COMPARISONS OF ADJUVANTS ON LAUDIS EFFICACY IN CORN, 2009

Trial ID: C1209 Study Dir.: Andy Chomas
Conducted: CAMPUS Investigator: Wesley Everman

Date Planted: 5/7/09 **Row Spacing:** 30 IN
Variety: DEKALB 46-60 **No. of Reps:** 3
Population: 31,000 S/A **% OM:** 2.9
Soil Type: Loam **pH:** 6.4
Plot Size: 10 **X** 35 **FT** **Design:** RANDOMIZED COMPLETE BLOCK

Tillage: Fall Chisel. Spring Field Cultivated X2.
Fertilizer: 300 lbs/A 46-0-0 Broadcast. 125 lbs/A 19-19-19 In Row at Planting.

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	ANGR	Annual Grass species	
2.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
3.	AMARE	PIGWEED, REDROOT	AMARANTHUS RETROFLEXUS L.
4.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
Crop	**Code**	**Common Name**	
1.	ZEAMX	CORN, FIELD	

Application Description

	A
Application Timing:	MP
Date Treated:	6/12/09
Time Treated:	10:30 AM
% Cloud Cover:	0
Air Temp., Unit:	77 F
% Relative Humidity:	45
Wind Speed/Unit/Dir:	3 mph N
Soil Temp., Unit:	63 F
Soil/Leaf Surface M:	5
Soil Moist (1=w 5=d):	3

Crop Stage at Each Application

	A
Crop Name:	ZEAMX
Height (In.):	10-13(12)
Stage (L):	7:V4-5(5)

Weed Stage at Each Application

	A
Weed 1 Name:	ANGR
Height (In.):	.25-10(8)
Stage (L):	1-6(5)
Weed 2 Name:	CHEAL
Height (In.):	.25-7(5)
Stage (L):	cot-6(5)
Weed 3 Name:	AMARE
Height (In.):	.25-8(6)
Stage (L):	cot-8(7)
Weed 4 Name:	ABUTH
Height (In.):	.25-7(5)
Stage (L):	cot-3(3)

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Weed Density (plants/sq. ft.)

	1
Date:	6/12/09
Weed Name:	ANGR
Density:	33
Date:	6/12/09
Weed Name:	CHEAL
Density:	62
Date:	6/12/09
Weed Name:	AMARE
Density:	3
Date:	6/12/09
Weed Name:	AMBEL
Density:	0
Date:	6/12/09
Weed Name:	ABUTH
Density:	1

Application Equipment

Appl	**Sprayer Type**	**Speed MPH**	**Nozzle Type**	**Nozzle Size**	**Nozzle Height**	**Nozzle Spacing**	**Boom Width**	**GPA**	**Carrier**	**PSI**
A	CUB	3.5	FF	8003	28"	20"	100"	20	H2O	30

