

Ohio State University
Horticulture and Crop Science

POST GLYPHOSATE TIMING IN ROUNDUP READY CORN

Trial ID: 08RRCTIME1 Study Dir.: Anthony F. Dobbels
Location: WESTERN BRANCH F-7 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. IPOHE	Ivyleaf morningglory	Ipomoea hederacea
3. ABUTH	Velvetleaf	Abutilon theophrasti
4. POLPY	Pennsylvania smartweed	Polygonum pensylvanicum
5. AMBTR	Giant ragweed	Ambrosia trifida
6. CHEAL	Common lambsquarters	Chenopodium album
7. AMBEL	Common ragweed	Ambrosia elatior
8. AMARE	Redroot pigweed	Amaranthus retroflexus

Crop 1: ZEAMX CORN, FIELD **Variety:** PIONEER 32B83
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: 3 **Texture:** SILTY CLAY LOAM
pH: 6.7 **Soil Name:** KOKOMO
CEC: 24.6 **Fert. Level:** GOOD

Overall Moisture Conditions: POOR

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	Apr/24/2008	Jun/02/2008	Jun/08/2008	Jun/17/2008
Time of Day:	11:00 A.M.	9:30 A.M.	7:30 P.M.	9:00 A.M.
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EPO	POST	LPO
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	62 F	73 F	73 F	60 F
% Relative Humidity:	39	67	81	50
Wind Velocity, Unit:	8 E	5 SE	7 SW	8 WNW
Soil Temp., Unit:	54 F	65 F	69 F	60 F
Soil Moisture:	DRY/MOIST	DRY/MOIST	MOIST/WET	DRY/MOIST
% Cloud Cover:	2	2	7	35

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	ZEAMX	ZEAMX V4	ZEAMX V6	ZEAMX V8
Stage Scale:	DESC	DESC	DESC	DESC
Height, Unit:	10 IN	23 IN	40 IN	IN

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WEED STAGE AT EACH APPLICATION

	A	B	C	D
Weed 1 Code, Stage:	SETFA	SETFA	SETFA 1-6"	SETFA
Stage Scale:			1-6 LVS	
Weed 2 Code, Stage:	IPOHE	IPOHE	IPOHE 1-6"	IPOHE
Stage Scale:			2-6 LVS	
Weed 3 Code, Stage:	ABUTH	ABUTH	ABUTH 1-6"	ABUTH
Stage Scale:			2-4 LVS	
Weed 4 Code, Stage:	POLPY	POLPY	POLPY 1-6"	POLPY
Stage Scale:			2-4 LVS	
Weed 5 Code, Stage:	AMBTR	AMBTR	AMBTR 1-24"	AMBTR
Stage Scale:			2->12 LVS	
Weed 6 Code, Stage:	CHEAL	CHEAL	CHEAL 1-6"	CHEAL
Stage Scale:			2-10 LVS	
Weed 7 Code, Stage:	AMBEL	AMBEL	AMBEL 1-6"	AMBEL
Stage Scale:			2-4 LVS	
Weed 8 Code, Stage:	AMARE	AMARE	AMARE 1-6"	AMARE
Stage Scale:			2-4 LVS	

APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	53	53	53	53
Nozzle Type:	DG	DG	DG	DG
Nozzle Size:	11002	11002	11002	11002
Nozzle Spacing, Unit:	18 IN	18 IN	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA	20 GPA
Propellant:	CO2	CO2	CO2	CO2

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Weed Code			
Crop Code	ZEAMX	ZEAMX	ZEAMX
Rating Data Type	YIELD	MOISTURE	YIELD
Rating Unit	LBS	PERCENT	BU
Rating Date	Oct/13/2008	Oct/13/2008	Oct/13/2008
Trt-Eval Interval	HARVEST	HARVEST	HARVEST
ARM Action Codes			TY1
# Subsamples, Dec.	2	2	1

Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	19	20	21
	LSD (P=.05)					4.402	3.354	17.35
	Standard Deviation					3.049	2.323	12.01
	CV					4.82	11.49	5.21
	Grand Mean					63.19	20.21	230.56
	Bartlett's X2					15.727	8.897	13.748
	P(Bartlett's X2)					0.152	0.631	0.247
	Replicate F					9.421	0.886	6.525
	Replicate Prob(F)					0.0001	0.4586	0.0014
	Treatment F					3.337	0.856	2.697
	Treatment Prob(F)					0.0036	0.5893	0.0135

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*[19]*(100-[20])/85