

PRE FB POST WEED CONTROL IN CORN

Trial ID: 04PRPOC2 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. CHEAL	Lambsquarters, common	Chenopodium album
3. AMBEL	Ragweed, common	Ambrosia artemisiifolia
4. ABUTH	Velvetleaf	Abutilon theophrasti
5. AMARE	Redroot pigweed	Amaranthus retroflexus
6. POLPY	Pennsylvania smartweed	Polygonum pensylvanicum

Crop 1: ZEAMX CORN, FIELD Variety: DEKALB DKC 60-09 RR
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: 10 FT Plot Length, Unit: 40 FT Reps: 4
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% OM: 5.2 Texture: silty clay loam
pH: 5.6 Soil Name: Kokomo
CEC: 25

APPLICATION DESCRIPTION

	A	B	C
Application Date:	4-29-04	6-3-04	6-17-04
Time of Day:	7:30 A.M.	9:00 A.M.	9:00 A.M.
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	POST	LPO
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	54 F	59 F	78 F
% Relative Humidity:	52	77	81
Wind Velocity, Unit:	2 S	2 W	8 SW
Soil Temp., Unit:	51 F	59 F	76 F
Soil Moisture:	DRY/MOIST	DRY/MOIST	MOIST/WET
% Cloud Cover:	0	25	100

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ZEAMX	ZEAMX	ZEAMX
Stage Scale:		6 COLLAR	8 COLLAR
Height, Unit:		15 IN	30 IN

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	SETFA	SETFA 3-4"	SETFA
Stage Scale:		3 LVS	
Density, Unit:		45 M2	
Weed 2 Code, Stage:	CHEAL	CHEAL 2-3"	CHEAL
Stage Scale:		4 LVS	
Density, Unit:		15 M2	
Weed 3 Code, Stage:	AMBEL	AMBEL 3-5"	AMBEL
Stage Scale:		6 LVS	
Density, Unit:		3.3 M2	
Weed 4 Code, Stage:	ABUTH	ABUTH 3-5"	ABUTH 1"
Stage Scale:		4 LVS	2 LVS
Density, Unit:		1.3 M2	1.3 M2
Weed 5 Code, Stage:	AMARE	AMARE 2"	AMARE
Stage Scale:		4 LVS	
Density, Unit:		3.3 M2	
Weed 6 Code, Stage:	POLPY	POLPY 6-8"	POLPY 8"
Stage Scale:		12 LVS	12 LVS
Density, Unit:		4 M2	4 M2

APPLICATION EQUIPMENT

	A	B	C
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	

PRE FB POST WEED CONTROL IN CORN

Trial ID: 04PRPOC2 Study Dir.: Anthony F. Dobbels
Location: WESTERN BRANCH F-7 Investigator: Dr. Mark M. Loux

Weed Code	ZEAMX	ZEAMX	ZEAMX	SETFA	AMBEL	TR CHEAL	ABUTH
Crop Code	MALFORMED	MALFORMED	PHYTO	CONTROL	CONTROL	CONTROL	CONTROL
Rating Data Type	PLANTS	PLANTS	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Unit	5-14-04	5-20-04	6-1-04	6-1-04	6-1-04	6-1-04	6-1-04
Rating Date	7 DAE	14 DAE	AT POST	AT POST	AT POST	AT POST	AT POST
Trt-Eval Interval	0	0	0	0	0	0	0
# 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
1	A14224	3.5 qt/a		PRE	A	2	2	0	100	100	100	100
2	BICEP II MAGNUM	2.6 qt/a		PRE	A	2	1	0	100	100	83	89
2	CALLISTO	3 oz/a		POST	B							
2	AATREX	0.5 qt/a		POST								
2	COC	0.8 qt/a		POST								
2	28 %	2 qt/a		POST								
3	GUARDSMAN MAX	2.3 qt/a		PRE	A	4	3	0	100	100	96	96
3	DISTINCT	4 oz/a		POST	B							
3	NIS	6.4 oz/a		POST								
3	28 %	2 qt/a		POST								
4	KEYSTONE	3.2 qt/a		PRE	A	4	3	0	100	100	100	100
4	HORNET WDG	3 oz/a		POST	B							
4	NIS	6.4 oz/a		POST								
4	28 %	2 qt/a		POST								
5	CINCH ATZ	0.75 qt/a		PRE	A	3	1	0	100	100	73	93
5	STEADFAST ATZ	14 oz/a		POST	B							
5	CALLISTO	3 oz/a		POST								
5	COC	0.8 qt/a		POST								
5	28 %	2 qt/a		POST								
6	BALANCE PRO	2.25 oz/a		PRE	A	1	2	0	100	100	100	100
6	AATREX	1 qt/a		PRE								
6	EQUIP	1.5 oz/a		POST	B							
6	MSO	0.8 qt/a		POST								
6	28 %	2 qt/a		POST								
7	BICEP II MAGNUM	2.4 qt/a		PRE	A	2	2	0	100	100	73	94
7	NORTHSTAR	5 oz/a		POST	B							
7	NIS	6.4 oz/a		POST								
7	28 %	1.6 qt/a		POST								
8	BICEP II MAGNUM	2.4 qt/a		PRE	A	2	2	0	100	100	63	94
8	SPIRIT	1 oz/a		POST	B							
8	COC	0.8 qt/a		POST								
8	28 %	1.6 qt/a		POST								
9	HARNESS XTRA 5.6	1 qt/a		PRE	A	2	3	0	100	100	92	78
9	ROUNDUP WEATHERMAX	22 oz/a		POST	B							
9	AMS	4 qt/a		POST								
10	ROUNDUP WEATHERMAX	22 oz/a		POST	B	3	1	0	0	0	0	0
10	AMS	4 qt/a		POST								
10	ROUNDUP WEATHERMAX	16 oz/a		LPO	C							
10	AMS	4 qt/a		LPO								
11	UTC					2	1	0	0	0	0	0
LSD (P=.05)						2.3	2.1	0.0	0.0	0.0	12.4	11.1
Standard Deviation						1.6	1.5	0.0	0.0	0.0	8.6	7.7
CV						69.52	82.38	0.0	0.0	0.0	12.1	10.04
Replicate F						3.121	0.398	0.000	0.000	0.000	1.238	1.705
Replicate Prob(F)						0.0406	0.7553	1.0000	1.0000	1.0000	0.3133	0.1871
Treatment F						1.723	0.773	0.000	0.000	0.000	75.740	99.869
Treatment Prob(F)						0.1212	0.6534	1.0000	1.0000	1.0000	0.0001	0.0001

