

COMPARISON OF ADJUVANTS ON CAPRENO EFFICACY IN CORN, 2010

Trial ID: C1110 Protocol ID: C1110
Location: Campus Study Director: Andy Chomas
Project ID: Investigator: Wesley Everman

General Trial Information

Study Director: Andy Chomas
Investigator: Wesley Everman

Personnel

Study Director: Andy Chomas
Investigator: Wesley Everman

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 46-61
BBCH Scale: BCOR
Planting Date: May-4-10
Rate, Unit: 30000 S/A
Row Spacing, Unit: 30 IN
Harvested Width, Unit: 5 FT Harvested Length, Unit: 35 FT

Pest Description

Pest 1 Type: W Code: ANGR
Common Name: annual grass
Pest 2 Type: W Code: CHEAL Chenopodium album
Common Name: Common lambsquarters
Pest 3 Type: W Code: AMARE Amaranthus retroflexus
Common Name: Redroot pigweed
Pest 4 Type: W Code: AMBEL Ambrosia artemisiifolia
Common Name: Common ragweed
Pest 5 Type: W Code: ABUTH Abutilon theophrasti
Common Name: Velvetleaf

Site and Design

Plot Width, Unit: 10 FT Site Type: FIELD field
Plot Length, Unit: 35 FT
Plot Area, Unit: 350 FT2 Tillage Type: CONTIL conventional-till
Replications: 3 Study Design: RACOB� Randomized Complete Block (RCB)

Trial Initiation Comments:
Fall Chisel, Spring Field Cultivate X2

Soil Description

% OM: 3.8 Texture: L loam
pH: 6.0
Analyzed By:
300 lb/A 46-0-0, 125 lb/A 19-19-19 in Row

Application Description

A
Application Date: Jun-8-10
Time of Day: 10:00 am
Application Method: SPRAY
Application Timing: POST
Application Placement: BROADC
Air Temperature, Unit: 72 F
% Relative Humidity: 68
Wind Velocity, Unit: 4 MPH
Wind Direction: SE
Soil Temperature, Unit: 62 F
Soil Moisture: 3
% Cloud Cover: 30

Crop Stage At Each Application

A
Crop 1 Code, BBCH Scale: ZEAMX BCOR
Stage Scale Used: BBCH
Stage Majority, Percent: V5
Height, Unit: 15 IN
Height Minimum, Maximum: 13 15

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Pest Stage At Each Application**A**

Pest 1 Code, Type, Scale: ANGR W
Stage Majority, Percent: L4
Stage Minimum, Percent: L3
Stage Maximum, Percent: L5
Height, Unit: 7 IN
Height Minimum, Maximum: 5 10
Density, Unit: 4 FT2
Pest 2 Code, Type, Scale: CHEAL W
Stage Majority, Percent: L8
Stage Minimum, Percent: L4
Stage Maximum, Percent: L12
Height, Unit: 6 IN
Height Minimum, Maximum: 2 10
Density, Unit: 23 FT2
Pest 3 Code, Type, Scale: AMARE W
Stage Majority, Percent: L8
Stage Minimum, Percent: L6
Stage Maximum, Percent: L8
Height, Unit: 7 IN
Height Minimum, Maximum: 7 8
Density, Unit: 1 FT2
Pest 4 Code, Type, Scale: AMBEL W
Stage Majority, Percent: L6
Stage Minimum, Percent: L4
Stage Maximum, Percent: L6
Height, Unit: 8 IN
Height Minimum, Maximum: 4 8
Density, Unit: 8 FT2
Pest 5 Code, Type, Scale: ABUTH W
Stage Majority, Percent: L4
Stage Minimum, Percent: L3
Stage Maximum, Percent: L5
Height, Unit: 5 IN
Height Minimum, Maximum: 5 7
Density, Unit: 1 FT2

Application Equipment

Equipment Type: CUB
Operating Pressure, Unit: 30 PSI
Nozzle Type: FF
Nozzle Size: 8003
Nozzle Spacing, Unit: 20 IN
Boom Length, Unit: 100 IN
Boom Height, Unit: 27 IN
Ground Speed, Unit: 3.5 MPH
Carrier: WATER
Spray Volume, Unit: 20 gal/ac
Mix Size, Unit: 1 gallons

