

# Ohio State University Horticulture and Crop Science

## FALL HERBICIDE PROGRAMS IN CORN

Trial ID: 07FALLCORN  
Location: WESTERN BRANCH F-9

Study Dir.: Anthony F. Dobbels  
Investigator: Dr. Mark M. Loux

### GENERAL TRIAL INFORMATION

**Study Director:** Anthony F. Dobbels  
**Affiliation:** OSU  
**Investigator:** Dr. Mark M. Loux  
**Affiliation:** OSU

### TRIAL LOCATION

**State/Prov.:** Ohio  
**Country:** Clark  
**Trial Status:** Complete  
**Initiation Date:** Nov/01/2006  
**Conducted Under GLP (Y/N):** N  
**Conducted Under GEP (Y/N):** N

### CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. TAROF	Common dandelion	Taraxacum officinale
2. AMBTR	Giant ragweed	Ambrosia trifida

**Crop 1:** ZEAMX CORN, FIELD  
**Planting Date:** May/01/2007  
**Rate:** 32097 SEED/A  
**Row Spacing:** 30 IN  
**Variety:** SEED CONSULTANTS SC1116  
**Planting Method:** JOHN DEERE 7200  
**Depth:** 1.5 IN  
**Seed Bed:** NO-TILL

### SITE AND DESIGN

**Plot Width, Unit:** 6.67 FT  
**Tillage Type:** NO-TILL  
**Plot Length, Unit:** 30 FT  
**Study Design:** RANDOMIZED COMPLETE BLOCK  
**Reps:** 3

### SOIL DESCRIPTION

<b>% OM:</b>	1.2	<b>Texture:</b>	SILT LOAM
<b>pH:</b>	5.8	<b>Soil Name:</b>	CROSBY
<b>CEC:</b>	10.8		

**Overall Moisture Conditions:** POOR

### APPLICATION DESCRIPTION

A

**Application Date:** Nov/09/2006  
**Time of Day:** 11:00 A.M  
**Application Method:** SPRAY  
**Application Timing:** FALL  
**Applic. Placement:** BROADCAST  
**Air Temp., Unit:** 63 F  
**% Relative Humidity:** 70  
**Wind Velocity, Unit:** 9 S  
**Soil Temp., Unit:** 48 F  
**Soil Moisture:** MOIST/WET  
**% Cloud Cover:** 5

### CROP STAGE AT EACH APPLICATION

A

**Crop 1 Code, Stage:** ZEAMX .  
**Stage Scale:** .  
**Height, Unit:** 0. .

### WEED STAGE AT EACH APPLICATION

A

**Weed 1 Code, Stage:** TAROF 6-8"  
**Stage Scale:** >12 LVS  
**Density, Unit:** 24 M2  
**Weed 2 Code, Stage:** AMBTR .  
**Stage Scale:** .  
**Density, Unit:** 2.66 M2

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## APPLICATION EQUIPMENT

A

Appl. Equipment:	BACKPACK
Operating Pressure:	50
Nozzle Type:	DG
Nozzle Size:	11002
Nozzle Spacing, Unit:	18 IN
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Spray Volume, Unit:	20 GPA
Propellant:	CO2

