

## BASF Corn Herbicides 2 Pass Programs

Trial ID: 15BASFCORN      Location: Western Branch Big E Trial Year: 2015  
 Protocol ID: 15BASFCORN      Investigator: Dr. Mark M. Loux  
 Project ID: MKD H 2015 US C72      Study Director: Anthony Dobbels  
    Sponsor Contact: Trevor Kraus, BASF

**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:** USWARM US Warm Continental

**Latitude of LL Corner** °: 39.85742 N  
**Longitude of LL Corner** °: -83.67004 W

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

**Contacts**

**Study Director:** Anthony Dobbels

**Investigator:** Dr. Mark M. Loux

**Crop Description**

**Crop 1:** ZEAMX      Zea mays  
**Variety:** SCS 1105 AM  
**Description:** RR / LL

Corn

**Planting Rate, Unit:** 32097 S/A  
**Depth, Unit:** 2 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-3-2015  
**Planting Method:** PLANTD      planted  
**Planting Equipment:** FPP      Finger Pickup Planter

**Emergence Date:** 5-9-2015  
**Harvest Date:** 10-2-2015

**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** NORMAL normal, adequate  
**Seed Bed:** MEDIUM medium

**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

**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:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters

**Pest 5 Type:** W      **Code:** AMARE Amaranthus retroflexus  
**Common Name:** Redroot pigweed

**Pest 6 Type:** W      **Code:** HIBTR Hibiscus trionum  
**Common Name:** Venice mallow

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 300 FT<sup>2</sup>      **Treatments:** 12  
**Replications:** 4

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

**No. Previous Crop Year**

1. Soybean      2014

**Soil Description**

**Description Name:** Big E

**% OM:** 2.8

**pH:** 5.9

**CEC:** 17.44

**Texture:** SIL silt loam

**Soil Name:** Kokomo

**Fert. Level:** G good

**Soil Drainage:** G good

**Additional Measured Elements**

Date	Element	Quantity	Unit
4-24-2015	NH3	180	LBS

**Application Description**

	A	B	C
<b>Application Date:</b>	5-4-2015	5-15-2015	5-28-2015
<b>Appl. Start Time:</b>	11:00 AM	9:30 AM	12:40 PM
<b>Appl. Stop Time:</b>	11:20 AM	10:00 AM	12:55 PM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	EPO	POST
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL
<b>Applied By:</b>	Ackley	Ackley	Bethel/Barc
<b>Air Temperature, Unit:</b>	73 F	66 F	78 F
<b>% Relative Humidity:</b>	45	73	60
<b>Wind Velocity, Unit:</b>	10 MPH	6 MPH	3 MPH
<b>Wind Direction:</b>	SW	E	SSE
<b>Dew Presence (Y/N):</b>	N no	N no	N no
<b>Soil Temperature, Unit:</b>	58 F	60 F	72 F
<b>Soil Moisture:</b>	DRY	NORMAL	MOIST
<b>% Cloud Cover:</b>	40	60	70
<b>Next Moisture Occurred On:</b>	5-5-2015	5-16-2015	5-30-2015
<b>Time to Next Moisture, Unit:</b>	14 HR	1 DAY	2 DAY

**Crop Stage At Each Application**

	A		B		C	
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR
<b>Stage Scale Used:</b>	BBCH		BBCH		BBCH	
<b>Stage Majority, Percent:</b>	12	100	14	100	14	100
<b>Height, Unit:</b>	3	IN	11	IN	10	12
<b>Height Minimum, Maximum:</b>						

**Pest Stage At Each Application**

	<b>A</b>		<b>B</b>		<b>C</b>	
<b>Pest 1 Code, Type, Scale:</b>	SETFA	W	SETFA	W	SETFA	W
<b>Stage Majority, Percent:</b>			12	100	13	100
<b>Stage Minimum, Percent:</b>					13	100
<b>Stage Maximum, Percent:</b>					13	100
<b>Height, Unit:</b>			0.5	IN	3	IN
<b>Height Minimum, Maximum:</b>			0.25	0.5	3	4
<b>Density, Unit:</b>			125	M2	14	m2
<b>Pest 2 Code, Type, Scale:</b>	AMBTR	W	AMBTR	W	AMBTR	W
<b>Stage Majority, Percent:</b>			09	90	14	100
<b>Stage Minimum, Percent:</b>			09	90	14	100
<b>Stage Maximum, Percent:</b>			10	10	14	100
<b>Diameter, Unit:</b>			1	IN		
<b>Height, Unit:</b>			2	IN	4	IN
<b>Height Minimum, Maximum:</b>			1	2	3	5
<b>Density, Unit:</b>			50	M2	13.75	m2
<b>Pest 3 Code, Type, Scale:</b>	ABUTH	W	ABUTH	W	ABUTH	W
<b>Stage Majority, Percent:</b>			09	100	13	100
<b>Stage Minimum, Percent:</b>					13	100
<b>Stage Maximum, Percent:</b>					13	100
<b>Height, Unit:</b>			0.25	IN	3	IN
<b>Height Minimum, Maximum:</b>			0.25	0.5	3	3
<b>Density, Unit:</b>			10	M2	0.75	m2
<b>Pest 4 Code, Type, Scale:</b>	CHEAL	W	CHEAL	W	CHEAL	W
<b>Stage Majority, Percent:</b>			12	90	17	100
<b>Stage Minimum, Percent:</b>			10	10	16	100
<b>Stage Maximum, Percent:</b>			12	90	18	100
<b>Diameter, Unit:</b>			0.5	IN		
<b>Height, Unit:</b>			0.5	IN	3	IN
<b>Height Minimum, Maximum:</b>			0.25	0.5	2	3
<b>Density, Unit:</b>			6	M2	3.75	m2
<b>Pest 5 Code, Type, Scale:</b>	AMARE	W	AMARE	W	AMARE	W
<b>Stage Majority, Percent:</b>			11	90	17	100
<b>Stage Minimum, Percent:</b>			09	10	16	100
<b>Stage Maximum, Percent:</b>			11	90	18	100
<b>Diameter, Unit:</b>			0.25	IN		
<b>Height, Unit:</b>			0.25	IN	3	IN
<b>Height Minimum, Maximum:</b>			0.25	0.33	2	3
<b>Density, Unit:</b>			4	M2	2.25	m2
<b>Pest 6 Code, Type, Scale:</b>	HIBTR	W	HIBTR	W	HIBTR	W
<b>Stage Majority, Percent:</b>					12	100
<b>Stage Minimum, Percent:</b>					12	100
<b>Stage Maximum, Percent:</b>					12	100
<b>Height, Unit:</b>					1	IN
<b>Height Minimum, Maximum:</b>					1	1
<b>Density, Unit:</b>					1	M2

