Renz Weed Science
COLLEGE OF AGRICULTURAL & LIFE SCIENCES
UNIVERSITY OF WISCONSIN-MADISON

Extension
UNIVERSITY OF WISCONSIN-MADISON

ID #17-7

UW – Madison Weed Science Renz Lab

2017 Wild Carrot High Productivity – 2018 Update

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Objective:

Determine the effectiveness of XDE-848 BE for Wild Carrot (*Daucus carota*) control as compared to established formulations including GrazonNext HL and Chaparral.

Summary:

At 13 and 27 DAT, wild carrot control was similar across all treatments (31% - 72%) except the untreated control (0%). By 40 DAT, wild carrot control was best in treatment 3 – Aminopyralid low concentration + XDE-848 BE high concentration (98%) treatment 8 – Aminopyralid high concentration + XDE – 848 BE (100%), and Chaparral treatments (100%). At 63 DAT, wild carrot control was high among all treatments (75% - 100%), except for GrazonNext HL (31%) and the untreated control (0%). By 91 DAT, wild carrot control was identical across all treatments except the untreated control. The following year at 351 DAT, wild carrot cover was identical across all treatments including the untreated control (0 – 2%).

Canada Thistle (*Cirsium arvense*) control was similar across all treatments excluding the untreated control and rating dates, except at 40 DAT when Chaparral outperformed treatment 2 - Aminopyralid low concentration + XDE-848 BE low concentration (80% versus 32%).

At 13 DAT, slight grass chlorosis and necrosis resulted from all treatments. However, necrosis and chlorosis became identical across all treatments by 27 DAT, and grass cover was higher in all treatments (61% - 86%) than the untreated control (42%). This trend continued at 40 DAT, 63 DAT, 91 DAT, and 351 DAT.

Research Plot Information:

Plot Dimensions: 20 feet x 50 feet

Design: Randomized Complete Block, 3 blocks

Soil Type: New Glarus silt loam, 12 to 20% slope

Herbicide Treatments:

Treatment Number	Treatment	Rate
1	Aminopyralid potassium (Aminopyralid) XDE-848 BE Methylated Seed Oil (MSO) concentrate	0.71 ounces acid equivalent per acre (oz AE/A) 0.06 ounces active ingredient per acre (oz AI/A) 1% volume by volume (v/v)
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v
10	GrazonNext HL Activator 90	0.18 gallons per acre (gal/A) 0.25% v/v
11	Chaparral Activator 90	2 ounces per acre (oz/A) 0.25% v/v
12	Untreated Control (UTC)	-

Herbicide Application:

Date: June 7th, 2017, 11:30am

Equipment: Backpack sprayer (15 gallons per acre), 10-foot boom

Nozzles: Eight flat tip TeeJet AIXR 110015, 15-foot nozzle spacing

Regulator PSI: 32

Boom PSI: 18

Plants Present/Stage of Development:

June 7th, 2017:

- Canada Thistle (*Cirsium arvense*): 6 – 12 inches
- Common Dandelion (*Taraxacum officinale*): 4 – 8 inches
- Wild Carrot (*Daucus carota*): 8 – 10 inches
- Wild Parsnip (*Pastinaca sativa*): 6 – 10 inches

Weather Data:

Weather Station	KWIMERRI9
Temperature	82.5°F
Wind Speed and Direction	3.2 mph NNW
Relative Humidity	44%
Previous Rain Event Within 48 Hours	-
When ≥ 0.25 inches of precipitation occurred after treatment	06.12.17 – 0.69 inches

Index of Ratings and Results

Results:

-1 DAT – June 6th, 2017 (PRE-APPLICATION DATA)

