

COMPARISON OF ADJUVANTS IN CORN, 2010

Trial ID: C0810 Protocol ID: C0810
 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: P37Y14
BBCH Scale: BCOR **Planting Date:** May-5-10
Rate, Unit: 30000 S/A
Row Spacing, Unit: 30 IN

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: 4 **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-4-10
Time of Day: 4:30 pm
Application Method: SPRAY
Application Timing: POST
Application Placement: BROADC
Air Temperature, Unit: 82 F
% Relative Humidity: 59
Wind Velocity, Unit: 5 MPH
Wind Direction: SW
Soil Temperature, Unit: 72 F
Soil Moisture: 2
% Cloud Cover: 95

Crop Stage At Each Application

A
Crop 1 Code, BBCH Scale: ZEAMX BCOR
Stage Scale Used: BBCH
Stage Majority, Percent: V4
Height, Unit: 10 IN
Height Minimum, Maximum: 9 12

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Pest Stage At Each Application**A**

Pest 1 Code, Type, Scale: ANGR W
Stage Majority, Percent: L4
Stage Minimum, Percent: L4
Stage Maximum, Percent: L6
Height, Unit: 5 IN
Height Minimum, Maximum: 0.5 8
Density, Unit: 16 FT2
Pest 2 Code, Type, Scale: CHEAL W
Stage Majority, Percent: L6
Stage Minimum, Percent: L4
Stage Maximum, Percent: L8
Height, Unit: 3 IN
Height Minimum, Maximum: 0.5 5
Density, Unit: 26 FT2
Pest 3 Code, Type, Scale: AMARE W
Stage Majority, Percent: L6
Stage Minimum, Percent: L5
Stage Maximum, Percent: L9
Height, Unit: 5 IN
Height Minimum, Maximum: 1 7
Density, Unit: 1 FT2
Pest 4 Code, Type, Scale: AMBEL W
Stage Majority, Percent: L4
Stage Minimum, Percent: L4
Stage Maximum, Percent: L6
Height, Unit: 4 IN
Height Minimum, Maximum: 1 6
Density, Unit: 11 FT2
Pest 5 Code, Type, Scale: ABUTH W
Stage Majority, Percent: L3
Stage Minimum, Percent: L3
Stage Maximum, Percent: L4
Height, Unit: 3 IN
Height Minimum, Maximum: 3 5
Density, Unit: 1 FT2

Application Equipment

Equipment Type: BKPK
Operating Pressure, Unit: 30 PSI
Nozzle Type: AI
Nozzle Size: 110015
Nozzle Spacing, Unit: 20 IN
Boom Length, Unit: 100 IN
Boom Height, Unit: 22 IN
Ground Speed, Unit: 3.7 MPH
Carrier: WATER
Spray Volume, Unit: 10 gal/ac
Mix Size, Unit: 1 gallons

MSU Weed Science Research Program

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ANGR	CHEAL	AMARE	AMBEL	ABUTH	ANGR	ANGR
Crop Code	ZEAMX						ZEAMX
Rating Date	Jun-11-10	Jun-11-10	Jun-11-10	Jun-11-10	Jun-11-10	Jun-11-10	Jun-18-10
Rating Type	injury	control	control	control	control	control	injury
Rating Unit	%	%	%	%	%	%	%
Trt-Eval Interval	7 DAPO	7 DAPO	7 DAPO	7 DAPO	7 DAPO	7 DAPO	14 DAPO

