

MSU Weed Science Research Program

WEED CONTROL IN CORN WITH VARIOUS ADJUVANTS, 2011

Trial ID: C1011 Study Dir.: Andy Chomas
Conducted: CAMPUS Investigator: Christy Sprague

Date Planted: 5/10/2011 Row Spacing: 30 IN
Variety: DKC 46-61 No. of Reps: 4
Population: 31,500 % OM: 3.1
Soil Type: LOAM pH: 6.0
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.

Application Description

A
Application Timing: POST
Date Treated: 6/8/2011
Time Treated: 9:50 AM
% Cloud Cover: 0
Air Temp., Unit: 91 F
% Relative Humidity: 60
Wind Speed/Unit/Dir: 6 mph SW
Soil Temp., Unit: 78 F
Soil/Leaf Surface M: 5
Soil Moist (1=w 5=d): 5

Crop Stage at Each Application

A
Height (In.): 12-15(13)
Stage (L): 7:V4-5(4)

Weed Stage at Each Application

A
Height (In.): 3-10(8)
Stage (L): 3-7(6)
Height (In.): 1-7(5)
Stage (L): 4-10(7)
Height (In.): 1-7(4)
Stage (L): 6-8(8)
Height (In.): 2-7(4)
Stage (L): 4-10(8)
Height (In.): 3-5(3)
Stage (L): 3-4(4)

Weed Density (plants/sq. ft.)

1
Date: 6/8/2011
Weed Name: ANGR
Density: 53
Date: 6/8/2011
Weed Name: CHEAL
Density: 37
Date: 6/8/2011
Weed Name: AMARE
Density: 4
Date: 6/8/2011
Weed Name: AMBEL
Density: 3
Date: 6/8/2011
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 XRFF 8015 26" 20" 100" 10 H20 25

Comments: * Weed Stage at Each Application: The order is as follows, ANGR(ANNUAL GRASS), CHEAL(COMMON LAMBSQUARTERS), AMARE(REDROOT PIGWEED), AMBEL(COMMON RAGWEED), ABUTH(VELVETLEAF).

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Weed Code	ANGR	CHEAL	AMARE	AMBEL	ABUTH
Crop Code	ZEAMX				
Rating Data Type	injury	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Rating Date	6/16/2011	6/16/2011	6/16/2011	6/16/2011	6/16/2011
Trt-Eval Interval	7 DAPO	7 DAPO	7 DAPO	7 DAPO	7 DAPO
# Subsamples, Dec.	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
1	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST	A	0	89	76	98	91	93
1	Buccaneer Plus	3	L	1	qt/a	POST	A						
2	Brimstone		L	1.5	pt/100 gal	POST	A	0	90	75	100	93	88
2	Buccaneer Plus	3	L	1	qt/a	POST	A						
3	Brimstone		L	3	pt/100 gal	POST	A	1	88	78	100	91	92
3	Buccaneer Plus	3	L	1	qt/a	POST	A						
4	Brimstone		L	6	pt/100 gal	POST	A	1	88	80	100	94	93
4	Buccaneer Plus	3	L	1	qt/a	POST	A						
5	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST	A	4	28	41	55	49	90
5	Cadet	0.91	L	0.9	oz/a	POST	A						
5	R-11		L	0.25	% v/v	POST	A						
6	Brimstone		L	1.5	pt/100 gal	POST	A	4	34	35	53	51	90
6	Cadet	0.91	L	0.9	oz/a	POST	A						
6	R-11		L	0.25	% v/v	POST	A						
7	Brimstone		L	3	pt/100 gal	POST	A	3	20	33	39	46	90
7	Cadet	0.91	L	0.9	oz/a	POST	A						
7	R-11		L	0.25	% v/v	POST	A						
8	Brimstone		L	6	pt/100 gal	POST	A	4	21	39	49	45	90
8	Cadet	0.91	L	0.9	oz/a	POST	A						
8	R-11		L	0.25	% v/v	POST	A						
9	Untreated						A	0	0	0	0	0	0

LSD (P=.05)	2.4	14.3	18.2	7.8	10.3	5.9
Standard Deviation	1.6	9.8	12.5	5.3	7.1	4.0
CV	85.74	19.3	24.6	8.11	11.36	5.02

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.

