

Ohio State University
Horticulture and Crop Science

PERFORMANCE OF HARNESS AND DEGREE APPLIED MPO TO CORN

2007-01-04-02

Trial ID: 08ACET

Study Dir.: Anthony F. Dobbels

Location: WESTERN BRANCH E-2

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	Common lambsquarters	Chenopodium album
3. AMBTR	Giant ragweed	Ambrosia trifida
4. ABUTH	Velvetleaf	Abutilon theophrasti
5. AMARE	Redroot pigweed	Amaranthus retroflexus

Crop 1: ZEAMX CORN, FIELD

Variety: DEKABL DKC 61-19

Planting Date: Apr/24/2008

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:	2.7	Texture:	SILTY CLAY LOAM
pH:	6.1	Soil Name:	KOKOMO
CEC:	21.6	Fert. Level:	EXCELLENT

APPLICATION DESCRIPTION

	A	B	C
Application Date:	Apr/24/2008	Jun/08/2008	Jun/17/2008
Time of Day:	3:00 P.M.	7:30 P.M.	9:00 A.M.
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	POST	LPO
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	76 F	73 F	60 F
% Relative Humidity:		81	50
Wind Velocity, Unit:	7 SE	7 SW	8 WNW
Soil Temp., Unit:	74 F	69 F	60 F
Soil Moisture:	DRY/MOIST	MOIST/WET	DRY/MOIST
% Cloud Cover:	70	7	35

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ZEAMX	ZEAMX V6	ZEAMX V8
Stage Scale:	DESC	DESC	
Height, Unit:	20 IN	36 IN	

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	SETFA	SETFA 1-8"	SETFA 2-8"
Stage Scale:		1-6 LVS	1-7 LVS
Density, Unit:		260 M2	260 M2
Weed 2 Code, Stage:	CHEAL	CHEAL 1-8"	CHEAL 3-8"
Stage Scale:		2->12 LVS	4->12LVS
Density, Unit:		30 M2	30 M2
Weed 3 Code, Stage:	AMBTR	AMBTR 4-22"	AMBTR 20-30"
Stage Scale:		4->12 LVS	12-30 LVS
Density, Unit:		34 M2	34 M2
Weed 4 Code, Stage:	ABUTH	ABUTH 2-6"	ABUTH 4-8"
Stage Scale:		2-8 LVS	6-10 LVS
Density, Unit:		3 M2	3 M2
Weed 5 Code, Stage:	AMARE	AMARE 1-2	AMARE 4-6"
Stage Scale:		2 LVS	4-8 LVS
Density, Unit:		5 M2	5 M2

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	53	53	53
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
	YIELD	MOISTURE	YIELD
	LBS	PERCENT	BU
	Oct/20/2008	Oct/20/2008	Oct/20/2008
	HARVEST	HARVEST	HARVEST
			TY1
	2	2	1

Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	11	12	13
1	HARNESS XTRA 5.6	1.5	qt/a	PRE	A	68.56 ab	14.90 a	267.0 a
1	ROUNDUP ORIGINAL MAX	21.3	oz/a	V-6 20"	B			
1	AMS	4	qt/a	V-6 20"				
2	HARNESS XTRA 5.6	1.5	qt/a	PRE	A	68.03 abc	13.88 a	268.1 a
2	HARNESS	1.5	pt/a	V-6 20"	B			
2	ROUNDUP ORIGINAL MAX	21.3	oz/a	V-6 20"				
2	AMS	4	qt/a	V-6 20"				
3	HARNESS XTRA 5.6	1.5	qt/a	PRE	A	69.14 a	14.69 a	269.9 a
3	HARNESS	3	pt/a	V-6 20"	B			
3	ROUNDUP ORIGINAL MAX	21.3	oz/a	V-6 20"				
3	AMS	4	qt/a	V-6 20"				
4	HARNESS XTRA 5.6	1.5	qt/a	PRE	A	61.78 d	14.42 a	241.9 c
4	HARNESS	1.5	pt/a	V-8 30"	C			
4	ROUNDUP ORIGINAL MAX	21.3	oz/a	V-8 30"				
4	AMS	4	qt/a	V-8 30"				
5	HARNESS XTRA 5.6	1.5	qt/a	PRE	A	63.97 cd	15.40 a	247.7 bc
5	HARNESS	3	pt/a	V-8 30"	C			
5	ROUNDUP ORIGINAL MAX	21.3	oz/a	V-8 30"				
5	AMS	4	qt/a	V-8 30"				
6	HARNESS XTRA 5.6	1.5	qt/a	PRE	A	67.82 abc	14.72 a	264.6 ab
6	CALLISTO	3	oz/a	V-6 20"	B			
6	ROUNDUP ORIGINAL MAX	21.3	oz/a	V-6 20"				
6	AMS	4	qt/a	V-6 20"				
7	HARNESS XTRA 5.6	1.5	qt/a	PRE	A	68.74 ab	15.24 a	266.6 a
7	STATUS	2.5	oz/a	V-6 20"	B			
7	ROUNDUP ORIGINAL MAX	21.3	oz/a	V-6 20"				
7	AMS	4	qt/a	V-6 20"				
8	HARNESS XTRA 5.6	1.5	qt/a	PRE	A	69.02 a	14.72 a	269.3 a
8	IMPACT	0.5	oz/a	V-6 20"	B			
8	ROUNDUP ORIGINAL MAX	21.3	oz/a	V-6 20"				
8	AMS	4	qt/a	V-6 20"				
9	HARNESS XTRA 5.6	2.6	qt/a	PRE	A	56.12 e	14.17 a	220.4 d
10	LEXAR	3	qt/a	PRE	A	64.65 bcd	14.67 a	252.4 abc
	LSD (P=.05)					4.238	1.473	17.82
	Standard Deviation					2.920	1.015	12.28
	CV					4.44	6.91	4.78
	Grand Mean					65.78	14.68	256.79
	Bartlett's X2					6.635	5.598	5.469
	P(Bartlett's X2)					0.675	0.779	0.792
	Replicate F					1.231	0.722	0.710
	Replicate Prob(F)					0.3178	0.5478	0.5546
	Treatment F					8.412	0.795	6.967
	Treatment Prob(F)					0.0001	0.6239	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.

ARM Action Codes

TY1 = 3.889286*[11]*(100-[12])/85