

## Armezon Pro Efficacy and Crop Safety

Trial ID: 15BASFPSTC1      Location: Western Branch Big E      Trial Year: 2015  
 Protocol ID: 15BASFPSTC1      Investigator: Dr. Mark M. Loux  
 Project ID: DEV H 2015 US C42      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** °: 39.85669 N  
**Longitude of LL Corner** °: -83.67015 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:** 10-1-2015

**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

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 300 FT2      **Treatments:** 12  
**Replications:** 4

**Site Type:** FIELD field  
**Experimental Unit:** 1 PLOT plot  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB L 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**

**Application Date:** 5-15-2015  
**Appl. Start Time:** 9:30 AM  
**Appl. Stop Time:** 10:00 AM  
**Application Method:** SPRAY  
**Application Timing:** EPO  
**Application Placement:** BROFOL  
**Applied By:** Ackley  
**Air Temperature, Unit:** 66 F  
**% Relative Humidity:** 73  
**Wind Velocity, Unit:** 6 MPH  
**Wind Direction:** E  
**Dew Presence (Y/N):** N no  
**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 60  
**Next Moisture Occurred On:** 5-18-2015  
**Time to Next Moisture, Unit:** 3 DAY

**Crop Stage At Each Application**

**A**

**Crop 1 Code, BBCH Scale:** ZEAMX BCOR  
**Stage Scale Used:** BBCH  
**Stage Majority, Percent:** 12 100  
**Height, Unit:** 3 IN

**Pest Stage At Each Application**

**A**

**Pest 1 Code, Type, Scale:** SETFA W  
**Stage Majority, Percent:** 12 100  
**Height, Unit:** 0.5 IN  
**Height Minimum, Maximum:** 0.25 0.5  
**Density, Unit:** 125 M2

**Pest 2 Code, Type, Scale:** AMBTR W  
**Stage Majority, Percent:** 09 90  
**Stage Minimum, Percent:** 09 90  
**Stage Maximum, Percent:** 10 10  
**Diameter, Unit:** 1 IN  
**Height, Unit:** 2 IN  
**Height Minimum, Maximum:** 1 2  
**Density, Unit:** 50 M2

**Pest 3 Code, Type, Scale:** ABUTH W  
**Stage Majority, Percent:** 09 100  
**Height, Unit:** 0.25 IN  
**Height Minimum, Maximum:** 0.25 0.5  
**Density, Unit:** 10 M2

**Pest 4 Code, Type, Scale:** CHEAL W  
**Stage Majority, Percent:** 12 90  
**Stage Minimum, Percent:** 10 10  
**Stage Maximum, Percent:** 12 90  
**Diameter, Unit:** 0.5 IN  
**Height, Unit:** 0.5 IN  
**Height Minimum, Maximum:** 0.25 0.5  
**Density, Unit:** 6 M2

**Pest 5 Code, Type, Scale:** AMARE W  
**Stage Majority, Percent:** 11 90  
**Stage Minimum, Percent:** 09 10  
**Stage Maximum, Percent:** 11 90  
**Diameter, Unit:** 0.25 IN  
**Height, Unit:** 0.25 IN  
**Height Minimum, Maximum:** 0.25 0.33  
**Density, Unit:** 4 M2

**Application Equipment**

**A**

**Appl. Equipment:** 10' AI XR  
**Equipment Type:** SPRBAC  
**Operation Pressure, Unit:** 46 PSI  
**Nozzle Type:** AI XR  
**Nozzle Size:** 110015  
**Nozzle Spacing, Unit:** 18 IN  
**Boom Length, Unit:** 10 FT  
**Boom Height, Unit:** 20 IN  
**Ground Speed, Unit:** 3 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 15 GPA  
**Mix Size, Unit:** 2 Liters  
**Propellant:** CO2

Armezon Pro Efficacy and Crop Safety

Trial ID: 15BASFPSTC1 Location: Western Branch Big E Trial Year: 2015  
 Protocol ID: 15BASFPSTC1 Investigator: Dr. Mark M. Loux  
 Project ID: DEV H 2015 US C42 Study Director: Anthony Dobbels  
 Sponsor Contact: Trevor Kraus, BASF