Trt. No.	Treatment	Rate	Grass Cover (%)	Canada Thistle Cover (%)	Wild Carrot Cover (%)	Clover Cover (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	76.0 -	7.0 -	9.5 -	4.0 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	80.8 -	8.3 -	4.8 -	5.3 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	78.0 -	9.0 -	7.5 -	2.8 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	76.8 -	10.8 -	6.5 -	5.3 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	74.5 -	7.5 -	11.5 -	4.5 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	73.5 -	7.8 -	8.8 -	4.0 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	76.0 -	8.0 -	10.0 -	3.8 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	77.0 -	7.3 -	8.3 -	3.0 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	80.8 -	8.8 -	5.3 -	4.5 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	77.5 -	7.0 -	8.5 -	3.5 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	72.0 -	10.3 -	9.3 -	5.5 -
12	UTC	-	.	.	.	.
Statistics[1]						
Least Standard Deviation (LSD) P=.05			9.03	3.30	5.42	5.41
Standard Deviation			6.25	2.28	3.75	3.74

[1] All statistical analyses were conducted in ARM software and assumptions of ANOVA were not evaluated.

Coefficient of Variation (CV)	8.16	27.44	45.97	89.5
Treatment Prob(F)	0.6735	0.3131	0.3456	0.9893

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

13 DAT – June 20th, 2017

Trt. No.	Treatment	Rate	Grass Cover (%)	Grass Chlorosis (%)	Grass Necrosis (%)	Grass Height Reduction (%)	Canada Thistle Cover (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	76.3 -	5.0a	1.0a	0.0 -	8.3 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	72.5 -	3.5a	0.5a	0.3 -	9.8 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	74.3 -	5.0a	1.0a	0.5 -	11.3 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	74.0 -	5.0a	1.0a	0.0 -	9.3 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	72.3 -	3.8a	0.8a	0.3 -	6.0 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	82.0 -	5.0a	1.0a	0.3 -	5.5 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	74.8 -	5.5a	1.0a	1.3 -	8.8 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	80.3 -	5.0a	1.0a	1.8 -	7.3 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	77.8 -	5.0a	1.0a	0.8 -	12.5 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	70.8 -	5.0a	1.0a	0.0 -	9.5 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	78.3 -	5.0a	1.0a	1.8 -	8.8 -
12	UTC	-	64.8 -	0.0b	0.0b	0.0 -	15.4 -
Statistics							
LSD P=.05			10.19	1.55	0.34	2.28	4.94
Standard Deviation			7.07	1.08	0.23	1.58	3.42
CV			9.39	23.48	26.16	269.04	37.78
Treatment Prob(F)			0.2885	0.0004	0.0004	0.7384	0.0795

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)

13 DAT, Continued – June 20th, 2017

Trt. No.	Treatment	Rate	Canada Thistle Control (%)	Wild Carrot Cover (%)	Wild Carrot Control (%)	Clover Cover (%)	Clover Control (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	61.3a	8.0 -	60.0a	2.0 -	47.5a
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	50.0a	7.0 -	52.5a	6.5 -	46.3a
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	62.5a	7.8 -	67.5a	2.5 -	53.8a
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	62.5a	13.0 -	62.5a	1.3 -	46.3a
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	48.8a	125 -	52.5a	1.5 -	27.5a
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	62.5a	5.0 -	56.3a	1.3 -	50.0a
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	72.5a	11.3 -	62.5a	1.5 -	46.3a
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	73.8a	7.0 -	72.5a	2.3 -	55.0a
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	68.8a	7.0 -	65.0a	1.0 -	52.3a
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	47.5a	13.0 -	31.3a	1.3 -	48.8a
11	Chaparral Activator 90	2 oz/A 0.25% v/v	65.0a	7.5 -	60.0a	1.0 -	51.3a
12	UTC	-	0.0b	10.7 -	0.0b	3.5 -	0.0b
Statistics							
LSD P=.05			22.10	7.13	25.35	4.29	22.11
Standard Deviation			15.32	4.94	17.588	2.97	15.31
CV			26.1	54.68	31.46	144.03	33.69
Treatment Prob(F)			0.0010	0.3103	0.0043	0.4213	0.0226

