

Ohio State University
Horticulture and Crop Science

PRE Followed by POST Weed Control in Corn III

Title No. 2: HP09NARJJA1

Trial ID: 09PRPOC3

Protocol ID: 09PRPOC3

Location: Western Branch F-8 E Study Director: Anthony F. Dobbels

Project ID: 09PRPOC3 Investigator: Dr. Mark M. Loux

Sponsor Contact: Dave Lamore, Bayer CropScience

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: Seed Consultants 11AQ07 **Description:** RR/LL
BBCH Scale: BCOR **Planting Date:** Apr-26-2009
Planting Method: SEEDED seeded **Rate, Unit:** 32097 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: SMOOTH smooth
Soil Moisture: NORMAL normal **Emergence Date:** May-12-2009

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:** SOLPT *Solanum ptycanthum*
Common Name: Eastern black nightshade

Pest 4 Type: W **Code:** POLPY *Polygonum pensylvanicum*
Common Name: Pennsylvania smartweed

Pest 5 Type: W **Code:** CHEAL *Chenopodium album*
Common Name: Common lambsquarters

Pest 6 Type: W **Code:** ABUTH *Abutilon theophrasti*
Common Name: Velvetleaf

Pest 7 Type: W **Code:** IPOHE *Ipomoea hederacea*
Common Name: Ivyleaf morningglory

Site and Design

Plot Width, Unit: 6.67 FT
Plot Length, Unit: 30 FT
Plot Area, Unit: 200.1 FT2
Replications: 3 **Study Design:** RACOB L Randomized Complete Block (RCB)

Application Description

	A	B	C
Application Date:	Apr-27-2009	May-13-2009	Jun-5-2009
Time of Day:	7:20 AM	7:30 AM	8:00 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PREPLA	EAPOCR	POST
Application Placement:	BROSOL	BROFOL	BROFOL
Air Temperature, Unit:	67 F	52 F	62 F
% Relative Humidity:	59	64	82
Wind Velocity, Unit:	7.1 MPH	5.7 MPH	5 MPH
Wind Direction:	SW	E	S
Dew Presence (Y/N):	N no	N no	N no
Soil Temperature, Unit:	56 F	51 F	58 F
Soil Moisture:	NORMAL	DRY	MOIST
% Cloud Cover:	5	90	0

Crop Stage At Each Application

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	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		12 100	16 100
Height, Unit:		4 IN	15 IN
Height Minimum, Maximum:		3 5	12 17

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:		11 100	15 50
Height, Unit:		0.5 IN	6 IN
Height Minimum, Maximum:		0.25 0.5	4 6
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Stage Majority, Percent:		11 100	14 100
Height, Unit:		0.5 IN	6 IN
Height Minimum, Maximum:		0.5 1	4 6
Pest 3 Code, Type, Scale:	SOLPT W	SOLPT W	SOLPT W
Stage Majority, Percent:			16 100
Height, Unit:			3 IN
Height Minimum, Maximum:			2 3
Pest 4 Code, Type, Scale:	POLPY W	POLPY W	POLPY W
Stage Majority, Percent:			16 100
Height, Unit:			6 IN
Height Minimum, Maximum:			4 6
Pest 5 Code, Type, Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:		11	16 100
Height, Unit:		0.25 IN	6 IN
Height Minimum, Maximum:		0.25 0.25	4 6
Pest 6 Code, Type, Scale:	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:			14 100
Height, Unit:			4 IN
Height Minimum, Maximum:			2 4
Pest 7 Code, Type, Scale:	IPOHE W	IPOHE W	IPOHE W
Stage Majority, Percent:			14 100
Height, Unit:			4 IN
Height Minimum, Maximum:			3 4

Application Equipment

	A	B	C
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK
Equipment Type:			SPRBAC
Operating Pressure, Unit:	53 PSI	53 PSI	53 PSI
Nozzle Type:	TEEJET DG	TEEJET DG	TEEJET DG
Nozzle Size:	11002	11002	11002
Nozzle Spacing, Unit:	18 IN	18 IN	18 IN
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA
Mix Size, Unit:	3 L	3 L	3 L
Propellant:	CO2	CO2	CO2