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	Appl Description	18	19	20	21
1	UTC					22.9 b	17.2 a	116.3 b	55.8 a
2	BAS 67703 H	20 oz/a		A	POST	34.2 a	17.2 a	173.7 a	56.7 a
	2 HC MSO	9.6 oz/a		A	POST				
	2 N PAK AMS	1.5 qt/a		A	POST				
3	BAS 67703 H	20 oz/a		A	POST	32.0 a	17.2 a	162.8 a	56.6 a
	3 Atrazine	32 oz/a		A	POST				
	3 COC	19.2 oz/a		A	POST				
	3 N PAK AMS	1.5 qt/a		A	POST				
4	BAS 67703 H	20 oz/a		A	POST	37.5 a	17.3 a	190.0 a	56.9 a
	4 Atrazine	32 oz/a		A	POST				
	4 NIS	4.8 oz/a		A	POST				
	4 N PAK AMS	1.5 qt/a		A	POST				
5	Capreno	3 oz/a		A	POST	33.8 a	17.2 a	171.7 a	56.5 a
	5 COC	19.2 oz/a		A	POST				
	5 N PAK AMS	1.5 qt/a		A	POST				
6	Capreno	3 oz/a		A	POST	38.7 a	17.2 a	196.3 a	56.6 a
	6 Atrazine	32 oz/a		A	POST				
	6 COC	19.2 oz/a		A	POST				
	6 N PAK AMS	1.5 qt/a		A	POST				
7	BAS 67703 H	20 oz/a		A	POST	35.8 a	17.2 a	181.2 a	55.5 a
	7 Roundup PowerMax	16 oz/a		A	POST				
	7 COC	19.2 oz/a		A	POST				
	7 N PAK AMS	1.5 qt/a		A	POST				
8	BAS 67703 H	20 oz/a		A	POST	30.3 ab	16.7 a	154.4 ab	56.6 a
	8 Roundup PowerMax	16 oz/a		A	POST				
	8 NIS	4.8 oz/a		A	POST				
	8 N PAK AMS	1.5 qt/a		A	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.

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		10-1-2015	10-1-2015	10-1-2015	10-1-2015				
Rating Type		YIELD	MOICON	YIELD	WEITES				
Rating Unit		LBS	%	BU	LBS				
Sample Size, Unit	1	PLOT		1	A				
Number of Subsamples		1	1	1	1				
Crop Stage Scale									
Days After First/Last Applic.		139	139	139	139				
Trt-Eval Interval		139 DA-A	139 DA-A	139 DA-A	139 DA-A				
Plant-Eval Interval		151 DP-1	151 DP-1	151 DP-1	151 DP-1				
Days After Emergence		145 DE-1	145 DE-1	145 DE-1	145 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	18	19	20	21
9	Halex GT	64 oz/a		A	POST	37.2 a	17.4 a	188.5 a	56.0 a
9	NIS	4.8 oz/a		A	POST				
9	N PAK AMS	1.5 qt/a		A	POST				
10	BAS 67703 H	20 oz/a		A	POST	38.6 a	17.2 a	195.9 a	56.4 a
10	Atrazine	32 oz/a		A	POST				
10	Roundup PowerMax	16 oz/a		A	POST				
10	NIS	4.8 oz/a		A	POST				
10	N PAK AMS	1.5 qt/a		A	POST				
11	BAS 67703 H	20 oz/a		A	POST	34.5 a	17.3 a	174.6 a	55.8 a
11	Atrazine	32 oz/a		A	POST				
11	Roundup PowerMax	16 oz/a		A	POST				
11	COC	19.2 oz/a		A	POST				
11	N PAK AMS	1.5 qt/a		A	POST				
12	Halex GT	64 oz/a		A	POST	36.6 a	17.0 a	185.7 a	56.3 a
12	Atrazine	32 oz/a		A	POST				
12	NIS	4.8 oz/a		A	POST				
12	N PAK AMS	1.5 qt/a		A	POST				
	LSD P=.05					8.48	1.08	42.74	1.93
	Standard Deviation					5.90	0.75	29.71	1.34
	CV					17.16	4.39	17.05	2.39
	Grand Mean					34.35	17.17	174.27	56.31
	Bartlett's X2					8.159	6.15	8.567	3.613
	P(Bartlett's X2)					0.699	0.863	0.662	0.98
	Skewness					-0.1322	0.5441	-0.1499	-0.7305*
	Kurtosis					-1.5328*	-0.3826	-1.5224*	-0.9092
	Replicate F					32.898	9.407	31.619	17.918
	Replicate Prob(F)					0.0001	0.0001	0.0001	0.0001
	Treatment F					2.254	0.182	2.256	0.398
	Treatment Prob(F)					0.0352	0.9977	0.0351	0.9472

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

151 DP-1 = 1 ZEAMX 5-3-2015

ARM Action Codes

TY1 = 5.185714\*[18]\*(100-[19])/84.5