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Weed Code		TAROF		STEME		LAMPU		TAROF		STEME	
Rating Data Type		STAND		CONTROL		CONTROL		CONTROL		CONTROL	
Rating Unit		PERCENT		PERCENT		PERCENT		PERCENT		PERCENT	
Rating Date		Nov/09/2006		May/04/2007		May/04/2007		May/04/2007		May/17/2007	
Trt-Eval Interval		0 DA-A		AT PLANT		AT PLANT		AT PLANT		15 DAPL	
# Subsamples, Dec.		0		0		0		0		0	
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code	1	2	3	4	5
1	UTC						0 a	0 b	0 b	0 c	0 b
2	BASIS	0.375	oz ai/a	0.5	oz/a	A	52 a	100 a	98 a	97 a	100 a
	2,4-D	0.5	lb ai/a	1	pt/a						
	COC	1	% v/v	0.8	qt/a						
3	BASIS	0.375	oz ai/a	0.5	oz/a	A	50 a	100 a	99 a	97 a	100 a
	SIMAZINE	14.4	oz ai/a	1.8	pt/a						
	2,4-D	0.5	lb ai/a	1	pt/a						
	COC	1	% v/v	0.8	qt/a						
4	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a	A	53 a	100 a	78 a	75 ab	100 a
	2,4-D	0.5	lb ai/a	1	pt/a						
	AMS	5	% v/v	4	qt/a						
5	AUTUMN	0.03	oz ai/a	0.3	oz/a	A	52 a	100 a	80 a	72 ab	100 a
	2,4-D	0.5	lb ai/a	1	pt/a						
	COC	1	% v/v	0.8	qt/a						
	28%	1.5	qt/a	1.5	qt/a						
6	AUTUMN	0.03	oz ai/a	0.3	oz/a	A	52 a	100 a	100 a	58 b	100 a
	SENCOR DF	0.47	lb ai/a	10	oz/a						
	2,4-D	0.5	lb ai/a	1	pt/a						
	COC	1	% v/v	0.8	qt/a						
	28%	1.5	qt/a	1.5	qt/a						
7	AUTUMN	0.03	oz ai/a	0.3	oz/a	A	45 a	100 a	98 a	93 a	100 a
	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a						
	AMS	5	% v/v	4	qt/a						
8	AUTUMN	0.00188	lb ai/a	0.3	oz/a	A	36 a	87 a	90 a	98 a	100 a
	COC	1	% v/v	0.8	qt/a						
	AMS	5	% v/v	4	qt/a						
LSD (P=.05)							66.0	14.3	13.7	22.7	0.0
Standard Deviation							37.7	8.2	7.8	12.9	0.0
CV							88.87	9.51	9.74	17.54	0.0
Bartlett's X2							0.125	0.0	15.845	17.853	0.0
P(Bartlett's X2)							1.00	.	0.007*	0.007*	.
Replicate F							0.591	1.000	0.338	2.408	0.000
Replicate Prob(F)							0.5668	0.3927	0.7188	0.1262	1.0000
Treatment F							0.691	55.107	55.370	19.765	0.000
Treatment Prob(F)							0.6793	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Weed Code	LAMPU	TAROF	SETFA	AMBTR	AMBEL
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	May/17/2007	May/17/2007	May/17/2007	May/17/2007	May/17/2007
Trt-Eval Interval	15 DAPL	15 DAPL	15 DAPL	15 DAPL	15 DAPL
# Subsamples, Dec.	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Unit	Appl Code	6	7	8	9	10
1	UTC						0 b	0 b	0 b	0 b	0 a
2	BASIS	0.375	oz ai/a	0.5	oz/a	A	100 a	57 a	33 a	50 a	30 a
	2,4-D	0.5	lb ai/a	1	pt/a						
	COC	1	% v/v	0.8	qt/a						
3	BASIS	0.375	oz ai/a	0.5	oz/a	A	100 a	63 a	37 a	57 a	40 a
	SIMAZINE	14.4	oz ai/a	1.8	pt/a						
	2,4-D	0.5	lb ai/a	1	pt/a						
	COC	1	% v/v	0.8	qt/a						
4	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a	A	67 a	50 a	7 b	17 b	7 a
	2,4-D	0.5	lb ai/a	1	pt/a						
	AMS	5	% v/v	4	qt/a						
5	AUTUMN	0.03	oz ai/a	0.3	oz/a	A	83 a	27 ab	0 b	0 b	10 a
	2,4-D	0.5	lb ai/a	1	pt/a						
	COC	1	% v/v	0.8	qt/a						
	28%	1.5	qt/a	1.5	qt/a						
6	AUTUMN	0.03	oz ai/a	0.3	oz/a	A	100 a	20 ab	0 b	0 b	7 a
	SENCOR DF	0.47	lb ai/a	10	oz/a						
	2,4-D	0.5	lb ai/a	1	pt/a						
	COC	1	% v/v	0.8	qt/a						
	28%	1.5	qt/a	1.5	qt/a						
7	AUTUMN	0.03	oz ai/a	0.3	oz/a	A	100 a	63 a	0 b	0 b	10 a
	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a						
	AMS	5	% v/v	4	qt/a						
8	AUTUMN	0.00188	lb ai/a	0.3	oz/a	A	77 a	70 a	13 b	20 b	20 a
	COC	1	% v/v	0.8	qt/a						
	AMS	5	% v/v	4	qt/a						
LSD (P=.05)							33.6	35.5	11.9	20.0	23.9
Standard Deviation							19.2	20.3	6.8	11.4	12.4
CV							24.52	46.39	60.18	63.73	80.38
Bartlett's X2							0.326	6.317	1.656	3.703	0.427
P(Bartlett's X2)							0.85	0.389	0.647	0.157	0.935
Replicate F							0.045	0.121	0.273	1.950	0.841
Replicate Prob(F)							0.9560	0.8866	0.7653	0.1791	0.4706
Treatment F							9.497	4.611	15.571	12.562	3.593
Treatment Prob(F)							0.0002	0.0073	0.0001	0.0001	0.0566

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# Ohio State University Horticulture and Crop Science

Weed Code	CHEAL
Rating Data Type	CONTROL
Rating Unit	PERCENT
Rating Date	May/17/2007
Trt-Eval Interval	15 DAPL
# Subsamples, Dec.	0

Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Rate	Product Unit	Appl Code	11
1	UTC							0 b
2	BASIS	0.375	oz ai/a	0.5	oz/a		A	33 ab
2	2,4-D	0.5	lb ai/a	1	pt/a			
2	COC	1	% v/v	0.8	qt/a			
3	BASIS	0.375	oz ai/a	0.5	oz/a		A	51 a
3	SIMAZINE	14.4	oz ai/a	1.8	pt/a			
3	2,4-D	0.5	lb ai/a	1	pt/a			
3	COC	1	% v/v	0.8	qt/a			
4	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a		A	0 b
4	2,4-D	0.5	lb ai/a	1	pt/a			
4	AMS	5	% v/v	4	qt/a			
5	AUTUMN	0.03	oz ai/a	0.3	oz/a		A	7 b
5	2,4-D	0.5	lb ai/a	1	pt/a			
5	COC	1	% v/v	0.8	qt/a			
5	28%	1.5	qt/a	1.5	qt/a			
6	AUTUMN	0.03	oz ai/a	0.3	oz/a		A	7 b
6	SENCOR DF	0.47	lb ai/a	10	oz/a			
6	2,4-D	0.5	lb ai/a	1	pt/a			
6	COC	1	% v/v	0.8	qt/a			
6	28%	1.5	qt/a	1.5	qt/a			
7	AUTUMN	0.03	oz ai/a	0.3	oz/a		A	7 b
7	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a			
7	AMS	5	% v/v	4	qt/a			
8	AUTUMN	0.00188	lb ai/a	0.3	oz/a		A	17 b
8	COC	1	% v/v	0.8	qt/a			
8	AMS	5	% v/v	4	qt/a			
LSD (P=.05)								24.0
Standard Deviation								13.6
CV								90.15
Bartlett's X2								2.818
P(Bartlett's X2)								0.589
Replicate F								1.434
Replicate Prob(F)								0.2737
Treatment F								5.263
Treatment Prob(F)								0.0050

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