

MSU Weed Science Research Program

EVALUATION OF DEPOSTITION AIDS ON LAUDIS EFFICACY IN CORN, 2009

Trial ID: C1409
Conducted: CAMPUS

Study Dir.: Andy Chomas
Investigator: Wesley Everman

Date Planted: 5/7/09 **Row Spacing:** 30 IN
Variety: DEKALB 46-60 **No. of Reps:** 4
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	PIGWEEED, 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: 10:45 AM
% Cloud Cover: 0
Air Temp., Unit: 85 F
% Relative Humidity: 25
Wind Speed/Unit/Dir: 3 mph N
Soil Temp., Unit: 65 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)

MSU Weed Science Research Program
EVALUATION OF DEPOSTITION AIDS ON LAUDIS EFFICACY IN CORN, 2009

Trial ID: C1409
Conducted: CAMPUS

Study Dir.: Andy Chomas
Investigator: Wesley Everman

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

MSU Weed Science Research Program

EVALUATION OF DEPOSITION AIDS ON LAUDIS EFFICACY IN CORN, 2009

Trial ID: C1409
 Conducted: CAMPUS

Study Dir.: Andy Chomas
 Investigator: Wesley Everman

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	95	93	99	100	0	74	100
2	Atrazine	4	L	1	pt/a	MP								
2	MSO		L	1	% v/v	MP								
2	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
3	Impact	2.8	SC	0.75	fl oz/a	MP	0	99	94	100	100	0	91	100
3	Atrazine	4	L	1	pt/a	MP								
3	MSO		L	1	% 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	97	93	96	94	0	77	100
4	Atrazine	4	L	1	pt/a	MP								
4	MSO		L	1	% v/v	MP								
4	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
4	Compadre		L	1	pt/100 gal	MP								
5	Laudis	3.5	SC	3	fl oz/a	MP	0	93	93	100	99	0	75	100
5	Atrazine	4	L	1	pt/a	MP								
5	MSO		L	1	% v/v	MP								
5	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
5	Interlock		L	4	fl oz/a	MP								
6	Laudis	3.5	SC	3	fl oz/a	MP	0	97	93	100	100	0	73	100
6	Atrazine	4	L	1	pt/a	MP								
6	MSO		L	1	% v/v	MP								
6	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
6	Grounded		L	1	gal/100 gal	MP								
7	Laudis	3.5	SC	3	fl oz/a	MP	1	96	96	96	96	0	73	100
7	Atrazine	4	L	1	pt/a	MP								
7	In-Place		L	1.1875	fl oz/a	MP								
7	MSO		L	1	% v/v	MP								
7	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP								
LSD (P=.05)							1.4	4.8	7.4	6.2	6.1	0.0	5.8	0.0
Standard Deviation							0.9	3.2	5.0	4.2	4.1	0.0	3.9	0.0
CV							529.15	3.91	6.23	4.92	4.9	0.0	5.95	0.0

MSU Weed Science Research Program

EVALUATION OF DEPOSITION AIDS ON LAUDIS EFFICACY IN CORN, 2009

Trial ID: C1409
 Conducted: CAMPUS

Study Dir.: Andy Chomas
 Investigator: Wesley Everman

Weed Code	AMARE	ABUTH		ANGR	CHEAL	AMARE	ABUTH
Crop Code			ZEAMX				
Rating Data Type	control	control	injury	control	control	control	control
Rating Unit	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
Trt-Eval Interval	14 DAMP	14 DAMP	28 DAMP	28 DAMP	28 DAMP	28 DAMP	28 DAMP
ARM Action Codes							

