

POSTEMERGENCE WEED CONTROL IN CORN I

Trial ID: 04POC1 Study Dir.: Anthony F. Dobbels  
Location: WESTERN BRANCH F-7 Investigator: Dr. Mark M. Loux

GENERAL TRIAL INFORMATION

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

Conducted Under GLP (Y/N): N Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. SETFA	Giant foxtail	Setaria faberi
2. AMARE	Pigweed, redroot	Amaranthus retroflexus
3. AMBTR	Ragweed, giant	Ambrosia trifida
4. ABUTH	Velvetleaf	Abutilon theophrasti
5. CHEAL	Lambsquarters, common	Chenopodium album

Crop 1: ZEAMX CORN, FIELD Variety: DEKALB DKC 61-43  
Planting Date: 4-28-04 Planting Method: JOHN DEERE 7200  
Rate: 32097 SEED/A Depth: 1.5 IN  
Row Spacing: 30 IN Seed Bed: CONVENTIONAL

SITE AND DESIGN

Plot Width, Unit: 6.67 FT Plot Length, Unit: 30 FT Reps: 3  
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% OM: 3.1 Texture: silt loam  
pH: 6.2 Soil Name: Crosby  
CEC: 16

APPLICATION DESCRIPTION

A

Application Date: 5-29-04  
Time of Day: 12:00 P.M.  
Application Method: SPRAY  
Application Timing: EPO  
Applic. Placement: BROADCAST  
Air Temp., Unit: 72 F  
% Relative Humidity: 64  
Wind Velocity, Unit: 6 W  
Soil Temp., Unit: 70 F  
Soil Moisture: WET/WET  
% Cloud Cover: 80

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: ZEAMX  
Stage Scale: 4 COLLAR  
Height, Unit: 10 IN

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: SETFA 2-4"  
Stage Scale: 4 LVS  
Density, Unit: 35.3 M2  
Weed 2 Code, Stage: AMARE 1-2"  
Stage Scale: 4 LVS  
Density, Unit: 6 M2  
Weed 3 Code, Stage: AMBTR 6-10"  
Stage Scale: 4-8 LVS  
Density, Unit: 6.3 M2  
Weed 4 Code, Stage: ABUTH 1-2"  
Stage Scale: 3 LVS  
Density, Unit: 3.3 M2  
Weed 5 Code, Stage: CHEAL 1-2"  
Stage Scale: 6 LVS  
Density, Unit: 13.3 M2

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

(04POC1)

Ohio State University  
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Location: WESTERN BRANCH F-7 Investigator: Dr. Mark M. Loux

Weed Code														
Crop Code														
Rating Data Type														
Rating Unit														
Rating Date														
Trt-Eval Interval														
# Subsamples, Dec.														
Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	1	2	3	4	5	6	7	8	9
1	OPTION	1.5 oz/a		EPO	A	0	95	88	73	98	100	95	0	100
1	DEFINE SC	10 oz/a		EPO										
1	ATRAZINE	1 qt/a		EPO										
1	MSO	1.5 pt/a		EPO										
1	28 %	1.5 qt/a		EPO										
2	EQUIP	1.5 oz/a		EPO	A	0	93	83	82	100	100	100	0	100
2	DEFINE SC	10 oz/a		EPO										
2	ATRAZINE	1 qt/a		EPO										
2	MSO	1.5 pt/a		EPO										
2	28 %	1.5 qt/a		EPO										
3	OPTION	1.5 oz/a		EPO	A	0	95	85	80	100	100	92	0	100
3	DISTINCT	2 oz/a		EPO										
3	MSO	1.5 pt/a		EPO										
3	28 %	1.5 qt/a		EPO										
4	EQUIP	1.5 oz/a		EPO	A	0	95	92	88	95	100	93	0	97
4	DISTINCT	2 oz/a		EPO										
4	MSO	1.5 pt/a		EPO										
4	28 %	1.5 qt/a		EPO										
5	OPTION	1.5 oz/a		EPO	A	0	95	80	97	100	100	98	0	99
5	CALLISTO	1.5 oz/a		EPO										
5	MSO	1.5 pt/a		EPO										
5	28 %	1.5 qt/a		EPO										
6	EQUIP	1.5 oz/a		EPO	A	0	95	88	98	100	100	98	0	100
6	CALLISTO	1.5 oz/a		EPO										
6	MSO	1.5 pt/a		EPO										
6	28 %	1.5 qt/a		EPO										
7	STEADFAST ATZ	14 oz/a		EPO	A	0	95	93	100	100	100	98	0	99
7	CALLISTO	2 oz/a		EPO										
7	NIS	6.4 oz/a		EPO										
7	28 %	1.5 qt/a		EPO										
8	UTC					0	0	0	0	0	0	0	0	0
LSD (P=.05)						0.0	1.8	8.5	8.8	5.4	0.0	8.3	0.0	2.1
Standard Deviation						0.0	1.0	4.8	5.0	3.1	0.0	4.7	0.0	1.2
CV						0.0	1.23	6.34	6.53	3.56	0.0	5.62	0.0	1.39
Replicate F						0.000	1.000	1.204	0.532	1.750	0.000	2.642	0.000	0.543
Replicate Prob(F)						1.0000	0.3927	0.3293	0.5988	0.2097	1.0000	0.1063	1.0000	0.5928
Treatment F						0.000	3233.715	124.306	125.842	387.250	0.000	156.285	0.000	2539.870
Treatment Prob(F)						1.0000	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	1.0000	0.0001