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Weed Code								ANGR	CHEAL	AMARE	ABUTH		ANGR	CHEAL
Crop Code							ZEAMX					ZEAMX		
Rating Data Type							injury	control	control	control	control	injury	control	control
Rating Unit							percent	percent	percent	percent	percent	percent	percent	percent
Rating Date							6/18/09	6/18/09	6/18/09	6/18/09	6/18/09	6/26/09	6/26/09	6/26/09
Trt-Eval Interval							6 DAMP	6 DAMP	6 DAMP	6 DAMP	6 DAMP	14 DAMP	14 DAMP	14 DAMP
ARM Action Codes														
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	1	2	3	4	5	6	7	8
1	Non-Treated						0	0	0	0	0	0	0	0
2	Laudis	3.5	SC	3	fl oz/a	MP	0	93	93	100	98	0	81	100
2	Atrazine	4	L	1	pt/a	MP								
2	MSO (Loveland)		L	1	% v/v	MP								
2	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
3	Laudis	3.5	SC	3	fl oz/a	MP	0	95	88	100	97	0	81	100
3	Atrazine	4	L	1	pt/a	MP								
3	MSO (Loveland)		L	0.75	% v/v	MP								
3	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
4	Laudis	3.5	SC	3	fl oz/a	MP	0	72	38	73	83	0	63	87
4	Atrazine	4	L	1	pt/a	MP								
4	MSO (Loveland)		L	0.5	% v/v	MP								
4	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
5	Laudis	3.5	SC	3	fl oz/a	MP	2	73	53	83	90	0	64	90
5	Atrazine	4	L	1	pt/a	MP								
5	Destiny HC		L	0.5	% v/v	MP								
5	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
6	Laudis	3.5	SC	3	fl oz/a	MP	2	95	96	100	100	0	73	100
6	Atrazine	4	L	1	pt/a	MP								
6	Dyne-Amic		L	0.5	% v/v	MP								
6	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
7	Laudis	3.5	SC	3	fl oz/a	MP	0	93	99	100	100	0	79	100
7	Atrazine	4	L	1	pt/a	MP								
7	Supersprea MSO		L	1.5	pt/a	MP								
7	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
8	Laudis	3.5	SC	3	fl oz/a	MP	0	96	99	100	100	0	80	100
8	Atrazine	4	L	1	pt/a	MP								
8	MSO (Loveland)		L	1.2	pt/a	MP								
8	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
9	Laudis	3.5	SC	3	fl oz/a	MP	0	93	98	97	100	0	78	100
9	Atrazine	4	L	1	pt/a	MP								
9	MSO (Loveland)		L	1	pt/a	MP								
9	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
10	Laudis	3.5	SC	3	fl oz/a	MP	2	67	47	87	90	0	60	73
10	Atrazine	4	L	1	pt/a	MP								
10	MSO (Loveland)		L	0.8	pt/a	MP								
10	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
LSD (P=.05)							2.7	10.2	20.2	14.6	7.4	0.0	8.3	10.6
Standard Deviation							1.6	5.9	11.8	8.5	4.3	0.0	4.8	6.2
CV							290.7	7.63	16.58	10.1	5.0	0.0	7.34	7.28

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Weed Code							AMARE	ABUTH		ANGR	CHEAL	AMARE	ABUTH	ANGR
Crop Code									ZEAMX					
Rating Data Type							control	control	injury	control	control	control	control	control
Rating Unit							percent	percent	percent	percent	percent	percent	percent	percent
Rating Date							6/26/09	6/26/09	7/10/09	7/10/09	7/10/09	7/10/09	7/10/09	7/24/09
Trt-Eval Interval							14 DAMP	14 DAMP	28 DAMP	28 DAMP	28 DAMP	28 DAMP	28 DAMP	42 DAMP
ARM Action Codes														
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	9	10	11	12	13	14	15	16
1	Non-Treated						0	0	0	0	0	0	0	0
2	Laudis	3.5	SC	3	fl oz/a	MP	100	97	0	74	100	96	100	74
2	Atrazine	4	L	1	pt/a	MP								
2	MSO (Loveland)		L	1	% v/v	MP								
2	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
3	Laudis	3.5	SC	3	fl oz/a	MP	100	100	0	72	100	98	99	72
3	Atrazine	4	L	1	pt/a	MP								
3	MSO (Loveland)		L	0.75	% v/v	MP								
3	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
4	Laudis	3.5	SC	3	fl oz/a	MP	93	93	0	57	97	93	98	57
4	Atrazine	4	L	1	pt/a	MP								
4	MSO (Loveland)		L	0.5	% v/v	MP								
4	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
5	Laudis	3.5	SC	3	fl oz/a	MP	90	97	0	57	98	88	94	58
5	Atrazine	4	L	1	pt/a	MP								
5	Destiny HC		L	0.5	% v/v	MP								
5	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
6	Laudis	3.5	SC	3	fl oz/a	MP	100	100	0	69	100	96	100	68
6	Atrazine	4	L	1	pt/a	MP								
6	Dyne-Amic		L	0.5	% v/v	MP								
6	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
7	Laudis	3.5	SC	3	fl oz/a	MP	100	100	0	71	100	97	100	70
7	Atrazine	4	L	1	pt/a	MP								
7	Supersprea MSO		L	1.5	pt/a	MP								
7	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
8	Laudis	3.5	SC	3	fl oz/a	MP	100	100	0	69	97	98	100	69
8	Atrazine	4	L	1	pt/a	MP								
8	MSO (Loveland)		L	1.2	pt/a	MP								
8	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
9	Laudis	3.5	SC	3	fl oz/a	MP	100	100	0	67	100	99	100	70
9	Atrazine	4	L	1	pt/a	MP								
9	MSO (Loveland)		L	1	pt/a	MP								
9	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
10	Laudis	3.5	SC	3	fl oz/a	MP	73	92	0	55	97	91	97	59
10	Atrazine	4	L	1	pt/a	MP								
10	MSO (Loveland)		L	0.8	pt/a	MP								
10	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
LSD (P=.05)							10.9	7.8	0.0	6.5	3.9	7.6	4.1	6.9
Standard Deviation							6.4	4.6	0.0	3.8	2.3	4.5	2.4	4.1
CV							7.42	5.2	0.0	6.46	2.57	5.2	2.72	6.79