Ohio State University
Horticulture and Crop Science

Weed Code	POLPY	AMBTR	ZEAMX	SETFA	AMBEL	TR CHEAL	ABUTH	POLPY
Crop Code								
Rating Data Type	CONTROL	CONTROL	PHYTO	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	6-16-04	6-16-04	6-29-04	6-29-04	6-29-04	6-29-04	6-29-04	6-29-04
Trt-Eval Interval	13 DA-B	13 DA-B	26 DA-B	26 DA-B	26 DA-B	26 DA-B	26 DA-B	26 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	16	17	18	19	20	21	22	23
1	A14224	3.5	qt/a	PRE	A	100	84	0	100	100	100	100	100
2	BICEP II MAGNUM	2.6	qt/a	PRE	A	100	91	0	100	100	100	100	100
2	CALLISTO	3	oz/a	POST	B								
2	AATREX	0.5	qt/a	POST									
2	COC	0.8	qt/a	POST									
2	28 %	2	qt/a	POST									
3	GUARDSMAN MAX	2.3	qt/a	PRE	A	100	98	0	100	100	100	100	100
3	DISTINCT	4	oz/a	POST	B								
3	NIS	6.4	oz/a	POST									
3	28 %	2	qt/a	POST									
4	KEYSTONE	3.2	qt/a	PRE	A	100	100	0	100	100	100	100	100
4	HORNET WDG	3	oz/a	POST	B								
4	NIS	6.4	oz/a	POST									
4	28 %	2	qt/a	POST									
5	CINCH ATZ	0.75	qt/a	PRE	A	100	100	0	100	100	100	100	100
5	STEADFAST ATZ	14	oz/a	POST	B								
5	CALLISTO	3	oz/a	POST									
5	COC	0.8	qt/a	POST									
5	28 %	2	qt/a	POST									
6	BALANCE PRO	2.25	oz/a	PRE	A	100	99	0	100	100	100	100	100
6	AATREX	1	qt/a	PRE									
6	EQUIP	1.5	oz/a	POST	B								
6	MSO	0.8	qt/a	POST									
6	28 %	2	qt/a	POST									
7	BICEP II MAGNUM	2.4	qt/a	PRE	A	100	90	0	100	100	100	100	100
7	NORTHSTAR	5	oz/a	POST	B								
7	NIS	6.4	oz/a	POST									
7	28 %	1.6	qt/a	POST									
8	BICEP II MAGNUM	2.4	qt/a	PRE	A	100	85	0	100	100	95	100	100
8	SPIRIT	1	oz/a	POST	B								
8	COC	0.8	qt/a	POST									
8	28 %	1.6	qt/a	POST									
9	HARNESX XTRA 5.6	1	qt/a	PRE	A	100	95	0	100	100	100	100	100
9	ROUNDUP WEATHERMAX	22	oz/a	POST	B								
9	AMS	4	qt/a	POST									
10	ROUNDUP WEATHERMAX	22	oz/a	POST	B	81	90	0	100	100	100	100	94
10	AMS	4	qt/a	POST									
10	ROUNDUP WEATHERMAX	16	oz/a	LPO	C								
10	AMS	4	qt/a	LPO									
11	UTC					0	0	0	0	0	0	0	0
LSD (P=.05)		1.1				10.3		0.0	0.3	0.0	3.1	0.0	1.1
Standard Deviation		0.8				7.1		0.0	0.2	0.0	2.1	0.0	0.8
CV		0.84				8.4		0.0	0.24	0.0	2.36	0.0	0.83
Replicate F		1.000				1.298		0.000	0.645	0.000	1.000	0.000	1.000
Replicate Prob(F)		0.4064				0.2932		1.0000	0.5921	1.0000	0.4064	1.0000	0.4064
Treatment F		6385.001				64.850		0.000	77342.812	0.000	794.000	0.000	6345.001
Treatment Prob(F)		0.0001				0.0001		1.0000	0.0001	1.0000	0.0001	1.0000	0.0001

