

Compare the performance of AG149039 against current commercial adjuvants with Section Three herbicide

Trial ID: 15 STA
Protocol ID: 15 STA
Project ID: AG150939 Clethodim 2015

Location: F-7 WEST END Trial Year: 2015
Investigator: Dr. Mark M. Loux
Study Director: Bryan Reeb
Sponsor Contact: John Smith, Winfield

General Trial Information

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Latitude of LL Corner °: 39.86034 N
Longitude of LL Corner °: 83.67258 W

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: GLXMA Glycine max
Variety: SCS 9363
Description: RoundUp Ready

Soybean

Planting Rate, Unit: 180000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 70 F
Soil Moisture: GOOD good
Seed Bed: MEDIUM medium

Planting Date: 5-7-2015
Planting Method: PLANTD planted
Planting Equipment: KINZE
Emergence Date: 5-15-2015

Crop 2: ZEAMD Zea mays indentata Dent corn
Variety: P 0993 HR

Depth, Unit: 2 IN
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 70 F
Soil Moisture: GOOD good
Seed Bed: MEDIUM medium

Planting Date: 5-7-2015
Planting Method: PLANTD planted
Planting Equipment: KINZE
Emergence Date: 5-15-2015

Pest Description

Pest 1 Type: W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 2 Type: W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed

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

Pest 4 Type: W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail

Pest 5 Type: W **Code:** AMBEL Ambrosia artemisiifolia
Common Name: Common ragweed

Pest 6 Type: W **Code:** ABUTH Abutilon theophrasti
Common Name: velvetleaf

Pest 7 Type: W **Code:** IPOHE Ipomoea hederacea
Common Name: Ivyleaf morningglory

Site and Design

Treated Plot Width: 6.67 FT
Treated Plot Length: 30 FT
Treated Plot Area: 200.1 FT2 **Treatments:** 8
Replications: 3

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

Soil Description

Description Name: F-7 West

% OM: 3.1

pH: 7.1

CEC: 22.2

Texture: SICL silty clay loam

Soil Name: Kokomo

Fert. Level: G good

Soil Drainage: G good

Application Description

A

Application Date: 6-3-2015
Appl. Start Time: 10:00AM
Appl. Stop Time: 10:30 AM
Application Method: SPRAY
Application Timing: POST
Application Placement: BROFOL
Applied By: Ackley/Lamb
Air Temperature, Unit: 61 F
% Relative Humidity: 86
Wind Velocity, Unit: 4 MPH
Wind Direction: NNE
Dew Presence (Y/N): Y yes
Soil Temperature, Unit: 59 F
Soil Moisture: WET
% Cloud Cover: 100
Next Moisture Occurred On: 6-5-2015
Time to Next Moisture, Unit: 2 DAY

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: GLXMA BSOY
Stage Scale Used: BBCH
Stage Majority, Percent: 12 100
Height, Unit: 4 IN
Height Minimum, Maximum: 3 4
Crop 2 Code, BBCH Scale: ZEAMD BCOR
Stage Scale Used: BBCH
Stage Majority, Percent: 14 100
Height, Unit: 10 IN
Height Minimum, Maximum: 6 12

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: CHEAL W
Stage Majority, Percent: 16 100
Stage Minimum, Percent: 16 100
Stage Maximum, Percent: 18 100
Height, Unit: 2 IN
Height Minimum, Maximum: 1 3
Density, Unit: 3.33 M2

Pest 2 Code, Type, Scale: AMARE W
Stage Majority, Percent: 14 100
Stage Minimum, Percent: 14 100
Stage Maximum, Percent: 16 100
Height, Unit: 0.5 IN
Height Minimum, Maximum: 0.5 2
Density, Unit: 2.67 M2

Pest 3 Code, Type, Scale: AMBTR W
Stage Majority, Percent: 19 100
Stage Minimum, Percent: 14 100
Stage Maximum, Percent: 19 100
Height, Unit: 5 IN
Height Minimum, Maximum: 3 9
Density, Unit: 6.33 M2

Pest 4 Code, Type, Scale: SETFA W
Stage Majority, Percent: 14 100
Stage Minimum, Percent: 12 100
Stage Maximum, Percent: 14 100
Height, Unit: 5 IN
Height Minimum, Maximum: 1 8
Density, Unit: 4.33 M2

