

Ohio State University Horticulture and Crop Science

Syngenta one pass programs for weed control in corn.

Title No. 2:
 Trial ID: 11SYN1PASS Protocol ID: 11SYN1PASS
 Location: WESTERN BRANCH G-6 Study Director: Anthony F. Dobbels
 Project ID: Investigator: Dr. Mark M. Loux
 Sponsor Contact: Dain Bruns, Syngenta

General Trial Information

Study Director: Anthony F. Dobbels **Title:** Research Specialist
Investigator: Dr. Mark M. Loux **Title:** Professor

Trial Location

City: South Charleston **Latitude of LL Corner °:** 39.85946 N
State/Prov.: Ohio **Longitude of LL Corner °:** -83.67476 W
Postal Code: 45368
Country: USA

No. Description

1. 14-21 DAT after APPLICATION A

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: Pioneer 33W84
Description: RR/LL
BBCH Scale: BCOR **Planting Date:** May-31-2011
Planting Method: SEEDED seeded **Rate, Unit:** 32097 S/A
Depth, Unit: 2 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium **Soil Temperature, Unit:** 72 F
Soil Moisture: SLIWET slightly wet **Emergence Date:** Jun-6-2011
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 30 FT

Pest Description

Pest 1 Type: W **Code:** SETFA *Setaria faberi*
Common Name: Giant foxtail

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** ABUTH *Abutilon theophrasti*
Common Name: Velvetleaf

Pest 4 Type: W **Code:** IPOHE *Ipomoea hederacea*
Common Name: Ivyleaf morningglory

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 30 FT **Experimental Unit:** 1 PLOT plot
Plot Area, Unit: 300 FT2 **Tillage Type:** CONTIL conventional-till
Replications: 4 **Study Design:** RACOB� Randomized Complete Block (RCB)
Untreated Arrangement: INCLUDED single control randomized in each block

Soil Description

Description Name: G-6
% OM: 2.2 **Texture:** SIL silt loam
pH: 6.3 **Soil Name:** Crosby
CEC: 13.6 **Fert. Level:** G good
Soil Drainage: G good

Application Description

A
Application Date: May-31-2011
Time of Day: 11:15 A.M.
Application Method: SPRAY
Application Placement: BROFOL
Applied By: Reeb
Air Temperature, Unit: 89.9 F
% Relative Humidity: 62.1
Wind Velocity, Unit: 3.8 MPH
Wind Direction: SSW
Dew Presence (Y/N): N no
Soil Temperature, Unit: 72 F
Soil Moisture: GOOD
% Cloud Cover: 2
Next Rain Occurred On: Jun-3-2011

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Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: ZEAMX BCOR

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W

Density, Unit: 13 M2

Pest 2 Code, Type, Scale: AMBTR W

Density, Unit: 9 M2

Pest 3 Code, Type, Scale: ABUTH W

Density, Unit: 1 M2

Pest 4 Code, Type, Scale: IPOHE W

Density, Unit: 6 M2

Application Equipment

A

Appl. Equipment: 6 foot boom

Equipment Type: SPRBAC

Operation Pressure, Unit: 46 PSI

Nozzle Type: TEEJET DG

Nozzle Size: 80015

Nozzle Spacing, Unit: 18 IN

Boom Length, Unit: 6 FT

Boom Height, Unit: 20 IN

Ground Speed, Unit: 3 MPH

Carrier: WATER

Spray Volume, Unit: 15 GPA

Mix Size, Unit: 0.33 Gallons

Propellant: CO2

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Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code	ZEAMX	ZEAMX	ZEAMX	
BBCH Scale	BCOR	BCOR	BCOR	
Crop Scientific Name	Zea mays	Zea mays	Zea mays	
Crop Name	Corn	Corn	Corn	
Rating Date	Nov-2-2011	Nov-2-2011	Nov-2-2011	
Rating Type	YIELD	MOICON	YIELD	
Rating Unit	LBS	%	BU	
Number of Subsamples	1	1	1	
Days After First/Last Applic.	155 155	155 155	155 155	
Trt-Eval Interval	155 DA-A	155 DA-A	155 DA-A	
Plant-Eval Interval	155 DP-1	155 DP-1	155 DP-1	
Days After Emergence	149 DE-1	149 DE-1	149 DE-1	
ARM Action Codes			TY1	
Number of Decimals	1	1	1	

Trt No.	Treatment Name	Rate	Other Rate	Other Unit	Appl Unit Code	15	16	17
1	Lexar	2.78 lb ai/a	3 qt/a		A	48.9 a	19.7 ab	240.9 ab
2	Lexar	5.55 lb ai/a	6 qt/a		A	49.7 a	17.9 c	250.6 a
3	Corvus	0.115 lb ai/a	5.6 oz/a		A	49.0 a	19.7 ab	241.3 ab
	Atrazine	1 lb ai/a	1 qt/a		A			
4	Corvus	0.23 lb ai/a	11.2 oz/a		A	50.3 a	20.2 a	246.0 ab
	Atrazine	1 lb ai/a	1 qt/a		A			
5	Verdict	0.566 lb ai/a	13 oz/a		A	47.1 ab	19.9 ab	231.4 bc
6	Verdict	1.13 lb ai/a	26 oz/a		A	48.8 a	20.1 a	239.1 ab
7	Fierce	0.14 lb ai/a	2.95 oz/a		A	44.5 b	19.2 abc	220.5 c
8	Fierce	0.28 lb ai/a	5.9 oz/a		A	47.1 ab	18.5 bc	235.5 abc
	LSD (P=.05)					3.38	1.44	16.96
	Standard Deviation					2.30	0.98	11.53
	CV					4.77	5.05	4.84
	Bartlett's X2					3.757	6.442	2.036
	P(Bartlett's X2)					0.807	0.489	0.958
	Replicate F					1.113	1.083	0.618
	Replicate Prob(F)					0.3661	0.3778	0.6111
	Treatment F					2.648	2.795	2.577
	Treatment Prob(F)					0.0396	0.0320	0.0439

Crop Code
 ZEAMX, BCOR, Zea mays, = US
Rating Type
 YIELD = yield
 MOICON = moisture content
Rating Unit
 % = percent
 BU = bushel
Plant-Eval Interval
 155 DP-1 = 1 May-31-2011
ARM Action Codes
 TY1 = 5.185714*[15]*(100-[16])/84.5

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.