/a A	100 a
Ignite 280	22 fl oz/a C	100 a
AMS	8.5 lb/100 gal C	
14 Authority First	4 oz/a A	100 a
Ignite 280	22 fl oz/a C	100 a
AMS	8.5 lb/100 gal C	
15 Authority Assist	6 fl oz/a A	100 a
Ignite 280	22 fl oz/a C	100 a
AMS	8.5 lb/100 gal C	
16 Valor SX	2 oz/a A	100 a

Ignite 280	22 fl oz/a	C		
AMS	8.5 lb/100 gal	C		



# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

Pest Type	W Weed	W Weed
Pest Code	AMARE	CHEAL
Pest Scientific Name	Amaranthus ret>	Chenopodium al>
Pest Name	Redroot pigweed	Common lambsqu>
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Rating Date	Aug-30-2010	Aug-30-2010
Rating Type	control	control
Rating Unit	%	%
Number of Subsamples	1	1
Days After First/Last Applic.	96 49	96 49
Trt-Eval Interval	49 DA-C	49 DA-C
Plant-Eval Interval	97 DP-1	97 DP-1
Days After Emergence	89 DE-	89 DE-
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	29	30
17 Enlite	100 a	100 a
chlorimuron ethyl	0.08 oz ai/a A	
thifensulfuron	0.25 oz ai/a A	
valor SX	1 oz/a A	
Ignite 280	22 fl oz/a C	
AMS	8.5 lb/100 gal C	
18 Sharpen	100 a	99 ab
Ignite 280	22 fl oz/a C	
AMS	8.5 lb/100 gal C	
19 Op-Till	100 a	100 a
Ignite 280	22 fl oz/a C	
AMS	8.5 lb/100 gal C	
LSD (P=.10)	0.4	1.2
Standard Deviation	0.3	1.0
CV	0.38	1.15
Bartlett's X2	0.0	1.623
P(Bartlett's X2)	.	0.951
Replicate F	1.000	0.920
Replicate Prob(F)	0.4000	0.4374
Treatment F	33551.621	3784.434
Treatment Prob(F)	0.0001	0.0001

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
Location: Arlington      Study Director:  
Project ID:                  Investigator: C. M. Boerboom  
                                 Sponsor  
                                 Contact:

### Pest Type

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

### Pest Code

SETFA, Setaria faberi, = US

CHEAL, Chenopodium album, = US

ABUTH, Abutilon theophrasti, = US

AMARE, Amaranthus retroflexus, = US

AMBEL, Ambrosia artemisiifolia, = US

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Type

PHYSTU = phytotoxicity - stunting

PHYNEC = phytotoxicity - necrosis /burn

### Rating Unit

% = percent

cm = centimeter

### Plant-Eval Interval

35 DP-1 = 1 May-25-2010

38 DP-1 = 1 May-25-2010

42 DP-1 = 1 May-25-2010

52 DP-1 = 1 May-25-2010

59 DP-1 = 1 May-25-2010

97 DP-1 = 1 May-25-2010

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
    Sponsor  
    Contact:

### General Trial Information

**Study Director:** T.L.Trower      **Title:** Sr. Outreach Specialist  
**Investigator:** C. M. Boerboom  
  
**Discipline:** H herbicide  
**Initiation Date:** Jun-2-2010

### Trial Location

**City:** Arlington  
**State/Prov.:** WI

### Personnel

**Study Director:** T.L.Trower      **Title:** Sr. Outreach Specialist  
**Affiliation:** UW-Madison  
**Address:** 1575 Linden Dr.  
**Location:** Madison, WI  
**Postal Code:** 53706      **E-mail:** tltrower@wisc.edu  
    **Mobile**  
    **No.:** 608-393-3173  
  
**Investigator:** C. M. Boerboom

### Crop Description

**Crop 1:** GLXMA Glycine max      Soybean  
**Variety:** Cropland LT 1829      **Description:** RR/LL  
**BBCH Scale:** BSOY      **Planting Date:** May-25-2010  
**Planting Method:** SEEDED seeded      **Rate, Unit:** 154000 S/A  
**Depth, Unit:** 0.75 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** SMOOTH smooth  
  
**Soil Moisture:** NORMAL normal      **Emergence**  
    **Date:** Jun-2-2010

### Pest Description

- Pest 1 Type:** W      **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail
- Pest 2 Type:** W      **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters
- Pest 3 Type:** W      **Code:** ABUTH Abutilon theophrasti  
**Common Name:** Velvetleaf
- Pest 4 Type:** W      **Code:** AMARE Amaranthus retroflexus  
**Common Name:** Redroot pigweed
- Pest 5 Type:** W      **Code:** AMBEL Ambrosia artemisiifolia  
**Common Name:** Common ragweed