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	9	10	11	12	13	14	15
1	Non-Treated						0	0	0	0	0	0	0
2	Laudis	3.5	SC	3	fl oz/a	MP	95	100	0	69	100	96	99
2	Atrazine	4	L	1	pt/a	MP							
2	MSO		L	1	% v/v	MP							
2	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP							
3	Impact	2.8	SC	0.75	fl oz/a	MP	93	100	0	86	100	89	100
3	Atrazine	4	L	1	pt/a	MP							
3	MSO		L	1	% v/v	MP							
3	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP							
4	Laudis	3.5	SC	3	fl oz/a	MP	98	100	0	70	100	97	100
4	Atrazine	4	L	1	pt/a	MP							
4	MSO		L	1	% v/v	MP							
4	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP							
4	Compadre		L	1	pt/100 gal	MP							
5	Laudis	3.5	SC	3	fl oz/a	MP	100	100	0	69	100	99	100
5	Atrazine	4	L	1	pt/a	MP							
5	MSO		L	1	% v/v	MP							
5	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP							
5	Interlock		L	4	fl oz/a	MP							
6	Laudis	3.5	SC	3	fl oz/a	MP	100	100	0	68	100	98	100
6	Atrazine	4	L	1	pt/a	MP							
6	MSO		L	1	% v/v	MP							
6	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP							
6	Grounded		L	1	gal/100 gal	MP							
7	Laudis	3.5	SC	3	fl oz/a	MP	100	100	0	68	100	98	100
7	Atrazine	4	L	1	pt/a	MP							
7	In-Place		L	1.1875	fl oz/a	MP							
7	MSO		L	1	% v/v	MP							
7	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP							
LSD (P=.05)							5.1	0.0	0.0	3.2	0.0	4.3	1.0
Standard Deviation							3.4	0.0	0.0	2.1	0.0	2.9	0.7
CV							4.12	0.0	0.0	3.49	0.0	3.54	0.82

MSU Weed Science Research Program

EVALUATION OF DEPOSITION AIDS ON LAUDIS EFFICACY IN CORN, 2009

Trial ID: C1409
 Conducted: CAMPUS

Study Dir.: Andy Chomas
 Investigator: Wesley Everman

Weed Code	ANGR	CHEAL	AMARE	ABUTH	
Crop Code					ZEAMX
Rating Data Type	control	control	control	control	yield
Rating Unit	percent	percent	percent	percent	bu/ac
Rating Date	7/24/09	7/24/09	7/24/09	7/24/09	11/5/09
Trt-Eval Interval	42 DAMP	42 DAMP	42 DAMP	42 DAMP	HARVEST
ARM Action Codes					

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	16	17	18	19	20
1	Non-Treated						0	0	0	0	108
2	Laudis	3.5	SC	3	fl oz/a	MP	70	100	98	100	225
2	Atrazine	4	L	1	pt/a	MP					
2	MSO		L	1	% v/v	MP					
2	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP					
3	Impact	2.8	SC	0.75	fl oz/a	MP	81	99	95	99	227
3	Atrazine	4	L	1	pt/a	MP					
3	MSO		L	1	% v/v	MP					
3	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP					
4	Laudis	3.5	SC	3	fl oz/a	MP	73	100	100	100	222
4	Atrazine	4	L	1	pt/a	MP					
4	MSO		L	1	% v/v	MP					
4	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP					
4	Compadre		L	1	pt/100 gal	MP					
5	Laudis	3.5	SC	3	fl oz/a	MP	69	100	100	100	229
5	Atrazine	4	L	1	pt/a	MP					
5	MSO		L	1	% v/v	MP					
5	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP					
5	Interlock		L	4	fl oz/a	MP					
6	Laudis	3.5	SC	3	fl oz/a	MP	67	99	100	100	215
6	Atrazine	4	L	1	pt/a	MP					
6	MSO		L	1	% v/v	MP					
6	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP					
6	Grounded		L	1	gal/100 gal	MP					
7	Laudis	3.5	SC	3	fl oz/a	MP	68	100	100	100	221
7	Atrazine	4	L	1	pt/a	MP					
7	In-Place		L	1.1875	fl oz/a	MP					
7	MSO		L	1	% v/v	MP					
7	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP					
LSD (P=.05)							4.8	1.6	6.4	1.4	30.2
Standard Deviation							3.2	1.1	4.3	0.9	20.3
CV							5.3	1.29	5.1	1.1	9.84