Trt No.	Treatment Name	Form Type	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
1	1189-1	L	3 pt/100 gal	POST	0	56	50	48	48	48	0	66
1	1193-1	L	4 fl oz/a	POST								
2	1189-1	L	3 pt/100 gal	POST	0	60	50	50	50	50	0	58
2	1211-1	L	4 fl oz/a	POST								
3	1095-1	L	3 pt/100 gal	POST	0	53	49	49	49	49	0	54
3	1193-1	L	4 fl oz/a	POST								
4	1095-1	L	3 pt/100 gal	POST	0	61	54	50	50	50	0	73
4	1211-1	L	4 fl oz/a	POST								
5	1186-1	L	3 qt/100 gal	POST	0	60	43	45	45	45	0	70
5	1193-1	L	4 fl oz/a	POST								
6	1186-1	L	3 qt/100 gal	POST	0	73	58	54	49	51	0	83
6	1211-1	L	4 fl oz/a	POST								
7	1185-1	DF	10 lb/100 gal	POST	0	10	10	10	10	10	0	13
7	1193-1	L	4 fl oz/a	POST								
8	1185-1	DF	10 lb/100 gal	POST	0	5	5	5	5	5	0	8
8	1211-1	L	4 fl oz/a	POST								
9	1222-1	L	1 qt/100 gal	POST	0	43	38	35	35	35	0	63
9	1193-1	L	4 fl oz/a	POST								
10	1222-1	L	1 qt/100 gal	POST	0	5	5	5	5	5	0	0
10	1211-1	L	4 fl oz/a	POST								
11	Non-Treated				0	0	0	0	0	0	0	3
LSD (P=.05)					0.0	14.0	8.5	8.4	7.2	6.9	0.0	23.5
Standard Deviation					0.0	9.7	5.9	5.8	5.0	4.8	0.0	16.2
CV					0.0	25.1	18.07	18.34	15.98	15.1	0.0	36.6

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	AMARE	AMBEL	ABUTH	ANGR	CHEAL	AMARE	AMBEL	ABUTH				
Crop Code													
Rating Date	Jun-18-10	Jun-18-10	Jun-18-10	Jun-18-10	Jul-1-10	Jul-1-10	Jul-1-10	Jul-1-10	Jul-1-10	Jul-1-10	Jul-1-10	Jul-1-10	Jul-1-10
Rating Type	control	control	control	control	control	control	control	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%	%	%	%	%	%	%
Trt-Eval Interval	14 DAPO	14 DAPO	14 DAPO	14 DAPO	27 DAPO	27 DAPO	27 DAPO	27 DAPO	27 DAPO	27 DAPO	27 DAPO	27 DAPO	27 DAPO

Trt No.	Treatment Name	Form Type	Rate Unit	Growth Stage	9	10	11	12	13	14	15	16	17	18	19
1	1189-1	L	3 pt/100 gal	POST	41	54	54	40	66	48	83	48	56		
1	1193-1	L	4 fl oz/a	POST											
2	1189-1	L	3 pt/100 gal	POST	53	60	56	43	64	60	75	48	53		
2	1211-1	L	4 fl oz/a	POST											
3	1095-1	L	3 pt/100 gal	POST	51	60	59	39	53	55	64	50	54		
3	1193-1	L	4 fl oz/a	POST											
4	1095-1	L	3 pt/100 gal	POST	49	49	63	45	68	60	74	49	59		
4	1211-1	L	4 fl oz/a	POST											
5	1186-1	L	3 qt/100 gal	POST	28	39	50	43	64	33	74	55	66		
5	1193-1	L	4 fl oz/a	POST											
6	1186-1	L	3 qt/100 gal	POST	45	48	56	45	74	41	84	59	60		
6	1211-1	L	4 fl oz/a	POST											
7	1185-1	DF	10 lb/100 gal	POST	0	4	18	10	25	15	33	49	60		
7	1193-1	L	4 fl oz/a	POST											
8	1185-1	DF	10 lb/100 gal	POST	0	0	33	15	45	5	35	64	75		
8	1211-1	L	4 fl oz/a	POST											
9	1222-1	L	1 qt/100 gal	POST	36	54	41	35	50	43	81	45	58		
9	1193-1	L	4 fl oz/a	POST											
10	1222-1	L	1 qt/100 gal	POST	0	0	0	0	18	23	30	18	65		
10	1211-1	L	4 fl oz/a	POST											
11	Non-Treated				0	0	0	0	0	0	0	0	0		
LSD (P=.05)					16.1	17.3	14.1	12.9	27.4	18.4	27.9	19.1	12.0	. .	
Standard Deviation					11.2	12.0	9.8	9.0	19.0	12.7	19.3	13.3	8.3	. .	
CV					40.63	36.07	25.02	31.41	39.75	36.68	33.71	30.22	15.05	. .	