### Site and Design

**Plot Width, Unit:** 10 FT      **Site Type:** CROP  
**Plot Length, Unit:** 25 FT  
**Plot Area, Unit:** 250 FT2      **Tillage Type:** CONTIL conventional-till  
**Replications:** 4      **Study**  
    **Design:** RACOBL Randomized Complete Block (RCB)

**Soil Description**

**% Sand:** 9      **% OM:** 3.4      **Texture:** SIL silt loam  
**% Silt:** 68      **pH:** 6.3      **Soil Name:** Plano  
**% Clay:** 23      **Fert. Level:** E excellent

# University of Wisconsin-Madison

## Ignite: Benifit of Soil-Applied Herbicides

Trial ID: 10ARLSB03      Protocol ID: 10ARLSB03  
 Location: Arlington      Study Director:  
 Project ID:                  Investigator: C. M. Boerboom  
                                  Sponsor  
                                  Contact:

### Application Description

	A	B	C
<b>Application Date:</b>	May-26-2010	Jun-23-2010	Jul-12-2010
<b>Time of Day:</b>	7:00A	9:30A	3:00P
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	Preemg	Post	Post
<b>Application Placement:</b>	Surface	Foliar	Foliar
<b>Applied By:</b>	T. Trower	T. Trower	T. Trower
<b>Air Temperature, Unit:</b>	73 F	73 F	88 F
<b>% Relative Humidity:</b>	81	93	44
<b>Wind Velocity, Unit:</b>	0 MPH	8 MPH	0 MPH
<b>Wind Direction:</b>		SW	
<b>Dew Presence (Y/N):</b>	N no	N no	N no
<b>Soil Temperature, Unit:</b>	68 F	70 F	81 F
<b>Soil Moisture:</b>	WET/WET	WET/WET	DRY
<b>% Cloud Cover:</b>	0	100	25

### Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	Pre	V3	R1
<b>Height, Unit:</b>		7 IN	18 IN
<b>Height Minimum, Maximum:</b>		6 6	12

# University of Wisconsin-Madison

**Ignite: Benifit of Soil-Applied Herbicides**

Trial ID: 10ARLSB03	Protocol ID: 10ARLSB03
Location: Arlington	Study Director:
Project ID:	Investigator: C. M. Boerboom
	Sponsor
	Contact:

**Pest Stage At Each Application**

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Stage Minimum, Percent:</b>		12	23
<b>Stage Maximum, Percent:</b>		15	24
	IN	IN	
<b>Height Minimum, Maximum:</b>		2 8	11 22
<b>Density, Unit:</b>		6 FT2	2.5 FT2
<b>Pest 2 Code, Type, Scale:</b>	CHEAL W	CHEAL W	CHEAL W
<b>Stage Minimum, Percent:</b>		12	15
<b>Stage Maximum, Percent:</b>		16	19
	IN	IN	
<b>Height Minimum, Maximum:</b>		0 2	3 7
<b>Density, Unit:</b>		1 FT2	0.5 IN
<b>Pest 3 Code, Type, Scale:</b>	ABUTH W	ABUTH W	ABUTH W
<b>Stage Minimum, Percent:</b>		12	14
<b>Stage Maximum, Percent:</b>		15	17
	IN	IN	
<b>Height Minimum, Maximum:</b>		0 3	3 14
<b>Density, Unit:</b>			1 FT2
<b>Pest 4 Code, Type, Scale:</b>	AMARE W	AMARE W	AMARE W
<b>Stage Minimum, Percent:</b>		12	
<b>Stage Maximum, Percent:</b>		19	
	IN		
<b>Height Minimum, Maximum:</b>		0 7	
<b>Pest 5 Code, Type, Scale:</b>	AMBEL W	AMBEL W	AMBEL W
		IN	
<b>Height Minimum, Maximum:</b>			11 24
<b>Density, Unit:</b>			0.5 FT2

**Application Equipment**

	A	B	C
<b>Equipment Type:</b>	SPRBAC	SPRBAC	SPRBAC
<b>Operating Pressure, Unit:</b>	23 PSI	23 PSI	23 PSI
<b>Nozzle Type:</b>	Flat Fan	Flat Fan	Flat Fan
<b>Nozzle Size:</b>	XR 8003	XR 8003	XR 8003
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN
<b>% Coverage:</b>	100	100	100
<b>Boom ID:</b>	20 GPA	20 GPA	20 GPA
<b>Boom Length, Unit:</b>	10 FT	10 FT	10 FT
<b>Boom Height, Unit:</b>	19 IN	19 IN	19 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	20 gal/ac	20 gal/ac	20 gal/ac
<b>Mix Size, Unit:</b>	2.2 liters	2.2 liters	2.2 liters
<b>Propellant:</b>	COMCO2	COMCO2	COMCO2