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

13 DAT, Continued – June 20th, 2017

Trt. No.	Treatment	Rate	Dandelion Cover (%)	Dandelion Control (%)	Horsenettle Cover (%)	Horsenettle Control (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	4.0 -	56.3a	1.5 -	73.2 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	3.0 -	46.3a	1.3 -	60.7 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	2.5 -	52.5a	1.8 -	60.0 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	1.0 -	55.0.a	1.5 -	69.3 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	3.0 -	39.7a	4.8 -	32.5 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	3.0 -	63.8a	3.3 -	44.8 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	2.3 -	65.0a	1.5 -	45.3 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	1.8 -	55.0a	1.5 -	61.1 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	1.3 -	56.3a	0.5 -	66.1 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	4.3 -	40.0a	1.3 -	73.1 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	4.0 -	56.3a	0.5 -	36.5 -
12	UTC	-	3.8 -	0.0b	1.8 -	10.7 -
Statistics						
LSD P=.05			3.21	23.72	3.71	43.62
Standard Deviation			2.23	16.43	2.57	28.31
CV			80.64	32.14	144.14	53.84
Treatment Prob(F)			0.5386	0.0138	0.5965	0.5191

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)

27 DAT – July 4th, 2017

Trt. No.	Treatment	Rate	Grass Cover (%)	Grass Chlorosis (%)	Grass Necrosis (%)	Grass Height Reduction (%)	Canada Thistle Cover (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	75.5a	1.5 -	2.0 -	1.3 -	8.8b
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	72.0a	1.0 -	2.0 -	1.3 -	8.8b
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	78.0a	1.5 -	2.0 -	2.5 -	7.5b
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	78.8a	1.5 -	2.0 -	2.8 -	3.8b
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	61.0a	1.5 -	2.0 -	1.3 -	7.5b
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	74.3a	1.5 -	2.0 -	0.0 -	7.5b
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	77.5a	1.0 -	2.8 -	3.0 -	3.8b
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	82.0a	0.5 -	2.0 -	0.3 -	4.0b
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	85.8a	1.0 -	2.0 -	2.5 -	6.3b
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	72.0a	1.0 -	2.0 -	2.5 -	4.3b
11	Chaparral Activator 90	2 oz/A 0.25% v/v	78.3a	2.0 -	2.0 -	1.8 -	8.8b
12	UTC	-	42.3b	0.2 -	1.9 -	0.7 -	21.3a
Statistics							
LSD P=.05			15.11	1.46	0.64	2.78	4.50
Standard Deviation			10.47	1.01	0.45	1.93	3.12
CV			14.07	83.3	21.6	116.85	44.46
Treatment Prob(F)			0.0061	0.5782	0.5186	0.3627	0.0002

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

27 DAT, Continued – July 4th, 2017

Trt. No.	Treatment	Rate	Canada Thistle Control (%)	Wild Carrot Cover (%)	Wild Carrot Control (%)	Clover Cover (%)	Clover Control (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	71.3a	7.8ab	81.0a	0.3 -	85.8a
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	57.5a	7.5ab	70.0a	4.3 -	72.5a
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	76.3a	4.0ab	87.5a	0.3 -	85.8a
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	86.3a	10.0ab	77.5a	0.0 -	75.0a
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	55.0a	12.5ab	60.0a	0.3 -	75.0a
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	78.8a	5.5ab	75.0a	0.3 -	98.8a
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	85.0a	10.0ab	77.5a	0.0 -	94.2a
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	78.8a	5.0ab	90.0a	0.3 -	98.8a
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	83.8a	1.5b	96.3a	0.3 -	96.3a
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	76.3a	13.8ab	51.3a	0.0 -	100.0a
11	Chaparral Activator 90	2 oz/A 0.25% v/v	82.5a	1.5b	95.0a	0.3 -	98.8a
12	UTC	-	0.0b	17.5a	0.0b	5.4 -	0.0b
Statistics							
LSD P=.05			27.25	8.32	29.14	3.09	38.14
Standard Deviation			18.90	5.77	20.20	0.14	26.33
CV			26.14	75.63	26.98	290.12	30.52
Treatment Prob(F)			0.0013	0.0266	0.0006	0.0701	0.0173

