

Ohio State University Horticulture and Crop Science

GET THE MOST OUT OF EVERY CORN ACRE

Title No. 2:
 Trial ID: 11GMOECA Protocol ID: 11GMOECA
 Location: WESTERN BRANCH F-8 Study Director: Anthony F. Dobbels
 Project ID: DEM-H-2011-US-C9F-I-01 Investigator: Dr. Mark M. Loux
 Sponsor Contact: Caren Judge, BASF

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 °:** 39.8595 N
State/Prov.: Ohio **Longitude of LL Corner °:** -83.67529 W
Postal Code: 45368
Country: USA

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: Seed Consultants SC10HQ70
BBCH Scale: BCOR
Planting Method: SEEDED seeded
Depth, Unit: 2 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM medium
Soil Moisture: SLIWET slightly wet
Description: RR/LL
Planting Date: 5/31/11
Rate, Unit: 32097 S/A
Soil Temperature, Unit: 72 F
Emergence Date: 6/6/11

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

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

Pest 6 Type: W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed

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: 6 **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

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Application Description

	A	B	C
Application Date:	5/31/11	6/17/11	7/26/11
Time of Day:	11:15 A.M	9:00 A.M.	8:30 A.M.
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	V5	VT
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	Reeb	Dobbels	Dobbels
Air Temperature, Unit:	89.9 F	78.3 F	79 F
% Relative Humidity:	62.1	64	75
Wind Velocity, Unit:	3.8 MPH	1.1 MPH	1 MPH
Wind Direction:	SSW	W	W
Dew Presence (Y/N):	N no	N no	Y yes
Soil Temperature, Unit:	72 F	68 F	72 F
Soil Moisture:	GOOD	GOOD	WET
% Cloud Cover:	2	0	10
Next Rain Occurred On:	6/3/11	6/19/11	

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:			V5		R1	100
Height, Unit:			6	IN	99	IN
Height Minimum, Maximum:			6	7	98	101

Pest Stage At Each Application

	A		B		C	
Pest 1 Code, Type, Scale:	SETFA	W	SETFA	W	SETFA	W
Stage Majority, Percent:			13			
Height, Unit:			2	IN		
Height Minimum, Maximum:			2	3		
Density, Unit:	30	M2	30	M2	30	M2
Pest 2 Code, Type, Scale:	AMBTR	W	AMBTR	W	AMBTR	W
Stage Majority, Percent:			13			
Stage Minimum, Percent:			12			
Stage Maximum, Percent:			14			
Height, Unit:			2	IN		
Height Minimum, Maximum:			2	3		
Density, Unit:	3	M2	3	M2	3	M2
Pest 3 Code, Type, Scale:	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent:			12			
Height, Unit:			1	IN		
Height Minimum, Maximum:			1	1		
Pest 4 Code, Type, Scale:	IPOHE	W	IPOHE	W	IPOHE	W
Height, Unit:			1	IN		
Height Minimum, Maximum:			1	1		
Pest 5 Code, Type, Scale:	CHEAL	W	CHEAL	W	CHEAL	W
Density, Unit:	2	M2	2	M2	2	M2
Pest 6 Code, Type, Scale:	AMARE	W	AMARE	W	AMARE	W
Density, Unit:	2	M2	2	M2	2	M2

Application Equipment

	A	B	C
Appl. Equipment:	10 Foot Boom	10 Foot Boom	OVERHEAD
Equipment Type:	SPRBAC	SPRBAC	SPRBAC
Operating Pressure, Unit:	46 PSI	46 PSI	50 PSI
Nozzle Type:	TEEJET DG	TEEJET DG	TEEJET VS
Nozzle Size:	80015	80015	8001
Nozzle Spacing, Unit:	18 IN	18 IN	15 IN
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN	12 FT
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA	10 GAL/AC
Mix Size, Unit:	0.33 Gallons	0.33 Gallons	3 gallons
Propellant:	CO2	CO2	CO2

