

(04NTC2)

Ohio State University  
Horticulture and Crop Science

EARLY PREPLANT GRASS CONTROL IN NO-TILL CORN

Trial ID: 04NTC2                      Study Dir.: Anthony F. Dobbels  
Location: WESTERN BRANCH F-9        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

Crop 1: ZEAMX    CORN, FIELD                                      Variety: SEED CONSULTANTS SC1124A

Planting Date: 6-28-04                                      Planting Method: JOHN DEERE 7200

Rate: 32097    SEED/A                                      Depth: 1.5    IN

Row Spacing: 30    IN                                      Seed Bed: NO-TILL

SITE AND DESIGN

Plot Width, Unit: 6.67    FT                      Plot Length, Unit: 30    FT                      Reps: 3

Tillage Type: NO-TILL                                      Study Design: RANDOMIZED COMPLETE BLOCK

MAINTENANCE

Field Prep./Maintenance: APPLIED ROUNDUP WEATHERMAX AT 22 OZ/A ON 4-23-04 TO ENTIRE STUDY.  
APPLIED 3 OZ CALLISTO 5-29-04

SOIL DESCRIPTION

% OM:    5                      Texture:    silty clay loam  
pH:    6.3                      Soil Name:    Kokomo  
CEC:    24

APPLICATION DESCRIPTION

	A	B	C
Application Date:	3-29-04	4-14-04	4-29-04
Time of Day:	10:00 A.M	12:00 P.M	9:00 A.M.
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	30 EPP	15 EPP	PRE
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	56    F	51    F	66    F
% Relative Humidity:	76	47	39
Wind Velocity, Unit:	2    S	8    N	7    S
Soil Temp., Unit:	53    F	48    F	53    F
Soil Moisture:	MOIST/WET	WET/MOIST	DRY/MOIST
% Cloud Cover:	100	5	10

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ZEAMX	ZEAMX	ZEAMX

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	SETFA	SETFA	SETFA
Density, Unit:	104    M2	104    M2	104    M2

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APPLICATION EQUIPMENT

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

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Weed Code

Crop Code

Rating Data Type

Rating Unit

Rating Date

Trt-Eval Interval

ARM Action Codes

# Subsamples, Dec.

ZEAMX	ZEAMX	ZEAMX
WEIGHT	MOISTURE	YIELD
LBS	PERCENT	BU/ACRE
10-8-04	10-8-04	10-8-04
HARVEST	HARVEST	HARVEST
		TY1
1	1	1

Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	4	5	6
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1	DUAL II MAGNUM	2 pt/a		30 EPP A		43.2 ab	17.5 a	218.7 ab
2	STALWART C	2 pt/a		30 EPP A		40.3 a-d	17.6 a	204.0 abc
3	KIH-485	5 oz/a		30 EPP A		43.9 a	18.0 a	220.8 a
4	DEFINE SC	21 oz/a		30 EPP A		37.4 a-e	18.1 a	187.9 bcd
5	DEGREE	2.5 qt/a		30 EPP A		36.9 b-e	16.2 a	189.2 a-d
6	DUAL II MAGNUM	1.67 pt/a		15 EPP B		35.3 de	18.3 a	176.4 cd
7	STALWART C	1.67 pt/a		15 EPP B		32.0 e	17.6 a	161.3 d
8	KIH-485	5 oz/a		15 EPP B		36.8 b-e	16.7 a	188.2 bcd
9	DEFINE SC	18 oz/a		15 EPP B		39.5 a-d	17.6 a	199.8 abc
10	DEGREE	2.125 qt/a		15 EPP B		36.9 b-e	19.2 a	182.9 cd
11	DUAL II MAGNUM	1.67 pt/a		PRE C		42.4 abc	18.1 a	216.6 ab
12	STALWART C	1.67 pt/a		PRE C		36.9 b-e	19.5 a	182.2 cd
13	KIH-485	5 oz/a		PRE C		38.7 a-e	17.3 a	195.8 abc
14	DEFINE SC	18 oz/a		PRE C		40.9 a-d	17.2 a	207.8 abc
15	DEGREE	2.125 qt/a		PRE C		35.9 cde	18.0 a	179.8 cd
16	UTC					11.1 f	13.5 a	56.4 e

LSD (P=.05)

Standard Deviation

CV

6.70	3.51	32.48
4.01	2.11	19.45
10.92	12.02	10.49

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Weed Code			
Crop Code	ZEAMX	ZEAMX	ZEAMX
Rating Data Type	WEIGHT	MOISTURE	YIELD
Rating Unit	LBS	PERCENT	BU/ACRE
Rating Date	10-8-04	10-8-04	10-8-04
Trt-Eval Interval	HARVEST	HARVEST	HARVEST
ARM Action Codes			TY1
# Subsamples, Dec.	1	1	1

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Trt	Treatment	Product	Product	Grow	Appl				
No.	Name	Rate	Rate	Unit	Stg	Code	4	5	6

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Replicate F	8.150	7.929	6.362
Replicate Prob(F)	0.0016	0.0017	0.0051
Treatment F	10.551	1.245	11.554
Treatment Prob(F)	0.0001	0.2947	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

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

Column 3: TY1 =  $5.185714 * [4] * (100 - [5]) / 84.5$