

POSTEMERGENCE BROADLEAF WEED CONTROL IN CORN

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

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	B
Application Date:	4-28-04	6-3-04
Time of Day:	7:00 A.M.	9:00 A.M.
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	54 F	59 F
% Relative Humidity:	52	77
Wind Velocity, Unit:	1 S	3 W
Soil Temp., Unit:	51 F	59 F
Soil Moisture:	DRY/MOIST	DRY/MOIST
% Cloud Cover:	0	25

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	ZEAMX	ZEAMX
Stage Scale:		5 COLLAR
Height, Unit:		13 IN

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	AMBTR	AMBTR 8-12"
Stage Scale:		12 LVS
Density, Unit:		12 M2
Weed 2 Code, Stage:	CHEAL	CHEAL 2-4"
Stage Scale:		6 LVS
Density, Unit:		13.3 M2
Weed 3 Code, Stage:	AMARE	AMARE 2-4"
Stage Scale:		6 LVS
Density, Unit:		3 M2
Weed 4 Code, Stage:	ABUTH	ABUTH 2-3"
Stage Scale:		5 LVS
Density, Unit:		3 M2
Weed 5 Code, Stage:	POLPY	POLPY 4-6"
Stage Scale:		12 LVS
Density, Unit:		1.3 M2

APPLICATION EQUIPMENT

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

(04POCRNBLF)

Ohio State University
Horticulture and Crop Science

POSTEMERGENCE BROADLEAF WEED CONTROL IN CORN

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

Weed Code						SETFA	AMBTR	CHEAL	ABUTH	POLPY		SETFA	AMBTR	
Crop Code						ZEAMX					ZEAMX			
Rating Data Type						PHYTO	CONTROL	CONTROL	CONTROL	CONTROL	PHYTO	CONTROL	CONTROL	
Rating Unit						PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
Rating Date						6-16-04	6-16-04	6-16-04	6-16-04	6-16-04	6-16-04	6-30-04	6-30-04	
Trt-Eval Interval						13 DA-B	13 DA-B	13 DA-B	13 DA-B	13 DA-B	13 DA-B	27 DA-B	27 DA-B	
# Subsamples, Dec.						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	DUAL II MAGNUM	1.68 pt/a		PRE	A	2	100	83	80	100	100	5	99	98
1	RIFLE PLUS	3 pt/a		POST	B									
2	DUAL II MAGNUM	1.68 pt/a		PRE	A	5	100	83	85	93	100	7	99	100
2	RIFLE	1 pt/a		POST	B									
3	KEYSTONE	1.25 qt/a		PRE	A	6	97	92	60	93	100	5	95	100
3	STARANE	0.66 pt/a		POST	B									
4	KEYSTONE	1.25 qt/a		PRE	A	5	98	85	60	100	100	5	96	100
4	GF-1203	1.33 pt/a		POST	B									
5	KEYSTONE	1.25 qt/a		PRE	A	8	98	85	82	85	85	10	95	100
5	CURTAIL	2 pt/a		POST	B									
6	KEYSTONE	1.25 qt/a		PRE	A	3	100	88	65	88	80	3	98	100
6	HORNET WDG	4 oz/a		POST	B									
6	NIS	6.4 oz/a		POST	B									
LSD (P=.05)						4.3	3.0	9.9	10.7	55.4	.	2.9	4.8	1.1
Standard Deviation						2.4	1.6	5.5	5.9	15.8	.	1.6	2.7	0.6
CV						49.4	1.67	6.33	8.19	16.98	.	27.11	2.74	0.63
Replicate F						0.380	3.449	1.168	2.440	0.079		1.667	2.606	1.000
Replicate Prob(F)						0.6933	0.0726	0.3500	0.1371	0.9264		0.2373	0.1227	0.4019
Treatment F						2.778	2.286	1.084	11.464	0.464		6.333	1.576	3.571
Treatment Prob(F)						0.0795	0.1246	0.4252	0.0007	0.7884		0.0067	0.2523	0.0411

(04POCRNBLF)

Ohio State University
Horticulture and Crop Science

Weed Code	CHEAL	ABUTH	POLPY	SETFA	AMBTR	CHEAL	ABUTH	POLPY						
Crop Code	ZEAMX													
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL						
Rating Unit	PERCENT	PERCENT	PERCENT	PHYTO	PERCENT	PERCENT	PERCENT	PERCENT						
Rating Date	6-30-04	6-30-04	6-30-04	7-28-04	7-28-04	7-28-04	7-28-04	7-28-04						
Trt-Eval Interval	27 DA-B	27 DA-B	27 DA-B	55 DA-B	55 DA-B	55 DA-B	55 DA-B	55 DA-B						
# Subsamples, Dec.	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	DUAL II MAGNUM	1.68	pt/a	PRE	A	100	99	100	7	99	100	97	100	100
1	RIFLE PLUS	3	pt/a	POST	B									
2	DUAL II MAGNUM	1.68	pt/a	PRE	A	100	99	100	7	99	100	100	100	100
2	RIFLE	1	pt/a	POST	B									
3	KEYSTONE	1.25	qt/a	PRE	A	73	100	100	8	96	99	83	100	98
3	STARANE	0.66	pt/a	POST	B									
4	KEYSTONE	1.25	qt/a	PRE	A	87	98	100	5	96	100	87	100	100
4	GF-1203	1.33	pt/a	POST	B									
5	KEYSTONE	1.25	qt/a	PRE	A	100	100	100	15	97	100	100	100	100
5	CURTAIL	2	pt/a	POST	B									
6	KEYSTONE	1.25	qt/a	PRE	A	91	100	100	3	97	98	93	100	100
6	HORNET WDG	4	oz/a	POST	B									
6	NIS	6.4	oz/a	POST	B									
LSD (P=.05)		5.0				5.0	2.6	0.0	3.3	2.9	2.2	6.9	0.4	2.1
Standard Deviation		2.8				2.8	1.4	0.0	1.8	1.6	1.2	3.8	0.2	1.2
CV		3.01				3.01	1.41	0.0	24.34	1.61	1.24	4.07	0.24	1.18
Replicate F		1.096				1.096	0.593	0.000	5.000	1.892	1.569	0.815	1.000	1.000
Replicate Prob(F)		0.3713				0.3713	0.5709	1.0000	0.0313	0.2010	0.2554	0.4701	0.4019	0.4019
Treatment F		44.350				44.350	0.661	0.000	14.750	2.473	0.847	10.012	1.000	1.000
Treatment Prob(F)		0.0001				0.0001	0.6612	1.0000	0.0002	0.1046	0.5469	0.0012	0.4651	0.4651