

MSU Weed Science Research Program

WEED CONTROL IN NO-TILL CORN, 2010

Trial ID: C1611 Study Dir.: Andy Chomas
Conducted: CAMPUS Investigator: Christy Sprague

Date Planted: 5/12/2011 Row Spacing: 30 IN
Variety: PIONEER 37Y14 No. of Reps: 4
Population: 30,000 % OM: 2.0
Soil Type: pH: 7.9
Plot Size: 10 X 30 FT Design: RANDOMIZED COMPLETE BLOCK

Tillage: NO-TILL
Fertilizer: 300 lbs/A 44-0-0 (ESN) Broadcast. 125 lbs/A 19-19-19 in Row at Planting.

Application Description

A B
Application Timing: EPP PRE
Date Treated: 5/5/2011 5/12/2011
Time Treated: 12:00 PM 6:15 PM
% Cloud Cover: 5 90
Air Temp., Unit: 75 F 88 F
% Relative Humidity: 38 45
Wind Speed/Unit/Dir: 2 mph NW 3 mph SW
Soil Temp., Unit: 56 F 70 F
Soil/Leaf Surface M: 4 5
Soil Moist (1=w 5=d): 2 3

Weed Stage at Each Application

A B
Height (In.): .5-1.5 * *
Stage (L): 3-6(3)
Height (In.): -- .25
Stage (L): cot
Height (In.): -- .25
Stage (L): cot
Height (In.): 2-5(3) --

Weed Density (plants/sq. ft.)

1 2
Date: 5/5/2011
Weed Name: POANN
Density: 5
Date: 5/12/2011
Weed Name: CHEAL
Density: <1
Date: 5/12/2011
Weed Name: AMBEL
Density: <1
Date: 5/12/2011
Weed Name: LEPVI
Density: <1

Application Equipment

Appl Sprayer Speed Nozzle Nozzle Nozzle Boom
Type MPH Type Size Height Spacing Width GPA Carrier PSI
A B KPK 3.5 FF 8003 18" 20" 100" 20 H2O 30
B CUB 3.5 FF 8003 19" 20" 100" 20 H2O 30

Comments: * Weed Stage at Each Application: The order is as follows, POANN(annual bluegrass), CHEAL(COMMON LAMBSQUARTERS), AMBEL(COMMON RAGWEED), LEPVI (Virginia pepperweed).

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Weed Code								POANN	CHEAL	AMBEL	LEPVI	POANN	CHEAL
Crop Code													
Rating Data Type								control	control	control	control	control	control
Rating Unit								percent	percent	percent	percent	percent	percent
Rating Date								6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/21/2011	6/21/2011
Trt-Eval Interval								28 DAP	28 DAP	28 DAP	28 DAP	42 DAP	42 DAP
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
1	Roundup PowerMAX	4.5	L	22	fl oz/a	7 EPP	A	99	100	98	100	100	88
1	Fierce	76	WG	3	oz/a	7 EPP	A						
1	Ammonium Sulfate	100	DF	17	lb/100 gal	7 EPP	A						
1	Roundup PowerMAX	4.5	L	22	fl oz/a	POST	C						
1	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
2	Roundup PowerMAX	4.5	L	22	fl oz/a	7 EPP	A	98	100	96	98	99	86
2	Fierce	76	WG	3.75	oz/a	7 EPP	A						
2	Ammonium Sulfate	100	DF	17	lb/100 gal	7 EPP	A						
2	Roundup PowerMAX	4.5	L	22	fl oz/a	POST	C						
2	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
3	Roundup PowerMAX	4.5	L	22	fl oz/a	7 EPP	A	100	100	100	96	99	85
3	Fierce	76	WG	4.5	oz/a	7 EPP	A						
3	Ammonium Sulfate	100	DF	17	lb/100 gal	7 EPP	A						
3	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
3	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
4	Roundup PowerMAX	4.5	SL	22	fl oz/a	7 EPP	A	99	100	82	96	95	74
4	Fierce	76	WG	3	oz/a	7 EPP	A						
4	2,4-D Ester	3.8	L	1	pt/a	7 EPP	A						
4	Ammonium Sulfate	100	DF	17	lb/100 gal	7 EPP	A						
4	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
4	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
5	Roundup PowerMAX	4.5	SL	22	fl oz/a	7 EPP	A	98	100	99	96	100	88
5	Fierce	76	WG	3	oz/a	7 EPP	A						
5	Atrazine	4	L	1	qt/a	7 EPP	A						
5	Ammonium Sulfate	100	DF	17	lb/100 gal	7 EPP	A						
5	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
5	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
6	Untreated						C	0	0	0	0	0	0
7	Roundup PowerMAX	4.5	SL	22	fl oz/a	PRE	B	100	100	94	92	96	75
7	Fierce	76	WG	3	oz/a	PRE	B						
7	Ammonium Sulfate	100	DF	17	lb/100 gal	PRE	B						
7	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
7	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
8	Roundup PowerMAX	4.5	SL	22	fl oz/a	PRE	B	98	100	100	97	99	88
8	Harness Xtra 5.6	5.6	L	1.4	qt/a	PRE	B						
8	Ammonium Sulfate	100	DF	17	lb/100 gal	PRE	B						
8	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
8	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
9	Roundup PowerMAX	4.5	SL	22	fl oz/a	PRE	B	100	100	100	96	100	88
9	Lexar	3.7	L	2.25	qt/a	PRE	B						
9	Ammonium Sulfate	100	DF	17	lb/100 gal	PRE	B						
9	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
9	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
10	Roundup PowerMAX	4.5	SL	22	fl oz/a	PRE	B	98	100	98	100	88	78
10	Verdict	5.6	L	13	fl oz/a	PRE	B						
10	MSO		L	1	% v/v	PRE	B						
10	Ammonium Sulfate	100	DF	17	lb/100 gal	PRE	B						
10	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
10	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						

