

The Ohio State University

Corvus fb DiFlexx

Trial ID: 14PROC4 Location: Western Branch F-7 Trial Year: 2014
 Protocol ID: 14PRPOC4 Investigator: Dr. Mark M. Loux
 Project ID: HP14USABLP Study Director: Anthony Dobbels
 Sponsor Contact: David Lamore, Bayer CropScience

General Trial Information

Study Director: Anthony Dobbels
Investigator: Dr. Mark M. Loux

Trial Location

City: South Charleston **Country:** USA United States
State/Prov.: Ohio
Postal Code: 45368 **Climate Zone:** US Warm Continental

Latitude of LL Corner °: 39.86031 N
Longitude of LL Corner °: 83.67248 W

Contacts

Study Director: Anthony Dobbels
Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: ZEAMX Zea mays
Variety: Pioneer P1184AM
Description: RR/LL

Corn

Planting Rate, Unit: 32097 S/A
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN

Planting Date: Apr-26-2014
Planting Method: SEEDDED seeded
Planting Equipment: FPP Finger Pickup Planter
Emergence Date: May-12-2014
Harvest Date: Sep-30-2014
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 30 FT
Harvest Equipment: Massey Ferguson 8 XP
% Standard Moisture: 15.5
Moisture Meter: Harvest Master
Weighing Equipment: Harvest Master

Soil Temperature, Unit: 56 F
Soil Moisture: NORMAL normal, adequate
Seed Bed: MEDIUM medium

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:** CHEAL *Chenopodium album*
Common Name: Common lambsquarters
- Pest 4 Type:** W **Code:** ABUTH *Abutilon theophrasti*
Common Name: velvetleaf
- Pest 5 Type:** W **Code:** AMARE *Amaranthus retroflexus*
Common Name: Redroot pigweed
- Pest 6 Type:** W **Code:** POLPY *Persicaria pensylvanica*
Common Name: Pennsylvania smartweed
- Pest 7 Type:** W **Code:** SIDSP *Sida spinosa*
Common Name: Prickly sida
- Pest 8 Type:** W **Code:** AMBEL *Ambrosia artemisiifolia*
Common Name: Common ragweed

Site and Design

Treated Plot Width: 6.67 FT
Treated Plot Length: 30 FT
Treated Plot Area: 200.1 FT2 **Treatments:** 10
Replications: 3

Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: CONTIL conventional-till
Study Design: RACOBL Randomized Complete Block (RCB)

No. Previous Crop Year
 1. Soybean 2013

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Soil Description

Description Name: F-7 West
% OM: 3.8 **Texture:** SICL silty clay loam
pH: 7.2 **Soil Name:** Kokomo
CEC: 23.6 **Fert. Level:** G good
Soil Drainage: G good

Application Description

	A	B
Application Date:	Apr-26-2014	Jun-5-2014
Appl. Start Time:	7:00 PM	10:30 AM
Appl. Stop Time:	7:30 PM	11:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Application Placement:	BROSOI	BROFOL
Applied By:	Loux	Ackley
Air Temperature, Unit:	74 F	66 f
% Relative Humidity:	47	73
Wind Velocity, Unit:	7 MPH	5.5 MPH
Wind Direction:	N	W
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	62 F	62 F
Soil Moisture:	NORMAL	MOIST
% Cloud Cover:	5	10
Next Moisture Occurred On:	Apr-28-2014	Jun-8-2014
Time to Next Moisture, Unit:	1.5 DAY	3 DAY

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		DESC
Stage Majority, Percent:		15 100
Height, Unit:		22 IN
Height Minimum, Maximum:		20 22

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Stage Majority, Percent:		15 100
Height, Unit:		3 IN
Height Minimum, Maximum:		2 4
Density, Unit:		153 M2
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:		19
Height, Unit:		2.5 IN
Height Minimum, Maximum:		1 4
Density, Unit:		8.66 M2
Pest 3 Code, Type, Scale:	CHEAL W	CHEAL W
Density, Unit:		6 M2
Pest 4 Code, Type, Scale:	ABUTH W	ABUTH W
Density, Unit:		7 M2
Pest 5 Code, Type, Scale:	AMARE W	AMARE W
Density, Unit:		6.33 M2
Pest 6 Code, Type, Scale:	POLPY W	POLPY W
Stage Majority, Percent:		19
Density, Unit:		3.33 M2
Pest 7 Code, Type, Scale:	SIDSP W	SIDSP W
Height, Unit:		3 IN
Height Minimum, Maximum:		2 4
Pest 8 Code, Type, Scale:	AMBEL W	AMBEL W
Density, Unit:		2.33 M2

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Application Equipment

	A	B
Appl. Equipment:	6 FOOT BOOM	6 FOOT BOOM
Equipment Type:	SPRBAC	SPRBAC
Operation Pressure, Unit:	46 PSI	46 PSI
Nozzle Type:	AI XR	AI XR
Nozzle Size:	110015	110015
Nozzle Spacing, Unit:	18 IN	18 IN
Boom Length, Unit:	6.67 FT	6.67 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Mix Size, Unit:	1 Liters	1 Liters
Propellant:	CO2	CO2