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

27 DAT, Continued – July 4th, 2017

Trt. No.	Treatment	Rate	Dandelion Cover (%)	Dandelion Control (%)	Horsenettle Cover (%)	Horsenettle Control (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	4.0 -	48.8 -	3.8 -	55.9 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	3.8 -	56.3 -	3.8 -	44.4 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	5.0 -	70.0 -	5.3 -	57.5 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	2.5 -	76.3 -	5.0 -	79.1 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	3.8 -	58.8 -	15.0 -	35.0 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	5.0 -	65.0 -	7.5 -	48.5 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	3.8 -	65.0 -	5.0 -	45.6 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	5.0 -	50.0 -	3.58 -	69.7 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	3.8 -	70.0 -	2.5 -	74.7 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	5.0 -	43.8 -	5.0 -	63.5 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	6.3 -	62.5 -	5.0 -	65.0 -
12	UTC	-	13.2 -	0.0 -	0.3 -	14.4 -
Statistics						
LSD P=.05			4.70	38.11	9.11	30.27
Standard Deviation			3.26	26.39	6.32	19.65
CV			69.37	45.76	115.83	36.84
Treatment Prob(F)			0.2035	0.2014	0.4121	0.2115

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

40 DAT Biomass Rating - July 17th, 2017

Trt. No.	Treatment	Rate	Grass Biomass (g)	Wild Carrot Biomass (g)	Legume Biomass (g)	Good Weeds Biomass (g)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v				
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	117.18ab	39.20 -	48.38a	5.19 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v				
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v				
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	144.08ab	27.10 -	0.13b	1.33 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v				
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v				
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v				
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v				
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	172.93a	15.35 -	0.18b	2.15 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	171.03a	0.15 -	0.85b	0.60 -
12	UTC	-	88.59b	62.65 -	7.27b	12.03 -
Statistics						
LSD P=.05			33.629	60.466	5.577	8.293
Standard Deviation			20.116	36.163	3.335	4.960
CV			13.47	175.78	74.34	171.02
Treatment Prob(F)			0.0098	0.5362	0.0001	0.2071

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

40 DAT Biomass Rating, Continued - July 17th, 2017

Trt. No.	Treatment	Rate	Canada Thistle Biomass (g)	Bad Weeds Biomass (g)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v		
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	71.18a	9.19 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v		
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v		
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	16.50b	10.15 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v		
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v		
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v		
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v		
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	6.15b	2.90 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	6.38b	0.53 -
12	UTC	-	93.99a	10.16 -
Statistics				
LSD P=.05			22.879	11.299
Standard Deviation			13.683	6.758
CV			56.28	127.51
Treatment Prob(F)			0.0008	0.3505

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

40 DAT – July 17th, 2017

Trt. No.	Treatment	Rate	Grass Cover (%)	Grass Chlorosis (%)	Grass Necrosis (%)	Grass Height Reduction (%)	Canada Thistle Cover (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	84.3a	2.0 -	0.0 -	5.0 -	5.8b
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	79.5a	2.3 -	0.0 -	4.0 -	5.3
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	89.8a	2.0 -	0.0 -	5.5 -	5.5b
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	89.3a	2.0 -	0.0 -	5.0 -	3.0b
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	80.5a	2.0 -	0.0 -	3.8 -	5.3b
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	89.8a	2.0 -	0.0 -	5.5 -	3.5b
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	89.8a	2.0 -	0.0 -	3.8 -	1.8b
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	92.3a	2.0 -	0.0 -	3.8 -	2.8b
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	90.3a	2.0 -	0.0 -	5.8 -	4.5b
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	81.8a	2.0 -	0.0 -	4.0 -	4.0b
11	Chaparral Activator 90	2 oz/A 0.25% v/v	92.0a	2.0 -	0.0 -	6.3 -	5.5b
12	UTC	-	50.6b	2.0 -	0.0 -	0.0 -	19.2a
Statistics							
LSD P=.05			13.94	0.21	.	2.89	4.89
Standard Deviation			9.66	0.15	0.00	2.00	3.39
CV			11.29	7.36	0.0	44.08	69.61
Treatment Prob(F)			0.0048	0.5186	1.0000	0.1057	0.0022

