

NO-TILL WEED CONTROL IN CORN I

Trial ID: 04NTC1 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.	LAMAM Henbit	Lamium amplexicaule
2.	CHEAL Common Lambsquarters	Chenopodium album
3.	STEME Common chickweed	Stellaria media
4.	ERICA Horseweed	Conyza canadensis
5.	AMBTR Giant Ragweed	Ambrosia trifida
6.	SONAR Field sowthistle	Sonchus arvensis
7.	TAROF Common dandelion	Taraxacum officinale

Crop 1: ZEAMX CORN, FIELD Variety: SEED CONSULTANTS SC1124A
Planting Date: 4-28-04 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

SOIL DESCRIPTION

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

APPLICATION DESCRIPTION

	A	B	C
Application Date:	4-16-04	4-29-04	6-7-04
Time of Day:	12:00 P.M	9:00 A.M.	8:00 A.M.
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	15 EPP	PRE	POST
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	51 F	66 F	80 F
% Relative Humidity:	47	39	45
Wind Velocity, Unit:	8 N	7 S	8 S
Soil Temp., Unit:	48 F	53 F	75 F
Soil Moisture:	WET/MOIST	DRY/MOIST	DRY/MOIST
% Cloud Cover:	5	10	5

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ZEAMX	ZEAMX	ZEAMX
Stage Scale:			5 COLLAR
Height, Unit:			16 IN

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	LAMAM 4" ROS	LAMAM 8-10"	LAMAM
Stage Scale:	>12 LVS	>12 LVS	
Density, Unit:	5 M2	5 M2	
Weed 2 Code, Stage:	CHEAL 4-6"	CHEAL 6-8"	CHEAL 6-8"
Stage Scale:	>12 LVS	>12 LVS	>12 LVS
Density, Unit:	3 M2	3 M2	3 M2
Weed 3 Code, Stage:	STEME 6-8" ROS	STEME >12" ROS	STEME
Stage Scale:	>12 LVS	>12 LVS	
Density, Unit:	8 M2	8 M2	
Weed 4 Code, Stage:	ERICA 2-3"	ERICA 3-4"	ERICA
Stage Scale:	10 LVS	>12 LVS	
Density, Unit:	16.6 M2	16.6 M2	
Weed 5 Code, Stage:	AMBTR 1"	AMBTR 2-4"	AMBTR 6-8"
Stage Scale:	COTYLEDON	4 LVS	12 LVS
Density, Unit:	10.6 M2	10.6 M2	10.6 M2
Weed 6 Code, Stage:	SONAR 6" ROS	SONAR 3-4"	SONAR
Stage Scale:	10 LVS	>12 LVS	
Density, Unit:	5.3 M2	5.3 M2	
Weed 7 Code, Stage:	TAROF 4-6"	TAROF 8"	TAROF
Stage Scale:	>12 LVS	>12 LVS	
Density, Unit:	1 M2	1 M2	

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

(04NTC1)

Ohio State University
Horticulture and Crop Science

NO-TILL WEED CONTROL IN CORN I

Trial ID: 04NTC1 Study Dir.: Anthony F. Dobbels
Location: WESTERN BRANCH F-9 Investigator: Dr. Mark M. Loux