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed D	Disease
Pest Code	SETFA	AMBTR	IPHOE	ABUTH	AMARE	
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Ipomoea hederacea	Abitilon theophrasti	Amaranthus retrofractus	
Pest Name	Giant foxtail	Giant ragweed	Ivyleaf mornin	Velvetleaf	Redroot pigweed	
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Rating Date	7/14/11	7/14/11	7/14/11	7/14/11	7/14/11	8/16/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	INFPRI
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	44 27	44 27	44 27	44 27	44 27	77 21
Trt-Eval Interval	27 DA-B	27 DA-B	27 DA-B	27 DA-B	27 DA-B	21 DA-C
Plant-Eval Interval	44 DP-1	44 DP-1	44 DP-1	44 DP-1	44 DP-1	77 DP-1
Days After Emergence	38 DE-1	38 DE-1	38 DE-1	38 DE-1	38 DE-1	71 DE-1
Number of Decimals						0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	7	8	9	10	11	12
1	Roundup WeatherMax	4.5	22 oz/a		B	95.8	100.0	100.0	100.0	100.0	0
1	NIS	100	3.2 oz/a		B						
1	N-PAK AMS	100	2 qt/a		B						
2	Guardsman Max	5	48 oz/a		A	100.0	100.0	100.0	100.0	100.0	0
2	Roundup WeatherMax	4.5	22 oz/a		B						
2	NIS	100	3.2 oz/a		B						
2	N-PAK AMS	100	2 qt/a		B						
3	Verdict	5.57	18 oz/a		A	99.2	100.0	100.0	100.0	100.0	0
3	Roundup WeatherMax	4.5	22 oz/a		B						
3	NIS	100	3.2 oz/a		B						
3	N-PAK AMS	100	2 qt/a		B						
4	Verdict	5.57	18 oz/a		A	100.0	100.0	100.0	100.0	100.0	0
4	Roundup WeatherMax	4.5	22 oz/a		B						
4	NIS	100	3.2 oz/a		B						
4	N-PAK AMS	100	2 qt/a		B						
4	Headline AMP	1.68	10 oz/a		C						
4	NIS	100	3.2 oz/a		C						
5	Verdict	5.57	18 oz/a		A	100.0	100.0	100.0	100.0	100.0	0
5	Roundup WeatherMax	4.5	22 oz/a		B						
5	Headline	2.09	6 oz/a		B						
5	NIS	100	3.2 oz/a		B						
5	N-PAK AMS	100	2 qt/a		B						
6	Verdict	5.57	18 oz/a		A	100.0	100.0	100.0	100.0	100.0	0
6	Roundup WeatherMax	4.5	22 oz/a		B						
6	Headline	2.09	6 oz/a		B						
6	NIS	100	3.2 oz/a		B						
6	N-PAK AMS	100	2 qt/a		B						
6	Headline AMP	1.68	10 oz/a		C						
6	NIS	100	3.2 oz/a		C						
LSD (P=.05)						2.66	0.00	0.00	0.00	0.00	0.0
Standard Deviation						2.24	0.00	0.00	0.00	0.00	0.0
CV						2.25	0.0	0.0	0.0	0.0	0.0
Bartlett's X2						3.392	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)						0.066
Replicate F						0.667	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)						0.6522	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F						3.333	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)						0.0192	1.0000	1.0000	1.0000	1.0000	1.0000

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Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop
D, Disease, G-BYRD7, G-DisStg = Disease, such as a fungus, bacteria, or virus

Pest Code

SETFA, Setaria faberi, = US
AMBTR, Ambrosia trifida, = US
IPOHE, Ipomoea hederacea, = US
ABUTH, Abutilon theophrasti, = US
AMARE, Amaranthus retroflexus, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

PHYGEN = phytotoxicity - general / injury
CONTRO = control / burndown or knockdown
INFPRI = infestation primary

Rating Unit

% = percent

Plant-Eval Interval

17 DP-1 = 1 5/31/11
44 DP-1 = 1 5/31/11
77 DP-1 = 1 5/31/11