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

40 DAT, Continued – July 17th, 2017

Trt. No.	Treatment	Rate	Canada Thistle Control (%)	Wild Carrot Cover (%)	Wild Carrot Control (%)	Clover Cover (%)	Clover Control (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	48.8ab	3.0ab	60.0abc	0.0 -	97.9a
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	32.5b	5.0ab	43.8a-d	5.0 -	75.0a
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	48.8ab	0.8b	97.5a	0.0 -	97.9a
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	68.8ab	3.0ab	46.3a-d	0.0 -	100.0a
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	31.3b	4.5ab	41.3bcd	0.0 -	75.0a
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	43.8ab	0.8b	90.0ab	0.0 -	100.0a
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	71.3ab	2.3ab	61.3abc	0.0 -	997.9a
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	61.3ab	0.0b	100.0a	0.0 -	100.0a
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	57.5ab	0.5b	90.0ab	0.0 -	100.0a
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	46.3ab	8.8ab	30.0cd	0.0 -	100.0a
11	Chaparral Activator 90	2 oz/A 0.25% v/v	80.0a	0.0b	100.0a	0.0 -	100.0a
12	UTC	-	0.0c	10.5a	0.0d	5.5 -	0.0b
Statistics							
LSD P=.05			26.91	5.16	33.67	4.28	32.36
Standard Deviation			18.66	3.58	23.35	2.97	22.34
CV			36.37	122.88	35.33	454.8	24.63
Treatment Prob(F)			0.0011	0.0118	0.0001	0.2463	0.0018

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

40 DAT, Continued – July 17th, 2017

Trt. No.	Treatment	Rate	Dandelion Cover (%)	Dandelion Control (%)	Horsenettle Cover (%)	Horsenettle Control (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	4.0 -	56.3 -	3.0 -	28.8 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	2.8 -	50.0 -	2.5 -	42.5 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	1.5 -	77.5 -	2.5 -	70.0 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	2.3 -	63.8 -	2.5 -	66.2 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	1.3 -	67.2 -	8.5 -	20.0 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	1.8 -	75.0 -	4.3 -	22.5 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	2.8 -	43.8 -	3.5 -	4.8 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	2.0 -	80.0 -	3.0 -	47.5 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	1.8 -	77.5 -	3.0 -	42.5 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	2.3 -	35.0 -	3.3 -	40.8 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	1.3 -	81.3 -	1.3 -	27.4 -
12	UTC	-	6.1 -	0.0 -	8.2 -	2.5 -
Statistics						
LSD P=.05			3.13	50.85	6.17	38.26
Standard Deviation			2.17	35.21	4.28	24.83
CV			94.24	57.41	117.82	62.67
Treatment Prob(F)			0.4259	0.2590	0.4834	0.2507

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

63 DAT – August 9th, 2017

Trt. No.	Treatment	Rate	Grass Cover (%)	Grass Chlorosis (%)	Grass Necrosis (%)	Grass Height Reduction (%)	Canada Thistle Cover (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	89.0a	0.0 -	0.0 -	0.0 -	4.5b
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	84.3a	0.0 -	0.0 -	0.0 -	6.0b
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	91.0a	0.0 -	0.0 -	0.0 -	4.0b
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	91.3a	0.0 -	0.0 -	0.0 -	5.3b
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	83.3a	0.0 -	0.0 -	0.0 -	4.3b
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	89.0a	0.0 -	0.0 -	0.0 -	5.3b
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	92.5a	0.0 -	0.0 -	0.0 -	4.3b
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	94.3a	0.0 -	0.0 -	0.0 -	2.5b
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	91.5a	0.0 -	0.0 -	0.0 -	5.8b
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	85.5a	0.0 -	0.0 -	0.0 -	4.3b
11	Chaparral Activator 90	2 oz/A 0.25% v/v	93.5a	0.0 -	0.0 -	0.0 -	4.5b
12	UTC	-	50.6b	0.0 -	0.0 -	0.0 -	25.7a
Statistics							
LSD P=.05			9.95	.	.	.	4.11
Standard Deviation			6.90	0.00	0.00	0.00	2.85
CV			7.85	0.0	0.0	0.0	52.04
Treatment Prob(F)			0.0001	1.0000	1.0000	1.0000	0.0001

