

PREEMERGENCE WEED CONTROL WITH KIH-485

Trial ID: 04KIHV 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. AMBTR	Ragweed, giant	Ambrosia trifida
3. CHEAL	Lambsquarters, common	Chenopodium album
4. ABUTH	Velvetleaf	Abutilon theophrasti
5. POLPY	Pennsylvania smartweed	Polygonum pennsylvanicum
6. AMARE	Redroot pigweed	Amaranthus retroflexus

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: 4-28-04
Time of Day: 7:00 A.M.
Application Method: SPRAY
Application Timing: PRE
Applic. Placement: BROADCAST
Air Temp., Unit: 54 F
% Relative Humidity: 52
Wind Velocity, Unit: 1 S
Soil Temp., Unit: 51 F
Soil Moisture: DRY/MOIST
% Cloud Cover: 0

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: ZEAMX

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: SETFA
Density, Unit: 33.3 M2
Weed 2 Code, Stage: AMBTR
Density, Unit: 6.3 M2
Weed 3 Code, Stage: CHEAL
Density, Unit: 13 M2
Weed 4 Code, Stage: ABUTH
Density, Unit: 3 M2
Weed 5 Code, Stage: POLPY
Density, Unit: 4.3 M2
Weed 6 Code, Stage: AMARE
Density, Unit: 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

(04KIHV)

Ohio State University
Horticulture and Crop Science

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Weed Code	ZEAMX	ZEAMX	ZEAMX	SETFA	AMBTR	TR CHEAL	ABUTH	POLPY	AMARE
Crop Code	MALFORM	MALFORM	PHYTO	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Data Type	PLANTS	PLANTS	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Unit									
Rating Date	5-14-04	5-20-04	5-26-04	5-26-04	5-26-04	5-26-04	5-26-04	5-26-04	5-26-04
Trt-Eval Interval	7 DAE	14 DAE	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A
# Subsamples, Dec.	0	0	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	KIH-485	5 oz/a		PRE	A	1	2	0	100	7	80	100	77	100
2	KIH-485	6 oz/a		PRE	A	1	1	0	100	43	96	100	67	100
3	KIH-485	10 oz/a		PRE	A	2	2	0	100	70	100	100	93	100
4	DUAL II MAGNUM	1.66 pt/a		PRE	A	1	1	0	100	20	60	27	73	100
5	DUAL II MAGNUM	3.33 pt/a		PRE	A	2	0	0	100	43	83	80	93	100
6	KIH-485/ATRAZINE	38 oz/a		PRE	A	1	1	0	100	80	97	97	100	100
7	KIH-485/ATRAZINE	52.3 oz/a		PRE	A	2	2	0	100	90	97	100	100	100
8	BICEP II MAGNUM	4.1 pt/a		PRE	A	2	0	0	100	77	73	100	100	100
9	HARNESS XTRA 5.6	2.4 qt/a		PRE	A	1	1	0	100	93	100	98	100	100
10	UTC					1	0	0	0	0	0	0	0	0
LSD (P=.05)						2.5	2.1	0.0	0.0	27.4	16.2	25.1	28.1	0.0
Standard Deviation						1.5	1.2	0.0	0.0	16.0	9.4	14.6	16.2	0.0
CV						112.65	123.68	0.0	0.0	30.54	12.01	18.22	20.21	0.0
Replicate F						1.725	0.588	0.000	0.000	3.373	1.806	1.200	2.446	0.000
Replicate Prob(F)						0.2063	0.5656	1.0000	1.0000	0.0570	0.1929	0.3243	0.1183	1.0000
Treatment F						0.326	0.920	0.000	0.000	14.078	31.618	18.536	10.889	0.000
Treatment Prob(F)						0.9549	0.5303	1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	1.0000

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Weed Code		SETFA	AMBTR	TR CHEAL	ABUTH	POLPY	AMARE				
Crop Code											
Rating Data Type		CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL				
Rating Unit		PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Rating Date		6-28-04	6-28-04	6-28-04	6-28-04	6-28-04	6-28-04				
Trt-Eval Interval		61 DA-A	61 DA-A	61 DA-A	61 DA-A	61 DA-A	61 DA-A				
# Subsamples, Dec.		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
1	KIH-485	5 oz/a		PRE	A	100	10	93	100	83	100
2	KIH-485	6 oz/a		PRE	A	100	23	83	83	57	100
3	KIH-485	10 oz/a		PRE	A	100	37	88	100	83	100
4	DUAL II MAGNUM	1.66 pt/a		PRE	A	100	0	53	46	30	100
5	DUAL II MAGNUM	3.33 pt/a		PRE	A	100	0	70	70	70	100
6	KIH-485/ATRAZINE	38 oz/a		PRE	A	100	67	80	100	100	100
7	KIH-485/ATRAZINE	52.3 oz/a		PRE	A	100	57	93	100	100	100
8	BICEP II MAGNUM	4.1 pt/a		PRE	A	100	33	67	100	100	100
9	HARNESS XTRA 5.6	2.4 qt/a		PRE	A	100	75	98	95	100	100
10	UTC					0	0	0	0	0	0
	LSD (P=.05)					0.0	31.5	19.6	30.1	37.1	0.0
	Standard Deviation					0.0	18.3	11.4	17.5	21.4	0.0
	CV					0.0	60.78	15.7	22.03	29.65	0.0
	Replicate F					0.000	2.278	5.607	1.622	4.377	0.000
	Replicate Prob(F)					1.0000	0.1313	0.0128	0.2266	0.0305	1.0000
	Treatment F					0.000	7.218	19.512	10.763	7.687	0.000
	Treatment Prob(F)					1.0000	0.0002	0.0001	0.0001	0.0002	1.0000