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Weed Code	POANN	CHEAL	AMBEL	LEPVI	POANN	CHEAL
Crop Code						
Rating Data Type	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent
Rating Date	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/21/2011	6/21/2011
Trt-Eval Interval	28 DAP	28 DAP	28 DAP	28 DAP	42 DAP	42 DAP
# Subsamples, Dec.	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code
LSD (P=.05)							
Standard Deviation							
CV							

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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Weed Code								AMBEL	LEPVI	POANN	CHEAL	AMBEL	LEPVI
Crop Code													
Rating Data Type								control	control	control	control	control	control
Rating Unit								percent	percent	percent	percent	percent	percent
Rating Date								6/21/2011	6/21/2011	7/6/2011	7/6/2011	7/6/2011	7/6/2011
Trt-Eval Interval								42 DAP	42 DAP	56 DAP	56 DAP	56 DAP	56 DAP
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
1	Roundup PowerMAX	4.5	L	22	fl oz/a	7 EPP	A	95	100	98	68	85	98
1	Fierce	76	WG	3	oz/a	7 EPP	A						
1	Ammonium Sulfate	100	DF	17	lb/100 gal	7 EPP	A						
1	Roundup PowerMAX	4.5	L	22	fl oz/a	POST	C						
1	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
2	Roundup PowerMAX	4.5	L	22	fl oz/a	7 EPP	A	79	99	100	69	90	100
2	Fierce	76	WG	3.75	oz/a	7 EPP	A						
2	Ammonium Sulfate	100	DF	17	lb/100 gal	7 EPP	A						
2	Roundup PowerMAX	4.5	L	22	fl oz/a	POST	C						
2	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
3	Roundup PowerMAX	4.5	L	22	fl oz/a	7 EPP	A	84	99	100	69	84	100
3	Fierce	76	WG	4.5	oz/a	7 EPP	A						
3	Ammonium Sulfate	100	DF	17	lb/100 gal	7 EPP	A						
3	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
3	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
4	Roundup PowerMAX	4.5	SL	22	fl oz/a	7 EPP	A	71	100	100	54	76	100
4	Fierce	76	WG	3	oz/a	7 EPP	A						
4	2,4-D Ester	3.8	L	1	pt/a	7 EPP	A						
4	Ammonium Sulfate	100	DF	17	lb/100 gal	7 EPP	A						
4	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
4	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
5	Roundup PowerMAX	4.5	SL	22	fl oz/a	7 EPP	A	98	100	100	78	96	100
5	Fierce	76	WG	3	oz/a	7 EPP	A						
5	Atrazine	4	L	1	qt/a	7 EPP	A						
5	Ammonium Sulfate	100	DF	17	lb/100 gal	7 EPP	A						
5	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
5	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
6	Untreated						C	0	0	0	0	0	0
7	Roundup PowerMAX	4.5	SL	22	fl oz/a	PRE	B	81	95	100	59	86	100
7	Fierce	76	WG	3	oz/a	PRE	B						
7	Ammonium Sulfate	100	DF	17	lb/100 gal	PRE	B						
7	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
7	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
8	Roundup PowerMAX	4.5	SL	22	fl oz/a	PRE	B	90	100	100	71	96	100
8	Harness Xtra 5.6	5.6	L	1.4	qt/a	PRE	B						
8	Ammonium Sulfate	100	DF	17	lb/100 gal	PRE	B						
8	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
8	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
9	Roundup PowerMAX	4.5	SL	22	fl oz/a	PRE	B	100	100	100	79	100	100
9	Lexar	3.7	L	2.25	qt/a	PRE	B						
9	Ammonium Sulfate	100	DF	17	lb/100 gal	PRE	B						
9	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
9	Ammonium Sulfate	100	DF	17	lb/100 gal	POST	C						
10	Roundup PowerMAX	4.5	SL	22	fl oz/a	PRE	B	88	100	100	69	90	100
10	Verdict	5.6	L	13	fl oz/a	PRE	B						
10	MSO		L	1	% v/v	PRE	B						
10	Ammonium Sulfate	100	DF	17	lb/100 gal	PRE	B						
10	Roundup PowerMAX	4.5	SL	22	fl oz/a	POST	C						
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Trt-Eval Interval	42 DAP	42 DAP	56 DAP	56 DAP	56 DAP	56 DAP
# Subsamples, Dec.	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code
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