Ohio State University
Horticulture and Crop Science

Weed Code		AMBTR	SETFA	AMBEL	TR CHEAL	ABUTH	POLPY	AMBTR				
Crop Code												
Rating Data Type		CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL				
Rating Unit		PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT				
Rating Date		6-29-04	7-28-04	7-28-04	7-28-04	7-28-04	7-28-04	7-28-04				
Trt-Eval Interval		26 DA-B	55 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				
Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	24	25	26	27	28	29	30
1	A14224	3.5	qt/a	PRE	A	91	100	100	100	100	100	90
2	BICEP II MAGNUM	2.6	qt/a	PRE	A	99	100	100	100	100	100	100
2	CALLISTO	3	oz/a	POST	B							
2	AATREX	0.5	qt/a	POST								
2	COC	0.8	qt/a	POST								
2	28 %	2	qt/a	POST								
3	GUARDSMAN MAX	2.3	qt/a	PRE	A	100	100	100	100	100	100	99
3	DISTINCT	4	oz/a	POST	B							
3	NIS	6.4	oz/a	POST								
3	28 %	2	qt/a	POST								
4	KEYSTONE	3.2	qt/a	PRE	A	100	99	100	100	100	100	100
4	HORNET WDG	3	oz/a	POST	B							
4	NIS	6.4	oz/a	POST								
4	28 %	2	qt/a	POST								
5	CINCH ATZ	0.75	qt/a	PRE	A	100	99	100	100	100	100	100
5	STEADFAST ATZ	14	oz/a	POST	B							
5	CALLISTO	3	oz/a	POST								
5	COC	0.8	qt/a	POST								
5	28 %	2	qt/a	POST								
6	BALANCE PRO	2.25	oz/a	PRE	A	99	98	100	100	100	100	98
6	AATREX	1	qt/a	PRE								
6	EQUIP	1.5	oz/a	POST	B							
6	MSO	0.8	qt/a	POST								
6	28 %	2	qt/a	POST								
7	BICEP II MAGNUM	2.4	qt/a	PRE	A	100	100	100	100	100	100	100
7	NORTHSTAR	5	oz/a	POST	B							
7	NIS	6.4	oz/a	POST								
7	28 %	1.6	qt/a	POST								
8	BICEP II MAGNUM	2.4	qt/a	PRE	A	98	100	100	97	100	100	96
8	SPIRIT	1	oz/a	POST	B							
8	COC	0.8	qt/a	POST								
8	28 %	1.6	qt/a	POST								
9	HARNESX XTRA 5.6	1	qt/a	PRE	A	99	99	100	100	100	100	97
9	ROUNDUP WEATHERMAX	22	oz/a	POST	B							
9	AMS	4	qt/a	POST								
10	ROUNDUP WEATHERMAX	22	oz/a	POST	B	100	100	100	100	100	100	100
10	AMS	4	qt/a	POST								
10	ROUNDUP WEATHERMAX	16	oz/a	LPO	C							
10	AMS	4	qt/a	LPO								
11	UTC					0	0	0	0	0	0	0
LSD (P=.05)						4.9	0.7	0.0	1.1	0.5	0.0	6.3
Standard Deviation						3.4	0.5	0.0	0.7	0.3	0.0	4.3
CV						3.78	0.56	0.0	0.81	0.37	0.0	4.87
Replicate F						1.452	2.515	0.000	1.000	3.200	0.000	1.080
Replicate Prob(F)						0.2475	0.0772	1.0000	0.4064	0.0374	1.0000	0.3725
Treatment F						310.610	14218.510	0.000	6632.667	31937.003	0.000	187.289
Treatment Prob(F)						0.0001	0.0001	1.0000	0.0001	0.0001	1.0000	0.0001