Pest 5 Code, Type, Scale: AMBEL W
Stage Majority, Percent: 14 100
Stage Minimum, Percent: 18 100
Stage Maximum, Percent: 14 100
Height, Unit: 2 IN
Height Minimum, Maximum: 1 4

Pest 6 Code, Type, Scale: ABUTH W
Stage Majority, Percent: 12 100
Stage Minimum, Percent: 12 100
Stage Maximum, Percent: 16 100
Height, Unit: 2 In
Height Minimum, Maximum: 1 4

Pest 7 Code, Type, Scale: IPOHE W
Density, Unit: 1.33 M2

Application Equipment

A

Appl. Equipment: 6' BACKPACK
Equipment Type: BACCAI
Operation Pressure, Unit: 44 PSI
Nozzle Type: AIXR
Nozzle Size: 11015
Nozzle Spacing, Unit: 18 IN
Nozzles/Row: 4
Boom Length, Unit: 6.67 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 15 gal/ac
Mix Size, Unit: 1 liters
Propellant: COMCO2

The Ohio State University

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Pest Type	W Weed	W Weed	W Weed
Pest Code	ZEAMX	ZEAMX	ZEAMX
Pest Scientific Name	Zea mays	Zea mays	Zea mays
Pest Name	Corn	Corn	Corn
Crop Code	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Crop Variety	P 0993 HR	P 0993 HR	P 0993 HR
Description	RR/LL	RR/LL	RR/LL
Part Rated	PLANT C	PLANT C	PLANT C
Rating Date	6-11-2015	6-16-2015	6-30-2015
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Days After First/Last Applic.	8 8	13 13	27 27
Trt-Eval Interval	8 DA-A	13 DA-A	27 DA-A
Plant-Eval Interval	35 DP-1	40 DP-1	54 DP-1
Days After Emergence	27 DE-1	32 DE-1	46 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Description	1	2	3
1	Section Three	2 oz/a		A		POST 6-12" CORN	10.0 c	5.0 d	0.0 d
2	Section Three	2 oz/a		A		POST 6-12" CORN	70.0 b	71.7 c	75.0 c
	2 AG 8050	6.4 oz/a		A		POST 6-12" CORN			
3	Section Three	2 oz/a		A		POST 6-12" CORN	75.0 ab	95.3 a	96.0 a
	3 AG 14012	6.4 oz/a		A		POST 6-12" CORN			
4	Section Three	2 oz/a		A		POST 6-12" CORN	73.3 ab	94.3 a	93.3 ab
	4 AG 14039	6.4 oz/a		A		POST 6-12" CORN			
5	Section Three	2 oz/a		A		POST 6-12" CORN	75.0 ab	94.3 a	92.7 ab
	5 AG 14039	8.0 oz/a		A		POST 6-12" CORN			
6	Section Three	2 oz/a		A		POST 6-12" CORN	71.7 b	85.0 b	87.0 b
	6 AG 14039	1 pt/a		A		POST 6-12" CORN			
7	Section Three	2 oz/a		A		POST 6-12" CORN	78.3 a	96.0 a	99.3 a
	7 Destiny HC	1 pt/a		A		POST 6-12" CORN			
8	UTC						0.0 d	0.0 d	0.0 d
	LSD P=.05						5.93	8.00	8.97
	Standard Deviation						3.39	4.57	5.12
	CV						5.97	6.75	7.54
	Grand Mean						56.67	67.71	67.92
	Bartlett's X2						3.132	5.515	8.37
	P(Bartlett's X2)						0.536	0.356	0.137
	Skewness						-1.1826*	-1.0786*	-1.0987*
	Kurtosis						-0.4727	-0.7112	-0.681
	Replicate F						6.091	2.123	0.888
	Replicate Prob(F)						0.0125	0.1566	0.4336
	Treatment F						269.714	242.659	206.968
	Treatment Prob(F)						0.0001	0.0001	0.0001

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

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.

ZEAMX, Zea mays, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Part Rated

PLANT = plant

C = Crop is Part Rated

Rating Type

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

35 DP-1 = 1 GLXMA 5-7-2015

40 DP-1 = 1 GLXMA 5-7-2015

54 DP-1 = 1 GLXMA 5-7-2015