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Crop Code	ZEAMX				
Rating Data Type	injury	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Rating Date	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Trt-Eval Interval	14 DAPO	14 DAPO	14 DAPO	14 DAPO	14 DAPO
# Subsamples, Dec.	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
1	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST	A	0	95	76	98	100	98
1	Buccaneer Plus	3	L	1	qt/a	POST	A						
2	Brimstone		L	1.5	pt/100 gal	POST	A	0	95	75	98	100	96
2	Buccaneer Plus	3	L	1	qt/a	POST	A						
3	Brimstone		L	3	pt/100 gal	POST	A	0	95	77	99	100	98
3	Buccaneer Plus	3	L	1	qt/a	POST	A						
4	Brimstone		L	6	pt/100 gal	POST	A	0	96	77	100	100	96
4	Buccaneer Plus	3	L	1	qt/a	POST	A						
5	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST	A	0	40	44	63	55	88
5	Cadet	0.91	L	0.9	oz/a	POST	A						
5	R-11		L	0.25	% v/v	POST	A						
6	Brimstone		L	1.5	pt/100 gal	POST	A	0	54	60	61	55	93
6	Cadet	0.91	L	0.9	oz/a	POST	A						
6	R-11		L	0.25	% v/v	POST	A						
7	Brimstone		L	3	pt/100 gal	POST	A	0	33	30	60	54	90
7	Cadet	0.91	L	0.9	oz/a	POST	A						
7	R-11		L	0.25	% v/v	POST	A						
8	Brimstone		L	6	pt/100 gal	POST	A	0	35	33	63	56	93
8	Cadet	0.91	L	0.9	oz/a	POST	A						
8	R-11		L	0.25	% v/v	POST	A						
9	Untreated						A	0	0	0	0	0	0

LSD (P=.05)	0.0	17.5	15.3	11.5	12.3	7.1
Standard Deviation	0.0	12.0	10.5	7.9	8.4	4.8
CV	0.0	19.92	20.04	11.13	12.23	5.8

Means followed by same letter do not significantly differ (P=.05, LSD)
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Crop Code	ZEAMX				
Rating Data Type	injury	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Rating Date	6/29/2011	6/29/2011	6/29/2011	6/29/2011	6/29/2011
Trt-Eval Interval	21 DAPO	21 DAPO	21 DAPO	21 DAPO	21 DAPO
# Subsamples, Dec.	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
1	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST	A	0	89	69	98	100	100
1	Buccaneer Plus	3	L	1	qt/a	POST	A						
2	Brimstone		L	1.5	pt/100 gal	POST	A	0	93	71	100	100	94
2	Buccaneer Plus	3	L	1	qt/a	POST	A						
3	Brimstone		L	3	pt/100 gal	POST	A	0	95	75	98	100	93
3	Buccaneer Plus	3	L	1	qt/a	POST	A						
4	Brimstone		L	6	pt/100 gal	POST	A	0	93	76	96	100	94
4	Buccaneer Plus	3	L	1	qt/a	POST	A						
5	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST	A	0	31	30	63	61	93
5	Cadet	0.91	L	0.9	oz/a	POST	A						
5	R-11		L	0.25	% v/v	POST	A						
6	Brimstone		L	1.5	pt/100 gal	POST	A	0	41	41	60	64	96
6	Cadet	0.91	L	0.9	oz/a	POST	A						
6	R-11		L	0.25	% v/v	POST	A						
7	Brimstone		L	3	pt/100 gal	POST	A	0	27	43	67	63	93
7	Cadet	0.91	L	0.9	oz/a	POST	A						
7	R-11		L	0.25	% v/v	POST	A						
8	Brimstone		L	6	pt/100 gal	POST	A	0	28	35	70	58	98
8	Cadet	0.91	L	0.9	oz/a	POST	A						
8	R-11		L	0.25	% v/v	POST	A						
9	Untreated						A	0	0	0	0	0	0

LSD (P=.05)	0.0	20.6	16.8	15.3	9.8	9.3
Standard Deviation	0.0	14.1	11.5	10.4	6.7	6.3
CV	0.0	25.49	23.51	14.44	9.29	7.52

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