Weed Code	TAROF	SONAR	ERICA	AMBTR	STEME	CHEAL	TAROF	SONAR
Crop Code								
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	4-29-04	4-29-04	4-29-04	4-29-04	4-29-04	4-29-04	5-14-04	5-14-04
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A	15 DA-A	15 DA-A	28 DA-A	28 DA-A
# 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
1	KEYSTONE	2.5 qt/a		15 EPP	A	75	95	100	100	100	100	99	100
1	GF-1279	12 oz/a		15 EPP									
1	AMS	4 qt/a		15 EPP									
2	KEYSTONE	2.5 qt/a		15 EPP	A	73	98	100	100	100	100	100	100
2	STARANE	0.66 pt/a		15 EPP									
2	GF-1279	12 oz/a		15 EPP									
2	AMS	4 qt/a		15 EPP									
3	KEYSTONE	2.5 qt/a		15 EPP	A	78	90	100	100	100	100	100	100
3	GF-1203	1.33 pt/a		15 EPP									
3	GF-1279	12 oz/a		15 EPP									
3	AMS	4 qt/a		15 EPP									
4	KEYSTONE	2.5 qt/a		15 EPP	A	75	100	100	100	100	100	100	100
4	CURTAIL	2 pt/a		15 EPP									
4	GF-1279	12 oz/a		15 EPP									
4	AMS	4 qt/a		15 EPP									
5	KEYSTONE	2.5 qt/a		15 EPP	A	90	94	100	100	100	100	100	100
5	HORNET WDG	3 oz/a		15 EPP									
5	GF-1279	12 oz/a		15 EPP									
5	AMS	4 qt/a		15 EPP									
6	LUMAX	3 qt/a		15 EPP	A	98	90	100	100	100	100	100	100
6	COC	0.8 qt/a		15 EPP									
7	LUMAX	3 qt/a		15 EPP	A	91	100	100	100	100	100	100	100
7	2,4-D	1 pt/a		15 EPP									
7	COC	0.8 qt/a		15 EPP									
8	A14224	3.5 qt/a		15 EPP	A		100	100	100	100	100		100
8	COC	0.8 qt/a		15 EPP									
9	A14224	3.5 qt/a		15 EPP	A	100	100	100	100	100	100	100	100
9	2,4-D	1 pt/a		15 EPP									
9	COC	0.8 qt/a		15 EPP									
10	EXPERT	3.5 qt/a		15 EPP	A		90	100	100	100	100		100
10	AMS	4 qt/a		15 EPP									
11	FIELDMASTER	4 qt/a		15 EPP	A		100	100	100	100	100		100
11	AMS	4 qt/a		15 EPP									
12	KIH-485	5 oz/a		15 EPP	A	50	99	99	100	100	100	95	100
12	ATRAZINE	1.5 qt/a		15 EPP									
12	COC	0.8 qt/a		15 EPP									
13	GRAMOXONE MAX	1.3 pt/a		15 EPP	A	75	100	100	100	90	100	98	100
13	2,4-D	1 pt/a		15 EPP									
13	BICEP II MAGNUM	2.4 qt/a		PRE	B								
13	CALLISTO	3 oz/a		POST	C								
13	ATRAZINE	1 pt/a		POST									
13	COC	0.8 qt/a		POST									
13	28 %	2 qt/a		POST									
14	UTC					0	0	0	0	0	0	0	0
LSD (P=.05)						26.3	11.1	0.8	0.0	7.8	0.0	5.3	0.0
Standard Deviation						13.6	6.6	0.5	0.0	4.6	0.0	2.7	0.0
CV						18.64	7.34	0.5	0.0	5.02	0.0	3.04	0.0
Replicate F						0.074	6.056	1.000	0.000	1.000	0.000	0.781	0.000
Replicate Prob(F)						0.9294	0.0069	0.3816	1.0000	0.3816	1.0000	0.4939	1.0000
Treatment F						12.697	47.252	9985.616	0.000	99.462	0.000	356.937	0.000
Treatment Prob(F)						0.0014	0.0001	0.0001	1.0000	0.0001	1.0000	0.0001	1.0000

(04NTC1)