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Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Rating Date	Sep-30-2014	Sep-30-2014	Sep-30-2014	Sep-30-2014
	4	4	4	4
Rating Type	WEIGHT	MOICON	YIELD	WEITES
Rating Unit	LBS	%	BU	LBS
Number of Subsamples	1	1	1	1
Rating Timing				
Days After First/Last Applic.	157 117	157 117	157 117	157 117
Trt-Eval Interval				
Plant-Eval Interval	157 DP-1	157 DP-1	157 DP-1	157 DP-1
Days After Emergence	141 DE-1	141 DE-1	141 DE-1	141 DE-1
ARM Action Codes			TY1	
Number of Decimals	1	1	1	1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	Appl Description	27	28	29	30
1	Atrazine	1 qt/a		A	PRE	37.5 d	17.9 a	189.1 d	58.7 a
2	Corvus	3.3 oz/a		A	PRE	48.5 ab	17.6 a	245.0 ab	60.1 a
2	Atrazine	1 qt/a		A	PRE				
2	Roundup PowerMax	32 oz/a		B	POST				
2	N PAK AMS	1.5 qt/a		B	POST				
3	Corvus	3.3 oz/a		A	PRE	46.4 bc	17.8 a	234.0 bc	59.3 a
3	Atrazine	1 qt/a		A	PRE				
3	Roundup PowerMax	32 oz/a		B	POST				
3	Clarity	8 oz/a		B	POST				
3	NIS	4.8 oz/a		B	POST				
3	N PAK AMS	1.5 qt/a		B	POST				
4	Corvus	3.3 oz/a		A	PRE	44.5 c	18.1 a	223.8 c	60.3 a
4	Atrazine	1 qt/a		A	PRE				
4	Roundup PowerMax	32 oz/a		B	POST				
4	Clarity	16 oz/a		B	POST				
4	NIS	4.8 oz/a		B	POST				
4	N PAK AMS	1.5 qt/a		B	POST				
5	Corvus	3.3 oz/a		A	PRE	48.0 ab	17.3 a	243.4 ab	59.8 a
5	Atrazine	1 qt/a		A	PRE				
5	Roundup PowerMax	32 oz/a		B	POST				
5	DiFlexx	8 oz/a		B	POST				
5	COC	19.2 oz/a		B	POST				
5	N PAK AMS	1.5 qt/a		B	POST				
6	Corvus	3.3 oz/a		A	PRE	47.7 ab	17.0 a	242.8 ab	60.1 a
6	Atrazine	1 qt/a		A	PRE				
6	Roundup PowerMax	32 oz/a		B	POST				
6	DiFlexx	16 oz/a		B	POST				
6	COC	19.2 oz/a		B	POST				
6	N PAK AMS	1.5 qt/a		B	POST				

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.

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Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn
Rating Date	Sep-30-201	Sep-30-201	Sep-30-2014	Sep-30-201
	4	4		4
Rating Type	WEIGHT	MOICON	YIELD	WEITES
Rating Unit	LBS	%	BU	LBS
Number of Subsamples	1	1	1	1
Rating Timing				
Days After First/Last Applic.	157 117	157 117	157 117	157 117
Trt-Eval Interval				
Plant-Eval Interval	157 DP-1	157 DP-1	157 DP-1	157 DP-1
Days After Emergence	141 DE-1	141 DE-1	141 DE-1	141 DE-1
ARM Action Codes			TY1	
Number of Decimals	1	1	1	1

Trt Treatment No. Name	Other Rate	Other Rate Unit	Appl Code	Appl Description	27	28	29	30
7 Corvus	3.3 oz/a		A	PRE	46.8 bc	18.0 a	235.6 abc	59.8 a
7 Atrazine	1 qt/a		A	PRE				
7 Roundup PowerMax	32 oz/a		B	POST				
7 Laudis	3 oz/a		B	POST				
7 DiFlexx	8 oz/a		B	POST				
7 MSO	19.2 oz/a		B	POST				
7 N PAK AMS	1.5 qt/a		B	POST				
8 Corvus	3.3 oz/a		A	PRE	44.6 c	17.3 a	226.4 c	59.7 a
8 Atrazine	1 qt/a		A	PRE				
8 Liberty	29 oz/a		B	POST				
8 DiFlexx	16 oz/a		B	POST				
8 N PAK AMS	1.5 qt/a		B	POST				
9 Corvus	3.3 oz/a		A	PRE	49.9 a	18.3 a	250.2 a	59.6 a
9 Atrazine	1 qt/a		A	PRE				
9 Roundup PowerMax	32 oz/a		B	POST				
9 Status	5 oz/a		B	POST				
9 COC	0.6 qt/a		B	POST				
9 N PAK AMS	1.5 qt/a		B	POST				
10 UTC					31.6 e	19.3 a	156.6 e	58.8 a
LSD (P=.05)					2.88	1.30	15.16	1.13
Standard Deviation					1.68	0.76	8.84	0.66
CV					3.77	4.24	3.93	1.11
Grand Mean					44.55	17.86	224.7	59.63
Bartlett's X2					11.472	11.137	12.932	8.636
P(Bartlett's X2)					0.245	0.266	0.166	0.472
Skewness					-1.5754*	0.5775	-1.6375*	-0.3782
Kurtosis					1.7898*	0.9801	2.0007*	-0.7509
Replicate F					0.927	0.085	0.836	0.387
Replicate Prob(F)					0.4137	0.9188	0.4495	0.6849
Treatment F					34.362	2.135	33.490	2.027
Treatment Prob(F)					0.0001	0.0816	0.0001	0.0966

Crop Code
 ZEAMX, BCOR, Zea mays, = US
 Rating Type
 WEIGHT = weight
 MOICON = moisture content
 YIELD = yield
 WEITES = weight - test
 Rating Unit
 % = percent
 BU = bushel

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Plant-Eval Interval

157 DP-1 = 1 ZEAMX Apr-26-2014

ARM Action Codes

TY1 = 5.185714*[27]*(100-[28])/84.5