

Ohio State University Horticulture and Crop Science

BASF RR AND CONVENTIONAL CORN TREATMENTS

Trial ID: 07PRPOC3
Location: WESTERN BRANCH G-2

Study Dir.: Anthony F. Dobbels
Investigator: Dr. Mark M. Loux

GENERAL TRIAL INFORMATION

Study Director: Anthony F. Dobbels
Affiliation: OSU
Investigator: Dr. Mark M. Loux
Affiliation: OSU

TRIAL LOCATION

State/Prov.: Ohio **Trial Status:** yield
Country: USA **Initiation Date:** Apr/01/2007
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. AMARE	Redroot pigweed	Amaranthus retroflexus
4. AMBTR	Giant ragweed	Ambrosia trifida
5. ABUTH	Velvetleaf	Abutilon theophrasti
6. POLPY	Pennsylvania smartweed	Polygonum pennsylvanicum

Crop 1: ZEAMX CORN, FIELD **Variety:** PIONEER 34D68RR
Planting Date: Apr/23/2007 **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:** 4
Tillage Type: CONVENTIONAL **Study Design:** RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% OM:	3.0	Texture:	SILTY CLAY LOAM
pH:	5.7	Soil Name:	KOKOMO
CEC:	23.5		

Overall Moisture Conditions: POOR

APPLICATION DESCRIPTION

	A	B	C
Application Date:	Apr/24/2007	May/30/2007	Jun/01/2007
Time of Day:	11:00 A.M	9:00 AM	7:30 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	POST	LPO
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	61 F	71 F	71 F
% Relative Humidity:	72	73	68
Wind Velocity, Unit:	7 NE	3 S	2 S
Soil Temp., Unit:	60 F	72 F	72 F
Soil Moisture:	MOIST MOI	DRY DRY	MOIST MOI
% Cloud Cover:	30	75	100

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ZEAMX .	ZEAMX V5	ZEAMX V6
Stage Scale:	.	5 COLLARS	6 COLLARS
Height, Unit:	0. .	13 IN	16 IN

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WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage: SETFA .	SETFA 5-6"	SETFA 6"	
Stage Scale: .	3 LVS	3 LVS	
Density, Unit: . . .	26.2 M2	26.2 M2	
Weed 2 Code, Stage: CHEAL .	CHEAL 3"	CHEAL 2-4"	
Stage Scale: .	8 LVS	6-10 LVS	
Density, Unit: . . .	21.7 M2	21.7 M2	
Weed 3 Code, Stage: AMARE .	AMARE 3"	AMARE .	
Stage Scale: .	6 LVS	.	
Density, Unit: . . .	0.25 M2	.	
Weed 4 Code, Stage: AMBTR .	AMBTR 8-12"	AMBTR 8-12"	
Stage Scale: .	12 LVS	8-12 LVS	
Density, Unit: . . .	12.2 M2	12.2 M2	
Weed 5 Code, Stage: ABUTH .	ABUTH 3-4"	ABUTH 3-4"	
Stage Scale: .	4-6 LVS	4-6 LVS	
Density, Unit: . . .	0.1 M2	0.1 M2	
Weed 6 Code, Stage: POLPY .	POLPY 3"	POLPY 2-4"	
Stage Scale: .	8 LVS	3-8 LVS	
Density, Unit: . . .	2 M2	2 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

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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/29/2007	Oct/29/2007	Oct/29/2007
	HARVEST	HARVEST	HARVEST
	1	1	1

Trt	Treatment	Rate	Rate Unit	Product Rate	Product Unit	Appl Code	24	25	26
1	GUARDSMAN MAX	2.5	lb ai/a	4	pt/a	A	48.6 a	13.4 a	192.5 a
1	STATUS	0.175	lb ai/a	5	oz/a	C			
1	NIS	0.25	% v/v	6.4	oz/a				
1	AMS	2.5	% v/v	2	qt/a				
2	GUARDSMAN MAX	1.56	lb ai/a	2.5	pt/a	A	46.7 a	13.6 a	184.6 a
2	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a	C			
2	AMS	2.5	% v/v	2	qt/a				
3	GUARDSMAN MAX	1.56	lb ai/a	2.5	pt/a	A	47.5 a	12.9 a	189.3 a
3	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a	C			
3	STATUS	0.0875	lb ai/a	2.5	oz/a				
3	AMS	2.5	% v/v	2	qt/a				
4	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a	B	44.8 a	13.6 a	177.1 a
4	AMS	2.5	% v/v	2	qt/a				
5	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a	B	44.9 a	13.6 a	177.3 a
5	STATUS	0.0875	lb ai/a	2.5	oz/a				
5	AMS	2.5	% v/v	2	qt/a				
6	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a	B	43.2 a	14.0 a	169.9 a
6	CALLISTO	0.047	lb ai/a	1.5	oz/a				
6	AMS	2.5	% v/v	2	qt/a				
7	BAS 756	3	pt/a	3	pt/a	B	41.5 a	13.6 a	164.1 a
7	NIS	0.25	% v/v	6.4	oz/a				
7	AMS	2.5	% v/v	2	qt/a				
8	BAS 756	3	pt/a	3	pt/a	B	43.8 a	13.8 a	172.5 a
8	ATRAZINE	1.5	lb ai/a	1.5	qt/a				
8	NIS	0.25	% v/v	6.4	oz/a				
8	AMS	2.5	% v/v	2	qt/a				
9	ROUNDUP WEATHERMAX	0.77	lb ae/a	22	oz/a	C	45.5 a	13.7 a	179.7 a
9	AMS	2.5	% v/v	2	qt/a				
10	UTC						10.5 b	7.1 b	43.1 b
	LSD (P=.05)						7.66	2.55	30.60
	Standard Deviation						5.28	1.76	21.09
	CV						12.66	13.58	12.78
	Bartlett's X2						8.658	60.824	8.263
	P(Bartlett's X2)						0.469	0.001*	0.508
	Replicate F						0.299	1.445	0.297
	Replicate Prob(F)						0.8256	0.2517	0.8274
	Treatment F						17.830	5.502	17.170
	Treatment Prob(F)						0.0001	0.0003	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes

TY1 = 3.889286*[24]*(100-[25])/85