Ohio State University
Horticulture and Crop Science

Weed Code	ERICA	AMBTR	STEME	CHEAL	ZEAMX	SETFA	AMBTR	AMBEL
Crop Code					PHYTO			
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	PERCENT	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	5-14-04	5-14-04	5-14-04	5-14-04	5-27-04	5-27-04	5-27-04	5-27-04
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-B	28 DA-B	28 DA-B	28 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	9	10	11	12	13	14	15	16
1	KEYSTONE	2.5	qt/a	15	EPP A	100	100	100	100	0	58	70	100
1	GF-1279	12	oz/a	15	EPP								
1	AMS	4	qt/a	15	EPP								
2	KEYSTONE	2.5	qt/a	15	EPP A	100	100	100	100	0	81	63	100
2	STARANE	0.66	pt/a	15	EPP								
2	GF-1279	12	oz/a	15	EPP								
2	AMS	4	qt/a	15	EPP								
3	KEYSTONE	2.5	qt/a	15	EPP A	100	100	100	100	0	73	60	100
3	GF-1203	1.33	pt/a	15	EPP								
3	GF-1279	12	oz/a	15	EPP								
3	AMS	4	qt/a	15	EPP								
4	KEYSTONE	2.5	qt/a	15	EPP A	100	100	100	100	0	68	68	100
4	CURTAIL	2	pt/a	15	EPP								
4	GF-1279	12	oz/a	15	EPP								
4	AMS	4	qt/a	15	EPP								
5	KEYSTONE	2.5	qt/a	15	EPP A	100	100	100	100	0	65	65	100
5	HORNET WDG	3	oz/a	15	EPP								
5	GF-1279	12	oz/a	15	EPP								
5	AMS	4	qt/a	15	EPP								
6	LUMAX	3	qt/a	15	EPP A	100	100	100	100	0	80	75	100
6	COC	0.8	qt/a	15	EPP								
7	LUMAX	3	qt/a	15	EPP A	100	100	100	100	0	92	76	100
7	2,4-D	1	pt/a	15	EPP								
7	COC	0.8	qt/a	15	EPP								
8	A14224	3.5	qt/a	15	EPP A	100	100	100	100	0	91	85	100
8	COC	0.8	qt/a	15	EPP								
9	A14224	3.5	qt/a	15	EPP A	100	100	100	100	0	82	90	100
9	2,4-D	1	pt/a	15	EPP								
9	COC	0.8	qt/a	15	EPP								
10	EXPERT	3.5	qt/a	15	EPP A	100	100	100	100	0	88	53	100
10	AMS	4	qt/a	15	EPP								
11	FIELDMASTER	4	qt/a	15	EPP A	100	100	100	100	0	70	63	100
11	AMS	4	qt/a	15	EPP								
12	KIH-485	5	oz/a	15	EPP A	100	100	100	100	0	92	78	100
12	ATRAZINE	1.5	qt/a	15	EPP								
12	COC	0.8	qt/a	15	EPP								
13	GRAMOXONE MAX	1.3	pt/a	15	EPP A	100	100	100	100	0	94	83	100
13	2,4-D	1	pt/a	15	EPP								
13	BICEP II MAGNUM	2.4	qt/a	PRE	B								
13	CALLISTO	3	oz/a	POST	C								
13	ATRAZINE	1	pt/a	POST									
13	COC	0.8	qt/a	POST									
13	28 %	2	qt/a	POST									
14	UTC					0	0	0	0	0	0	0	0
LSD (P=.05)						0.0	0.0	0.0	0.0	0.0	18.0	20.1	0.0
Standard Deviation						0.0	0.0	0.0	0.0	0.0	10.7	11.9	0.0
CV						0.0	0.0	0.0	0.0	0.0	14.52	17.89	0.0
Replicate F						0.000	0.000	0.000	0.000	0.000	1.842	1.448	0.000
Replicate Prob(F)						1.0000	1.0000	1.0000	1.0000	1.0000	0.1786	0.2548	1.0000
Treatment F						0.000	0.000	0.000	0.000	0.000	15.079	10.037	0.000
Treatment Prob(F)						1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	1.0000

(04NTC1)

Ohio State University
Horticulture and Crop Science

Weed Code						CHEAL	POLPY	AMARE	SETFA	AMBTR	AMBEL	CHEAL	POLPY
Crop Code													
Rating Data Type						CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit						PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date						5-27-04	5-27-04	5-27-04	6-28-04	6-28-04	6-28-04	6-28-04	6-28-04
Trt-Eval Interval						28 DA-B	28 DA-B	28 DA-B	60 DA-B	60 DA-B	60 DA-B	60 DA-B	60 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	17	18	19	20	21	22	23	24
1	KEYSTONE	2.5	qt/a	15	EPP A	72	100	100	57	68	100	78	100
1	GF-1279	12	oz/a	15	EPP								
1	AMS	4	qt/a	15	EPP								
2	KEYSTONE	2.5	qt/a	15	EPP A	70	97	100	63	67	100	70	100
2	STARANE	0.66	pt/a	15	EPP								
2	GF-1279	12	oz/a	15	EPP								
2	AMS	4	qt/a	15	EPP								
3	KEYSTONE	2.5	qt/a	15	EPP A	73	100	100	70	67	100	70	100
3	GF-1203	1.33	pt/a	15	EPP								
3	GF-1279	12	oz/a	15	EPP								
3	AMS	4	qt/a	15	EPP								
4	KEYSTONE	2.5	qt/a	15	EPP A	68	100	100	63	67	97	68	100
4	CURTAIL	2	pt/a	15	EPP								
4	GF-1279	12	oz/a	15	EPP								
4	AMS	4	qt/a	15	EPP								
5	KEYSTONE	2.5	qt/a	15	EPP A	90	100	100	47	67	100	93	100
5	HORNET WDG	3	oz/a	15	EPP								
5	GF-1279	12	oz/a	15	EPP								
5	AMS	4	qt/a	15	EPP								
6	LUMAX	3	qt/a	15	EPP A	100	100	100	73	70	100	95	100
6	COC	0.8	qt/a	15	EPP								
7	LUMAX	3	qt/a	15	EPP A	100	100	100	83	70	100	97	100
7	2,4-D	1	pt/a	15	EPP								
7	COC	0.8	qt/a	15	EPP								
8	A14224	3.5	qt/a	15	EPP A	98	100	100	85	77	97	88	100
8	COC	0.8	qt/a	15	EPP								
9	A14224	3.5	qt/a	15	EPP A	90	100	100	77	73	90	90	100
9	2,4-D	1	pt/a	15	EPP								
9	COC	0.8	qt/a	15	EPP								
10	EXPERT	3.5	qt/a	15	EPP A	68	100	100	75	63	97	63	100
10	AMS	4	qt/a	15	EPP								
11	FIELDMASTER	4	qt/a	15	EPP A	68	100	100	67	63	97	73	100
11	AMS	4	qt/a	15	EPP								
12	KIH-485	5	oz/a	15	EPP A	86	100	100	88	68	100	77	100
12	ATRAZINE	1.5	qt/a	15	EPP								
12	COC	0.8	qt/a	15	EPP								
13	GRAMOXONE MAX	1.3	pt/a	15	EPP A	63	100	100	93	100	100	93	100
13	2,4-D	1	pt/a	15	EPP								
13	BICEP II MAGNUM	2.4	qt/a	PRE	B								
13	CALLISTO	3	oz/a	POST	C								
13	ATRAZINE	1	pt/a	POST									
13	COC	0.8	qt/a	POST									
13	28 %	2	qt/a	POST									
14	UTC					0	0	0	0	0	0	0	0
LSD (P=.05)						12.1	2.6	0.0	15.0	14.7	7.1	16.9	0.0
Standard Deviation						7.2	1.5	0.0	8.9	8.7	4.2	10.1	0.0
CV						9.63	1.67	0.0	13.27	13.28	4.62	13.37	0.0
Replicate F						1.755	1.000	0.000	1.217	10.406	0.134	0.251	0.000
Replicate Prob(F)						0.1927	0.3816	1.0000	0.3124	0.0005	0.8752	0.7797	1.0000
Treatment F						36.873	896.385	0.000	20.210	17.377	117.660	17.699	0.000
Treatment Prob(F)						0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	0.0001	1.0000