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

63 DAT, Continued – August 9th, 2017

Trt No	Treatment	Rate	Canada Thistle Control (%)	Wild Carrot Cover (%)	Wild Carrot Control (%)	W. Carrot Flowering Plant Count (#)	Clover Cover (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	51.3 -	0.8 -	86.3a	0.8b	0.0 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	30.0 -	2.8 -	73.8a	2.3b	3.0 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	51.3 -	0.0 -	100.0a	0.0b	0.0 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	57.5 -	0.5 -	95.0a	0.5b	0.0 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	45.0 -	5.0. -	75.0a	3.5b	0.0 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	51.3 -	0.5 -	95.0a	0.5b	0.0 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	65.0 -	0.3 -	97.5a	0.3b	0.0 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	72.5 -	0.0 -	100.0a	0.0b	0.0 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	51.3 -	0.3 -	98.8a	0.0b	0.0 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	48.8 -	5.5 -	31.3b	6.5b	0.0 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	55.0 -	0.0 -	100.0a	0.0b	0.0 -
12	UTC	-	0.0 -	12.0 -	0.0b	13.8a	2.8 -
Statistics							
LSD P=.05			30.56	5.79	33.80	5.81	2.71
Standard Deviation			21.19	4.01	23.44	4.03	1.88
CV			42.1	217.18	28.3	220.64	508.88
Treatment Prob(F)			0.0610	0.0571	0.0001	0.0203	0.4040

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

63 DAT, Continued – August 9th, 2017

Trt. No.	Treatment	Rate	Clover Control (%)	Dandelion Cover (%)	Dandelion Control (%)	Horsenettle Cover (%)	Horsenettle Control (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	97.9 -	3.3b	50.0a	2.5 -	31.9 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	75.0 -	2.0b	63.8a	2.0 -	41.0 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	97.9 -	22.5b	56.3a	2.5 -	57.5 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	100.0 -	1.0b	88.8a	2.0 -	43.1 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	75.0 -	1.3b	66.7a	6.3 -	21.3 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	100.0 -	1.8b	75.0a	3.5 -	28.0 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	97.9 -	1.0b	78.8a	2.0 -	46.5 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	100.0 -	1.3b	90.0a	2.0 -	48.9 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	100.0 -	1.3b	88.8a	1.3 -	73.9 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	100.0 -	3.5b	32.5ab	1.3 -	71.3 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	100.0 -	0.3b	97.5a	1.8 -	31.8 -
12	UTC	-	44.9 -	7.7a	0.0b	1.2 -	11.0. -
Statistics							
LSD P=.05			37.29	2.49	39.24	3.99	42.11
Standard Deviation			25.75	1.73	27.17	2.77	27.33
CV			27.68	87.33	39.64	113.6	65.6
Treatment Prob(F)			0.4077	0.0056	0.0059	0.5151	0.3776

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

91 DAT Biomass Rating – September 6th, 2017

Trt. No.	Treatment	Rate	Grass Biomass (g)	Wild Carrot Biomass (g)	Legume Biomass (g)	Canada Thistle Biomass (g)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	199.39 -	13.18 -	1.75 -	.
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	156.63 -	43.36 -	13.65 -	44.30 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	108.69 -	25.78 -	10.85 -	.
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	151.55 -	48.56 -	290 -	.
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	137.23 -	29.23 -	0.00 -	15.30 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	35.40 -	1.53 -	18.70 -	.
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	.	.	.	.
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	77.30 -	1.73 -	4.55 -	.
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	128.71 -	0.00 -	4.25 -	.
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	85.89 -	35.28 -	9.40 -	.
11	Chaparral Activator 90	2 oz/A 0.25% v/v	145.45 -	2.96 -	6.00 -	.
12	UTC	-	95.40 -	57.94 -	6.70 -	79.40 -
Statistics						
LSD P=.05			70.220	79.559	13.416	306.376
Standard Deviation			44.5690	50.497	8.515	34.100
CV			35.77	219.03	137.72	104.37
Treatment Prob(F)			0.2522	0.9412	0.5681	0.4459