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ANGR	CHEAL	AMARA	AMBEL	ABUTH	ANGR
Crop Code	ZEAMX					
Rating Date	Jun-22-10	Jun-22-10	Jun-22-10	Jun-22-10	Jun-22-10	Jul-6-10
Rating Type	injury	control	control	control	control	control
Rating Unit	%	%	%	%	%	%
Trt-Eval Interval	14 DAPO	14 DAPO	14 DAPO	14 DAPO	14 DAPO	28 DAPO

Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Growth Stage	1	2	3	4	5	6	7
1	Non-Treated					0	0	0	0	0	0	0
2	Capreno	3.45	SC	3 fl oz/a	MP	0	88	99	100	100	100	88
	2 Atrazine	4	L	1 pt/a	MP							
	2 Herbimax	100	L	1 % v/v	MP							
	2 Ammonium Sulfate	100	DF	8.5 lb/100 gal	MP							
3	Halex GT	4.39	L	3.6 pt/a	MP	0	97	96	100	98	100	99
	3 Activator 90	100	L	0.25 % v/v	MP							
	3 Ammonium Sulfate	100	DF	8.5 lb/100 gal	MP							
4	Capreno	3.45	SC	3 fl oz/a	MP	0	99	100	100	100	100	99
	4 Atrazine	4	L	1 pt/a	MP							
	4 Roundup PowerMAX	4.5	L	22 fl oz/a	MP							
	4 Superb HC	100	L	0.5 % v/v	MP							
	4 Ammonium Sulfate	100	DF	8.5 lb/100 gal	MP							
5	Capreno	3.45	SC	3 fl oz/a	MP	0	86	97	100	100	99	83
	5 Atrazine	4	L	1 pt/a	MP							
	5 Herbimax	100	L	1 % v/v	MP							
	5 WTHR GUARD COMPLT	100	L	2 qt/100 gal	MP							
6	Capreno	3.45	SC	3 fl oz/a	MP	0	86	99	100	99	100	82
	6 Atrazine	4	L	1 pt/a	MP							
	6 Superb HC	100	L	0.5 % v/v	MP							
	6 Class Act	100	L	5 qt/100 gal	MP							
	6 Interlock	100	L	4 fl oz/a	MP							
7	Capreno	3.45	SC	3 fl oz/a	MP	0	87	98	100	100	99	88
	7 Atrazine	4	L	1 pt/a	MP							
	7 Herbimax	100	L	2 qt/100 gal	MP							
	7 Hel-Fire	100	L	1 qt/100 gal	MP							
	7 Grounded	100	L	1 gal/100 gal	MP							
8	Capreno	3.45	SC	3 fl oz/a	MP	0	83	97	100	100	93	77
	8 Atrazine	4	L	1 pt/a	MP							
	8 Hi-Load	100	L	1 pt/a	MP							
	8 Bron Max E.D.T.	100	L	2 qt/100 gal	MP							
	LSD (P=.05)					0.0	4.8	3.8	0.4	1.8	3.6	6.5
	Standard Deviation					0.0	2.7	2.2	0.2	1.0	2.1	3.7
	CV					0.0	3.51	2.55	0.23	1.19	2.39	4.82

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	AMARE	AMBEL	ABUTH	ANGR	CHEAL	AMARE
Crop Code							
Rating Date	Jul-6-10	Jul-6-10	Jul-6-10	Jul-6-10	Jul-20-10	Jul-20-10	Jul-20-10
Rating Type	control	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%
Trt-Eval Interval	28 DAPO	28 DAPO	28 DAPO	28 DAPO	42 DAPO	42 DAPO	42 DAPO

Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Growth Stage	8	9	10	11	12	13	14
1	Non-Treated					0	0	0	0	0	0	0
2	Capreno	3.45	SC	3 fl oz/a	MP	100	100	100	100	82	100	100
	Atrazine	4	L	1 pt/a	MP							
	Herbimax	100	L	1 % v/v	MP							
	Ammonium Sulfate	100	DF	8.5 lb/100 gal	MP							
3	Halex GT	4.39	L	3.6 pt/a	MP	99	99	99	100	95	100	97
	Activator 90	100	L	0.25 % v/v	MP							
	Ammonium Sulfate	100	DF	8.5 lb/100 gal	MP							
4	Capreno	3.45	SC	3 fl oz/a	MP	100	100	100	100	97	100	100
	Atrazine	4	L	1 pt/a	MP							
	Roundup PowerMAX	4.5	L	22 fl oz/a	MP							
	Superb HC	100	L	0.5 % v/v	MP							
	Ammonium Sulfate	100	DF	8.5 lb/100 gal	MP							
5	Capreno	3.45	SC	3 fl oz/a	MP	100	100	100	100	83	100	100
	Atrazine	4	L	1 pt/a	MP							
	Herbimax	100	L	1 % v/v	MP							
	WTHR GUARD COMPLT	100	L	2 qt/100 gal	MP							
6	Capreno	3.45	SC	3 fl oz/a	MP	100	100	100	100	79	100	100
	Atrazine	4	L	1 pt/a	MP							
	Superb HC	100	L	0.5 % v/v	MP							
	Class Act	100	L	5 qt/100 gal	MP							
	Interlock	100	L	4 fl oz/a	MP							
7	Capreno	3.45	SC	3 fl oz/a	MP	100	100	100	100	82	100	100
	Atrazine	4	L	1 pt/a	MP							
	Herbimax	100	L	2 qt/100 gal	MP							
	Hel-Fire	100	L	1 qt/100 gal	MP							
	Grounded	100	L	1 gal/100 gal	MP							
8	Capreno	3.45	SC	3 fl oz/a	MP	100	100	100	96	70	100	100
	Atrazine	4	L	1 pt/a	MP							
	Hi-Load	100	L	1 pt/a	MP							
	Bron Max E.D.T.	100	L	2 qt/100 gal	MP							
	LSD (P=.05)					0.7	0.7	0.7	2.5	8.0	0.0	3.6
	Standard Deviation					0.4	0.4	0.4	1.4	4.6	0.0	2.0
	CV					0.47	0.47	0.47	1.64	6.23	0.0	2.34

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Pest Type	W Weed	W Weed	
Pest Code	AMBEL	ABUTH	
Crop Code			ZEAMX
Rating Date	Jul-20-10	Jul-20-10	Oct-6-10
Rating Type	control	control	yield
Rating Unit	%	%	bu/ac
Trt-Eval Interval	42 DAPO	42 DAPO	HARVEST

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Growth Stage	15	16	17
1	Non-Treated					0	0	46
2	Capreno	3.45	SC	3 fl oz/a	MP	100	100	221
	2 Atrazine	4	L	1 pt/a	MP			
	2 Herbimax	100	L	1 % v/v	MP			
	2 Ammonium Sulfate	100	DF	8.5 lb/100 gal	MP			
3	Halex GT	4.39	L	3.6 pt/a	MP	100	100	232
	3 Activator 90	100	L	0.25 % v/v	MP			
	3 Ammonium Sulfate	100	DF	8.5 lb/100 gal	MP			
4	Capreno	3.45	SC	3 fl oz/a	MP	100	100	224
	4 Atrazine	4	L	1 pt/a	MP			
	4 Roundup PowerMAX	4.5	L	22 fl oz/a	MP			
	4 Superb HC	100	L	0.5 % v/v	MP			
	4 Ammonium Sulfate	100	DF	8.5 lb/100 gal	MP			
5	Capreno	3.45	SC	3 fl oz/a	MP	100	100	214
	5 Atrazine	4	L	1 pt/a	MP			
	5 Herbimax	100	L	1 % v/v	MP			
	5 WTHR GUARD COMPLT	100	L	2 qt/100 gal	MP			
6	Capreno	3.45	SC	3 fl oz/a	MP	100	100	224
	6 Atrazine	4	L	1 pt/a	MP			
	6 Superb HC	100	L	0.5 % v/v	MP			
	6 Class Act	100	L	5 qt/100 gal	MP			
	6 Interlock	100	L	4 fl oz/a	MP			
7	Capreno	3.45	SC	3 fl oz/a	MP	100	100	228
	7 Atrazine	4	L	1 pt/a	MP			
	7 Herbimax	100	L	2 qt/100 gal	MP			
	7 Hel-Fire	100	L	1 qt/100 gal	MP			
	7 Grounded	100	L	1 gal/100 gal	MP			
8	Capreno	3.45	SC	3 fl oz/a	MP	100	92	223
	8 Atrazine	4	L	1 pt/a	MP			
	8 Hi-Load	100	L	1 pt/a	MP			
	8 Bron Max E.D.T.	100	L	2 qt/100 gal	MP			
	LSD (P=.05)					0.0	4.7	11.1
	Standard Deviation					0.0	2.7	6.3
	CV					0.0	3.12	3.14