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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	17	18	19	20
	Weed Code						CHEAL	AMARE	ABUTH	
	Crop Code									ZEAMX
	Rating Data Type						control	control	control	yield
	Rating Unit						percent	percent	percent	bu/ac
	Rating Date						7/24/09	7/24/09	7/24/09	11/5/09
	Trt-Eval Interval						42 DAMP	42 DAMP	42 DAMP	HARVEST
	ARM Action Codes									
1	Non-Treated						0	0	0	119
2	Laudis	3.5	SC	3	fl oz/a	MP	100	98	100	234
2	Atrazine	4	L	1	pt/a	MP				
2	MSO (Loveland)		L	1	% v/v	MP				
2	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP				
3	Laudis	3.5	SC	3	fl oz/a	MP	100	100	100	227
3	Atrazine	4	L	1	pt/a	MP				
3	MSO (Loveland)		L	0.75	% v/v	MP				
3	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP				
4	Laudis	3.5	SC	3	fl oz/a	MP	100	100	100	224
4	Atrazine	4	L	1	pt/a	MP				
4	MSO (Loveland)		L	0.5	% v/v	MP				
4	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP				
5	Laudis	3.5	SC	3	fl oz/a	MP	97	90	100	217
5	Atrazine	4	L	1	pt/a	MP				
5	Destiny HC		L	0.5	% v/v	MP				
5	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP				
6	Laudis	3.5	SC	3	fl oz/a	MP	100	100	100	230
6	Atrazine	4	L	1	pt/a	MP				
6	Dyne-Amic		L	0.5	% v/v	MP				
6	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP				
7	Laudis	3.5	SC	3	fl oz/a	MP	100	100	100	238
7	Atrazine	4	L	1	pt/a	MP				
7	Superspread MSO		L	1.5	pt/a	MP				
7	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP				
8	Laudis	3.5	SC	3	fl oz/a	MP	100	100	100	225
8	Atrazine	4	L	1	pt/a	MP				
8	MSO (Loveland)		L	1.2	pt/a	MP				
8	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP				
9	Laudis	3.5	SC	3	fl oz/a	MP	98	100	100	226
9	Atrazine	4	L	1	pt/a	MP				
9	MSO (Loveland)		L	1	pt/a	MP				
9	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP				
10	Laudis	3.5	SC	3	fl oz/a	MP	100	100	97	213
10	Atrazine	4	L	1	pt/a	MP				
10	MSO (Loveland)		L	0.8	pt/a	MP				
10	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP				
	LSD (P=.05)						3.3	7.4	3.1	25.0
	Standard Deviation						1.9	4.3	1.8	14.6
	CV						2.18	4.86	2.04	6.77