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

91 DAT Biomass Rating – September 6th, 2017

Trt. No.	Treatment	Rate	Good Weeds (g)	Bad Weeds (g)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	2.60 -	0.00 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	4.50 -	0.00 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	3.80 -	0.00 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	1.80 -	0.09 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	1.68 -	9.70 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	4.41 -	0.00 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	.	.
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	3.26 -	0.00 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	1.92 -	0.01 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	2.80 -	0.00 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	2.05 -	0.04 -
12	UTC	-	12.80 -	20.96 -
Statistics				
LSD P=.05			8.733	12.108
Standard Deviation			5.543	7.685
CV			266.07	211.76
Treatment Prob(F)			0.4459	0.2928

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

91 DAT – September 6th, 2017

Trt. No.	Treatment	Rate	Grass Cover (%)	Grass Chlorosis (%)	Grass Necrosis (%)	Grass Height Reduction (%)	Canada Thistle Cover (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	87.8a	0.0 -	0.0 -	0.0 -	6.8b
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	85.0a	0.0 -	0.0 -	0.0 -	8.0b
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	90.0a	0.0 -	0.0 -	0.0 -	5.0b
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	89.3a	0.0 -	0.0 -	0.0 -	6.0b
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	83.8a	0.0 -	0.0 -	0.0 -	6.0b
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	87.8a	0.0 -	0.0 -	0.0 -	5.0b
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	91.3a	0.0 -	0.0 -	0.0 -	4.8b
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	90.8a	0.0 -	0.0 -	0.0 -	4.5b
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	87.8a	0.0 -	0.0 -	0.0 -	5.5b
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	86.8a	0.0 -	0.0 -	0.0 -	5.5b
11	Chaparral Activator 90	2 oz/A 0.25% v/v	913a	0.0 -	0.0 -	0.0 -	6.3b
12	UTC	-	44.8b	0.0 -	0.0 -	0.0 -	30.7a
Statistics							
LSD P=.05			9.35	.	.	.	4.16
Standard Deviation			6.48	0.00	0.00	0.00	2.89
CV			7.5	0.0	0.0	0.0	42.41
Treatment Prob(F)			0.0001	1.0000	1.0000	1.0000	0.0001

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

91 DAT, Continued – September 6th, 2017

Trt No	Treatment	Rate	Canada Thistle Control (%)	Wild Carrot Cover (%)	Wild Carrot Control (%)	W. Carrot Flowering Plant Count (#)	Clover Cover (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	50.0a	0.8 -	88.8a	0.8 -	0.0 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	51.3a	2.5 -	75.0a	3.8 -	3.8 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	63.8a	0.0 -	100.0a	0.0 -	0.0 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	56.3a	1.0 -	87.5a	1.0 -	0.0 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	48.8a	2.5 -	75.0a	2.5 -	0.0 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	62.5a	0.5 -	96.3a	0.5 -	0.0 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	67.5a	0.5 -	92.5a	0.3 -	0.0 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	65.0a	0.0 -	100.0a	0.0 -	0.0 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	57.5a	0.3 -	98.8a	0.0 -	0.0 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	60.0a	3.5 -	53.8a	3.5 -	3.5 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	53.8a	0.0 -	100.0a	0.0 -	0.0 -
12	UTC	-	0.0b	7.9 -	0.0b	15.6 -	2.8 -
Statistics							
LSD P=.05			20.12	4.18	34.20	6.57	3.33
Standard Deviation			13.95	2.90	23.711	4.56	2.31
CV			25.62	218.33	28.19	265.28	530.41
Treatment Prob(F)			0.0010	0.1783	0.0017	0.0665	0.4477

