

Ohio State University
Horticulture and Crop Science

PRE fb POST Weed Control Programs in Corn Yield Trial HP09NARDLL, USA-09-295

Title No. 2:

Trial ID: 09CORNULD1 Protocol ID: 09CORNULD1
Location: WESTERN BRANCH BIG E S Study Director: Anthony F. Dobbels
Project ID: 09CORNULD2 Investigator: Dr. Mark M. Loux
Sponsor Contact: Dave Lamore, Bayer CropScience

Crop Description

Crop 1: ZEAMX Zea mays Corn
 Variety: Dekalb 63-42 **Description:** RR
 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

Pest Description

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

Pest 2 Type: W **Code:** CHEAL Chenopodium album
 Common Name: Common lambsquarters

Pest 3 Type: W **Code:** AMBTR Ambrosia trifida
 Common Name: Giant ragweed

Pest 4 Type: W **Code:** AMARE Amaranthus retroflexus
 Common Name: Redroot pigweed

Pest 5 Type: W **Code:** POLPY Polygonum pensylvanicum
 Common Name: Pennsylvania smartweed

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 30 FT
Plot Area, Unit: 300 FT2
Replications: 4 **Study Design:** RACOB Randomized Complete Block (RCB)

Application Description

	A	B	C
Application Date:	Apr-27-2009	May-30-2009	Jun-5-2009
Time of Day:	7:30 AM	8:00 AM	8:00 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	EPP	MPO	POST
Application Placement:	BROFOL	BROFOL	BROFOL
Air Temperature, Unit:	67 F	62 F	62 F
% Relative Humidity:	59	60	82
Wind Velocity, Unit:	7.1 MPH	2 MPH	5 MPH
Wind Direction:	SW	E	E
Dew Presence (Y/N):	N no	N no	N no
Soil Temperature, Unit:	56 F	62 F	58 F
Soil Moisture:	Normal	DRY	WET
% Cloud Cover:	5	2	0

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		14 100	15 100
Height, Unit:		12 IN	15 IN
Height Minimum, Maximum:		8 12	14 15

Pest Stage At Each Application

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	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:	13	100	12 100
Height, Unit:	4 IN	1 IN	
Height Minimum, Maximum:	4 6	1 1	
Pest 2 Code, Type, Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:	14		
Height, Unit:	3 IN		
Height Minimum, Maximum:	2 5		
Pest 3 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Stage Majority, Percent:	16	100	14 100
Height, Unit:	8 IN	4 IN	
Height Minimum, Maximum:	6 8	2 6	
Pest 4 Code, Type, Scale:	AMARE W	AMARE W	AMARE W
Stage Majority, Percent:	14		
Height, Unit:	2 IN		
Height Minimum, Maximum:	2 3		
Pest 5 Code, Type, Scale:	POLPY W	POLPY W	POLPY W
Stage Majority, Percent:	13	100	
Height, Unit:	3 IN		
Height Minimum, Maximum:	2 4		

Application Equipment

	A	B	C
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK
Equipment Type:	SPRBAC	SPRBAC	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.				Notes
										Rep. 1	2	3	4	
	Capreno	3.46	SC	0.081	lb ai/a		3 oz/a	MPO	C					
	Atrazine	4	F	0.5	lb ai/a		1 pt/a	MPO						
	COC	100	SL	1	% v/v		0.8 qt/a	MPO						
	28% UAN	100	L	1.5	qt/a		1.5 qt/a	MPO						
12	Bicep II Magnum	5.5	EC	1.79	lb ai/a		1.3 qt/a	PRE	A	112	211	312	406	_____
	Roundup PowerMax	4.5	SL	0.77	lb ae/a		22 oz/a	MPO	C					
	N-PAK AMS	100	L	2.5	% v/v		2 qt/a	MPO						
13	Lexar	3.7	SE	2.08	lb ai/a		2.25 qt/a	PRE	A	113	202	313	402	_____
	Roundup PowerMax	4.5	SL	0.77	lb ae/a		22 oz/a	MPO	C					
	N-PAK AMS	100	L	2.5	% v/v		2 qt/a	MPO						
14	Untreated Check									114	213	314	401	_____

Sort Order: Replicate 1