Weed Code	AMARE
Crop Code	
Rating Data Type	CONTROL
Rating Unit	PERCENT
Rating Date	6-28-04
Trt-Eval Interval	60 DA-B
# Subsamples, Dec.	0

Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	25
1	KEYSTONE	2.5	qt/a	15	EPP A	80
1	GF-1279	12	oz/a	15	EPP	
1	AMS	4	qt/a	15	EPP	
2	KEYSTONE	2.5	qt/a	15	EPP A	97
2	STARANE	0.66	pt/a	15	EPP	
2	GF-1279	12	oz/a	15	EPP	
2	AMS	4	qt/a	15	EPP	
3	KEYSTONE	2.5	qt/a	15	EPP A	87
3	GF-1203	1.33	pt/a	15	EPP	
3	GF-1279	12	oz/a	15	EPP	
3	AMS	4	qt/a	15	EPP	
4	KEYSTONE	2.5	qt/a	15	EPP A	100
4	CURTAIL	2	pt/a	15	EPP	
4	GF-1279	12	oz/a	15	EPP	
4	AMS	4	qt/a	15	EPP	
5	KEYSTONE	2.5	qt/a	15	EPP A	100
5	HORNET WDG	3	oz/a	15	EPP	
5	GF-1279	12	oz/a	15	EPP	
5	AMS	4	qt/a	15	EPP	
6	LUMAX	3	qt/a	15	EPP A	73
6	COC	0.8	qt/a	15	EPP	
7	LUMAX	3	qt/a	15	EPP A	85
7	2,4-D	1	pt/a	15	EPP	
7	COC	0.8	qt/a	15	EPP	
8	A14224	3.5	qt/a	15	EPP A	80
8	COC	0.8	qt/a	15	EPP	
9	A14224	3.5	qt/a	15	EPP A	98
9	2,4-D	1	pt/a	15	EPP	
9	COC	0.8	qt/a	15	EPP	
10	EXPERT	3.5	qt/a	15	EPP A	100
10	AMS	4	qt/a	15	EPP	
11	FIELDMASTER	4	qt/a	15	EPP A	80
11	AMS	4	qt/a	15	EPP	
12	KIH-485	5	oz/a	15	EPP A	100
12	ATRAZINE	1.5	qt/a	15	EPP	
12	COC	0.8	qt/a	15	EPP	
13	GRAMOXONE MAX	1.3	pt/a	15	EPP A	100
13	2,4-D	1	pt/a	15	EPP	
13	BICEP II MAGNUM	2.4	qt/a	PRE	B	
13	CALLISTO	3	oz/a	POST	C	
13	ATRAZINE	1	pt/a	POST		
13	COC	0.8	qt/a	POST		
13	28 %	2	qt/a	POST		
14	UTC					0
LSD (P=.05)						23.4
Standard Deviation						13.9
CV						16.54
Replicate F						0.028
Replicate Prob(F)						0.9729
Treatment F						10.527
Treatment Prob(F)						0.0001