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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No. Rep.	1	2	3	Notes
1	untreated									101	212	303		
2	Corvus Atrazine	2.63 EC 4 F		0.115 lb ai/a 1.5 lb ai/a		5.6 oz/a 1.5 qt/a		PRE PRE	A	102	207	311		
3	Balance Flexx Atrazine	2 EC 4 F		0.094 lb ai/a 1.5 lb ai/a		6 oz/a 1.5 qt/a		PRE PRE	A	103	208	301		
4	Corvus Atrazine NIS	2.63 EC 4 F 100 SL		0.115 lb ai/a 1 lb ai/a 0.125 % v/v		5.6 oz/a 1 qt/a 3.2 oz/a		EPOST EPOST EPOST	B	104	201	310		
5	Balance Flexx Atrazine NIS	2 EC 4 F 100 SL		0.094 lb ai/a 1 lb ai/a 0.125 % v/v		6 oz/a 1 qt/a 3.2 oz/a		EPOST EPOST EPOST	B	105	206	305		
6	Capreno Atrazine COC N-PAK AMS	3.46 SC 4 F 100 SL 100 L		0.081 lb ai/a 1 lb ai/a 1 % v/v 2.5 % v/v		3 oz/a 1 qt/a 0.8 qt/a 2 qt/a		EPOST EPOST EPOST EPOST	B	106	211	307		
7	Corvus Laudis Atrazine MSO N-PAK AMS	2.63 EC 3.5 SC 4 F 100 L 100 L		0.0616 lb ai/a 0.082 lb ai/a 1 lb ai/a 1 % v/v 2.5 % v/v		3 oz/a 3 oz/a 1 qt/a 0.8 qt/a 2 qt/a		PRE POST POST POST POST	A C	107	210	304		
8	Corvus Ignite Laudis N-PAK AMS	2.63 EC 2.34 EC 3.5 SC 100 L		0.0616 lb ai/a 0.402 lb ai/a 0.082 lb ai/a 2.5 % v/v		3 oz/a 22 oz/a 3 oz/a 2 qt/a		PRE POST POST POST	A C	108	209	302		
9	Balance Flexx Ignite Capreno N-PAK AMS	2 EC 2.34 EC 3.46 SC 100 L		0.047 lb ai/a 0.402 lb ai/a 0.054 lb ai/a 2.5 % v/v		3 oz/a 22 oz/a 2 oz/a 2 qt/a		PRE POST POST POST	A C	109	205	312		
10	Balance Flexx Capreno Atrazine COC N-PAK AMS	2 EC 3.46 SC 4 F 100 SL 100 L		0.047 lb ai/a 0.081 lb ai/a 1 lb ai/a 1 qt/a 2.5 % v/v		3 oz/a 3 oz/a 1 qt/a 1 qt/a 2 qt/a		PRE POST POST POST POST	A C	110	202	308		
11	Dual II Magnum Impact Atrazine MSO 28% UAN	7.64 EC 2.8 SC 4 F 100 L 100 L		0.8 lb ai/a 0.0164 lb ai/a 0.5 lb ai/a 1 % v/v 2.5 % v/v		0.84 pt/a 0.75 oz/a 1 pt/a 0.8 qt/a 2 qt/a		PRE POST POST POST POST	A C	111	203	306		
12	Dual II Magnum Laudis Atrazine MSO 28% UAN	7.64 EC 3.5 SC 4 F 100 L 100 L		0.8 lb ai/a 0.082 lb ai/a 0.5 lb ai/a 1 % v/v 2.5 % v/v		0.84 pt/a 3 oz/a 1 pt/a 0.8 qt/a 2 qt/a		PRE POST POST POST POST	A C	112	204	309		