**Application Equipment**

	<b>A</b>		<b>B</b>		<b>C</b>	
<b>Appl. Equipment:</b>	6 FOOT BOOM		10' AI XR		10' AI XR	
<b>Equipment Type:</b>	SPRBAC		SPRBAC		SPRBAC	
<b>Operation Pressure, Unit:</b>	46 PSI		46 PSI		46 PSI	
<b>Nozzle Type:</b>	AI XR		AI XR		AI XR	
<b>Nozzle Size:</b>	110015		110015		110015	
<b>Nozzle Spacing, Unit:</b>	18 IN		18 IN		18 IN	
<b>Boom Length, Unit:</b>	6.67 FT		10 FT		10 FT	
<b>Boom Height, Unit:</b>	20 IN		20 IN		20 IN	
<b>Ground Speed, Unit:</b>	3 MPH		3 MPH		3 MPH	
<b>Carrier:</b>	WATER		WATER		WATER	
<b>Spray Volume, Unit:</b>	15 GPA		15 GPA		15 GPA	
<b>Mix Size, Unit:</b>	2 Liters		2 Liters		2 Liters	
<b>Propellant:</b>	CO2		CO2		CO2	



Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	Appl Description	22	23	24	25
8	Capreno	3 oz/a		B	EPO	46.5 bc	19.6 a	229.5 b	57.5 a
8	Atrazine	32 oz/a		B	EPO				
8	Roundup PowerMax	22 oz/a		B	EPO				
8	HC MSO	9.6 oz/a		B	EPO				
8	N PAK AMS	1.5 qt/a		B	EPO				
9	Anthem ATZ	40 oz/a		B	EPO	46.4 bc	19.1 a	230.4 b	58.4 a
9	Roundup PowerMax	22 oz/a		B	EPO				
9	NIS	4.8 oz/a		B	EPO				
9	N PAK AMS	1.5 qt/a		B	EPO				
10	Dual II Magnum	26 oz/a		A	PRE	48.7 abc	20.3 a	238.0 ab	57.1 a
10	Roundup PowerMax	22 oz/a		C	POST				
10	Laudis	3 oz/a		C	POST				
10	Atrazine	32 oz/a		C	POST				
10	NIS	4.8 oz/a		C	POST				
10	N PAK AMS	1.5 qt/a		C	POST				
11	Dual II Magnum	26 oz/a		A	PRE	49.7 ab	19.6 a	245.0 ab	57.1 a
11	Roundup PowerMax	22 oz/a		C	POST				
11	Callisto Xtra	24 oz/a		C	POST				
11	NIS	4.8 oz/a		C	POST				
11	N PAK AMS	1.5 qt/a		C	POST				
12	Corvus	5.6 oz/a		A	PRE	47.8 abc	20.0 a	234.8 ab	57.0 a
12	Roundup PowerMax	22 oz/a		C	POST				
12	DiFlexx	12 oz/a		C	POST				
12	NIS	4.8 oz/a		C	POST				
12	N PAK AMS	1.5 qt/a		C	POST				
	LSD P=.05					3.31	1.35	16.74	0.89
	Standard Deviation					2.30	0.94	11.64	0.62
	CV					4.87	4.88	4.98	1.08
	Grand Mean					47.22	19.27	233.88	57.44
	Bartlett's X2					9.708	16.021	12.2	16.676
	P(Bartlett's X2)					0.557	0.14	0.349	0.118
	Skewness					-0.6821	-0.3327	-0.984*	-0.0021
	Kurtosis					0.7046	-0.2323	1.5649*	1.559*
	Replicate F					2.899	7.927	2.417	7.345
	Replicate Prob(F)					0.0496	0.0004	0.0839	0.0007
	Treatment F					4.624	1.597	4.257	1.684
	Treatment Prob(F)					0.0003	0.1456	0.0006	0.1212

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

MOICON = moisture content

WEITES = weight - test

Rating Unit

% = percent  
BU = bushel

PLOT = total plot  
A = acre  
Plant-Eval Interval  
152 DP-1 = 1 ZEAMX 5-3-2015  
ARM Action Codes  
 $TY1 = 5.185714 * [22] * (100 - [23]) / 84.5$