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											AMBTR	CHEAL	ABUTH	AMARE	POLPY	SETFA	AMBTR	CHEAL	ABUTH
Weed Code	Crop Code										CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Data Type	Rating Unit										PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	Trt-Eval Interval										6-24-04	6-24-04	6-24-04	6-24-04	6-24-04	7-21-04	7-21-04	7-21-04	7-21-04
# Subsamples, Dec.											26 DA-A	26 DA-A	26 DA-A	26 DA-A	26 DA-A	53 DA-A	53 DA-A	53 DA-A	53 DA-A
											0	0	0	0	0	0	0	0	0
Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	10	11	12	13	14	15	16	17	18					
1	OPTION	1.5 oz/a		EPO	A	93	90	100	100	95	100	92	91	93					
1	DEFINE SC	10 oz/a		EPO															
1	ATRAZINE	1 qt/a		EPO															
1	MSO	1.5 pt/a		EPO															
1	28 %	1.5 qt/a		EPO															
2	EQUIP	1.5 oz/a		EPO	A	90	95	97	100	93	99	88	96	100					
2	DEFINE SC	10 oz/a		EPO															
2	ATRAZINE	1 qt/a		EPO															
2	MSO	1.5 pt/a		EPO															
2	28 %	1.5 qt/a		EPO															
3	OPTION	1.5 oz/a		EPO	A	86	92	98	100	93	100	80	100	100					
3	DISTINCT	2 oz/a		EPO															
3	MSO	1.5 pt/a		EPO															
3	28 %	1.5 qt/a		EPO															
4	EQUIP	1.5 oz/a		EPO	A	90	99	98	100	95	96	87	100	100					
4	DISTINCT	2 oz/a		EPO															
4	MSO	1.5 pt/a		EPO															
4	28 %	1.5 qt/a		EPO															
5	OPTION	1.5 oz/a		EPO	A	82	100	100	100	95	95	73	100	100					
5	CALLISTO	1.5 oz/a		EPO															
5	MSO	1.5 pt/a		EPO															
5	28 %	1.5 qt/a		EPO															
6	EQUIP	1.5 oz/a		EPO	A	90	100	100	100	93	99	88	100	100					
6	CALLISTO	1.5 oz/a		EPO															
6	MSO	1.5 pt/a		EPO															
6	28 %	1.5 qt/a		EPO															
7	STEADFAST ATZ	14 oz/a		EPO	A	93	100	100	100	100	98	91	100	100					
7	CALLISTO	2 oz/a		EPO															
7	NIS	6.4 oz/a		EPO															
7	28 %	1.5 qt/a		EPO															
8	UTC					0	0	0	0	0	0	0	0	0					
LSD (P=.05)						10.2	7.7	4.3	0.0	13.2	5.5	16.1	4.8	3.6					
Standard Deviation						5.8	4.4	2.5	0.0	7.5	3.2	9.2	2.7	2.0					
CV						7.47	5.23	2.85	0.0	9.06	3.66	12.24	3.18	2.36					
Replicate F						3.925	1.171	1.195	0.000	2.701	4.710	3.890	1.967	1.000					
Replicate Prob(F)						0.0443	0.3388	0.3317	1.0000	0.1019	0.0273	0.0454	0.1766	0.3927					
Treatment F						88.894	181.434	603.707	0.000	59.945	365.972	34.043	490.247	886.857					
Treatment Prob(F)						0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001					

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Weed Code	AMARE	POLPY
Crop Code		
Rating Data Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Rating Date	7-21-04	7-21-04
Trt-Eval Interval	53 DA-A	53 DA-A
# Subsamples, Dec.	0	0

Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	19	20
1	OPTION	1.5 oz/a		EPO	A	100	97
1	DEFINE SC	10 oz/a		EPO			
1	ATRAZINE	1 qt/a		EPO			
1	MSO	1.5 pt/a		EPO			
1	28 %	1.5 qt/a		EPO			
2	EQUIP	1.5 oz/a		EPO	A	100	100
2	DEFINE SC	10 oz/a		EPO			
2	ATRAZINE	1 qt/a		EPO			
2	MSO	1.5 pt/a		EPO			
2	28 %	1.5 qt/a		EPO			
3	OPTION	1.5 oz/a		EPO	A	100	88
3	DISTINCT	2 oz/a		EPO			
3	MSO	1.5 pt/a		EPO			
3	28 %	1.5 qt/a		EPO			
4	EQUIP	1.5 oz/a		EPO	A	100	97
4	DISTINCT	2 oz/a		EPO			
4	MSO	1.5 pt/a		EPO			
4	28 %	1.5 qt/a		EPO			
5	OPTION	1.5 oz/a		EPO	A	100	100
5	CALLISTO	1.5 oz/a		EPO			
5	MSO	1.5 pt/a		EPO			
5	28 %	1.5 qt/a		EPO			
6	EQUIP	1.5 oz/a		EPO	A	100	99
6	CALLISTO	1.5 oz/a		EPO			
6	MSO	1.5 pt/a		EPO			
6	28 %	1.5 qt/a		EPO			
7	STEADFAST ATZ	14 oz/a		EPO	A	100	100
7	CALLISTO	2 oz/a		EPO			
7	NIS	6.4 oz/a		EPO			
7	28 %	1.5 qt/a		EPO			
8	UTC					0	0
LSD (P=.05)						0.0	7.5
Standard Deviation						0.0	4.3
CV						0.0	5.06
Replicate F						0.000	2.516
Replicate Prob(F)						1.0000	0.1165
Treatment F						0.000	194.020
Treatment Prob(F)						1.0000	0.0001