

PREEMERGENCE WEED CONTROL IN CORN IV

Trial ID: 04PREC4 Study Dir.: Anthony F. Dobbels
Location: WESTERN BRANCH F-10 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. ABUTH	Velvetleaf	Abutilon theophrasti
3. CHEAL	Lambsquarters, common	Chenopodium album
4. AMBEL	Ragweed, common	Ambrosia artemisiifolia
5. AMARE	Redroot pigweed	Amaranthus retroflexus

Crop 1: ZEAMX CORN, FIELD Variety: PIONEER 34M94
Planting Date: 5-10-04 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: CONVENTIOANL Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% OM: 2.6 Texture: silt loam
pH: 5.7 Soil Name: Crosby
CEC: 12

APPLICATION DESCRIPTION

A

Application Date: 5-11-04
Time of Day: 7:00 A.M.
Application Method: SPRAY
Application Timing: PRE
Applic. Placement: BROADCAST
Air Temp., Unit: 68 F
% Relative Humidity: 73
Wind Velocity, Unit: 2 W
Soil Temp., Unit: 61 F
Soil Moisture: DRY/MOIST
% Cloud Cover: 15

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: ZEAMX

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: SETFA
Density, Unit: 57 M2
Weed 2 Code, Stage: ABUTH
Density, Unit: 23 M2
Weed 3 Code, Stage: CHEAL
Density, Unit: 16 M2
Weed 4 Code, Stage: AMBEL
Density, Unit: 2.3 M2
Weed 5 Code, Stage: AMARE
Density, Unit: 4 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

(04PREC4)

Ohio State University
Horticulture and Crop Science

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Weed Code				SETFA	ABUTH	TR CHEAL	AMBEL	AMARE		SETFA
Crop Code										
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date				6-1-04	6-8-04	6-8-04	6-8-04	6-8-04	6-8-04	6-28-04
Trt-Eval Interval				14 DAE	28 DAE	28 DAE	28 DAE	28 DAE	28 DAE	42 DAE
# Subsamples, Dec.				0	0	0	0	0	0	0

Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	1	2	3	4	5	6	7	8	9
1	BICEP II MAGNUM	1.3	qt/a	PRE	A	0	0	100	33	17	100	100	0	100
2	BICEP II MAGNUM	2.22	qt/a	PRE	A	0	0	100	77	60	100	100	0	100
3	BICEP II MAGNUM	2.6	qt/a	PRE	A	0	0	100	77	53	100	100	0	100
4	MANA-283	0.96	qt/a	PRE	A	0	0	100	53	33	100	100	0	100
4	ATRAZINE	0.35	qt/a	PRE										
5	MANA-283	1.44	qt/a	PRE	A	0	0	100	53	37	100	100	0	100
5	ATRAZINE	0.54	qt/a	PRE										
6	MANA-283	1.63	qt/a	PRE	A	0	0	100	77	40	100	100	0	100
6	ATRAZINE	0.62	qt/a	PRE										
7	MANA-283	1.91	qt/a	PRE	A	0	0	100	80	67	100	100	0	100
7	ATRAZINE	0.70	qt/a	PRE										
8	MANA-283	2.45	qt/a	PRE	A	0	0	100	67	47	100	100	0	100
9	MANA-283	2.87	qt/a	PRE	A	0	0	100	83	70	100	100	0	100
10	MANA-283	0.96	qt/a	PRE	A	0	0	99	100	100	100	100	0	100
10	ATRAZINE	0.35	qt/a	PRE										
10	BALANCE PRO	1.5	oz/a	PRE										
11	MANA-283	1.44	qt/a	PRE	A	0	0	100	100	100	100	100	0	100
11	ATRAZINE	0.54	qt/a	PRE										
11	BALANCE PRO	1.5	oz/a	PRE										
12	MANA-283	1.91	qt/a	PRE	A	0	0	100	100	100	100	100	0	100
12	ATRAZINE	0.7	qt/a	PRE										
12	BALANCE PRO	1.5	oz/a	PRE										
13	MANA-283	2.45	qt/a	PRE	A	0	0	100	100	100	100	100	0	100
13	BALANCE PRO	1.5	oz/a	PRE										
14	MANA-283	2.87	qt/a	PRE	A	0	0	100	100	100	100	100	0	100
14	BALANCE PRO	1.5	oz/a	PRE										
15	MANA-283	0.96	qt/a	PRE	A	0	0	100	100	100	100	100	0	100
15	ATRAZINE	0.35	qt/a	PRE										
15	BALANCE PRO	2.25	oz/a	PRE										
16	MANA-283	1.44	qt/a	PRE	A	0	0	100	100	100	100	100	0	100
16	ATRAZINE	0.54	qt/a	PRE										
16	BALANCE PRO	2.25	oz/a	PRE										
17	MANA-283	1.91	qt/a	PRE	A	0	0	100	100	100	100	100	0	100
17	ATRAZINE	0.7	qt/a	PRE										
17	BALANCE PRO	2.25	oz/a	PRE										
18	MANA-283	2.45	qt/a	PRE	A	0	0	100	100	100	100	100	0	100
18	BALANCE PRO	2.25	oz/a	PRE										
19	MANA-283	2.87	qt/a	PRE	A	0	0	100	100	100	100	100	0	100
19	BALANCE PRO	2.25	oz/a	PRE										
20	UTC					0	0	0	0	0	0	0	0	0
LSD (P=.05)						0.0	0.0	0.4	16.1	26.8	0.0	0.0	0.0	0.3
Standard Deviation						0.0	0.0	0.3	9.7	16.2	0.0	0.0	0.0	0.2
CV						0.0	0.0	0.27	12.17	22.79	0.0	0.0	0.0	0.19
Replicate F						0.000	0.000	1.000	3.849	2.287	0.000	0.000	0.000	0.487
Replicate Prob(F)						1.0000	1.0000	0.3774	0.0300	0.1154	1.0000	1.0000	1.0000	0.6181
Treatment F						0.000	0.000	22485.213	23.682	12.608	0.000	0.000	0.000	43816.313
Treatment Prob(F)						1.0000	1.0000	0.0001	0.0001	0.0001	1.0000	1.0000	1.0000	0.0001

