

Ohio State University
Horticulture and Crop Science

CORN COMPETITIVE HERBICIDE FOUNDATION TRIAL
2008-01-04-02

Trial ID: 08RRCYLD1 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. 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	Jul/01/2008
Time of Day:	3:00 P.M.	7:30 P.M.	2:00 P.M.
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	POST	LPO
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	76 F	73 F	78 F
% Relative Humidity:		81	57
Wind Velocity, Unit:	7 SE	7 SW	7 SW
Soil Temp., Unit:	74 F	69 F	71 F
Soil Moisture:	DRY/MOIST	MOIST/WET	MOIST/WET
% Cloud Cover:	70	7	5

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ZEAMX	ZEAMX V6	ZEAMX V10
Stage Scale:	DESC	DESC	
Height, Unit:	22 IN	69 IN	

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	SETFA	SETFA 4-10"	SETFA 6-8"
Stage Scale:		3-6 LVS	5 LVS
Density, Unit:		260 M2	260 M2
Weed 2 Code, Stage:	CHEAL	CHEAL 1-10"	CHEAL 3-4"
Stage Scale:		2->12 LVS	>12 LVS
Density, Unit:		30 M2	30 M2
Weed 3 Code, Stage:	AMBTR	AMBTR 16-22"	AMBTR 3-4"
Stage Scale:		>12 LVS	8 LVS
Density, Unit:		34 M2	34 M2
Weed 4 Code, Stage:	AMARE	AMARE 1-4"	AMARE 2-3"
Stage Scale:		2-4 LVS	8-10 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	9	10	11
1	HARNESS XTRA 5.6	1.5	qt/a	PRE	A	70.69 a	14.81 a	275.6 a
1	ROUNDUP POWERMAX	21.3	oz/a	POST	B			
1	AMS	4	qt/a	POST				
2	DEGREE XTRA	2	qt/a	PRE	A	69.96 a	15.20 a	271.4 a
2	ROUNDUP POWERMAX	21.3	oz/a	POST	B			
2	AMS	4	qt/a	POST				
3	GUARDSMAN MAX	1.25	qt/a	PRE	A	70.49 a	14.55 a	275.5 a
3	ROUNDUP POWERMAX	21.3	oz/a	POST	B			
3	AMS	4	qt/a	POST				
4	LEXAR	2.01	qt/a	PRE	A	70.69 a	14.51 a	276.5 a
4	TOUCHDOWN TOTAL	24	oz/a	POST	B			
4	AMS	4	qt/a	POST				
5	BICEP II MAGNUM	1.45	qt/a	PRE	A	68.04 a	15.18 a	264.1 a
5	CALLISTO	3	oz/a	POST	B			
5	AMS	2	qt/a	POST				
6	ATRAZINE	1	qt/a	PRE	A	73.78 a	15.23 a	286.2 a
6	ROUNDUP POWERMAX	21.3	oz/a	POST	B			
6	AMS	4	qt/a	POST				
7	SURESTART	1.2	pt/a	PRE	A	70.65 a	15.65 a	272.6 a
7	ROUNDUP POWERMAX	21.3	oz/a	POST	B			
7	AMS	4	qt/a	POST				
8	ROUNDUP POWERMAX	21.3	oz/a	POST	B	70.09 a	16.06 a	269.2 a
8	AMS	4	qt/a	POST				
9	ROUNDUP POWERMAX	21.3	oz/a	POST	B	66.16 a	15.40 a	256.1 a
9	AMS	4	qt/a	POST				
9	ROUNDUP POWERMAX	21.3	oz/a	LPO	C			
9	AMS	4	qt/a	LPO				
10	DEFINE	8.3	oz/a	PRE	A	70.72 a	14.77 a	275.8 a
10	BALANCE PRO	2.02	oz/a	PRE				
10	ROUNDUP POWERMAX	21.3	oz/a	MPO	B			
10	AMS	4	qt/a	MPO				
LSD (P=.05)						4.042	1.537	15.91
Standard Deviation						2.786	1.059	10.97
CV						3.97	7.0	4.03
Grand Mean						70.13	15.14	272.31
Bartlett's X2						4.824	14.444	5.477
P(Bartlett's X2)						0.849	0.107	0.791
Replicate F						1.982	1.287	1.949
Replicate Prob(F)						0.1405	0.2989	0.1454
Treatment F						1.994	0.860	2.160
Treatment Prob(F)						0.0801	0.5709	0.0590

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

$$TY1 = 3.889286 * [9] * (100 - [10]) / 85$$