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

91 DAT, Continued – September 6th, 2017

Trt. No.	Treatment	Rate	Clover Control (%)	Dandelion Cover (%)	Dandelion Control (%)	Horsenettle Cover (%)	Horsenettle Control (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	97.9 -	3.5 -	73.8a	1.3 -	62.3 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	75.0 -	2.0 -	62.5a	1.3 -	50.5 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	97.9 -	2.8 -	81.3a	2.3 -	57.5 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	100.0 -	2.0 -	82.5a	1.8 -	67.7 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	75.0 -	1.3 -	66.2a	6.5 -	20.0 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	100.0 -	2.3 -	85.0a	4.0 -	28.2 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	97.9 -	1.8 -	86.3a	1.5 -	44.0 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	100.0 -	2.0 -	83.8a	2.5 -	56.3 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	100.0 -	1.8 -	85.0a	2.3 -	57.5 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	100.0 -	3.3 -	75.0a	1.8 -	53.2 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	100.0 -	0.8 -	92.5a	1.8 -	52.1 -
12	UTC	-	44.9 -	11.3 -	0.0b	2.4 -	20.5 -
Statistics							
LSD P=.05			37.29	4.20	34.38	3.95	36.42
Standard Deviation			25.75	2.92	23.80	2.74	23.84
CV			27.68	115.62	331.23	110.48	53.61
Treatment Prob(F)			0.4077	0.0535	0.0257	0.3292	0.3198

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

351 DAT – May 24th, 2018

Trt. No.	Treatment	Rate	Grass Cover (%)	Broadleaf Cover (%)	Shrub Cover (%)	Bareground Cover (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	86.8a	4.5 -	0.0 -	0.0 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	84.8a	2.8 -	0.0 -	0.0 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	83.3a	5.5 -	0.0 -	0.0 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	92.5a	5.0 -	0.0 -	0.0 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	89.0a	4.3 -	0.0 -	0.0 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	87.0a	6.3 -	0.0 -	0.0 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	90.0a	3.8 -	0.0 -	0.0 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	92.0a	5.3 -	0.0 -	0.0 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	91.0a	3.0 -	0.0 -	0.0 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	86.0a	8.0 -	0.0 -	0.0 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	91.5a	4.0 -	0.0 -	0.0 -
12	UTC	-	58.5b	2.7 -	0.0 -	0.0 -
Statistics						
LSD P=.05			9.84	4.19	.	.
Standard Deviation			6.81	2.90	0.00	0.00
CV			7.82	62.13	0.0	0.0
Treatment Prob(F)			0.0006	0.4090	1.0000	1.0000

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

351 DAT – May 24th, 2018

Trt. No.	Treatment	Rate	Canada Thistle Cover (%)	Wild Carrot Cover (%)	Clover Cover (%)	Dandelion Cover (%)
1	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.06 oz AI/A 1% v/v	5.5b	0.8 -	0.0 -	2.5 -
2	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.10 oz AI/A 1% v/v	8.8b	1.3 -	2.5 -	0.0 -
3	Aminopyralid XDE-848 BE MSO concentrate	0.71 oz AE/A 0.14 oz AI/A 1% v/v	10.0b	0.0 -	0.0 -	1.3 -
4	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.06 oz AI/A 1% v/v	2.5b	0.0 -	0.0 -	0.0 -
5	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.10 oz AI/A 1% v/v	5.3b	1.3 -	0.3 -	0.0 -
6	Aminopyralid XDE-848 BE MSO concentrate	1 oz AE/A 0.14 oz AI/A 1% v/v	6.5b	0.3 -	0.0 -	0.0 -
7	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.06 oz AI/A 1% v/v	4.3b	2.1 -	0.0 -	0.0 -
8	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.10 oz AI/A 1% v/v	2.8b	0.0 -	0.0 -	0.0 -
9	Aminopyralid XDE-848 BE MSO concentrate	1.28 oz AE/A 0.14 oz AI/A 1% v/v	6.0b	0.0 -	0.0 -	0.0 -
10	GrazonNext HL Activator 90	0.18 gal/A 0.25% v/v	4.3b	1.8 -	0.0 -	0.0 -
11	Chaparral Activator 90	2 oz/A 0.25% v/v	4.5b	0.0 -	0.0 -	0.0 -
12	UTC	-	23.6a	2.8 -	7.7 -	7.7 -
Statistics						
LSD P=.05			5.68	2.35	3.46	3.46
Standard Deviation			3.93	1.62	2.40	2.40
CV			62.06	228.37	414.91	414.91
Treatment Prob(F)			0.0001	0.4695	0.0736	0.0736

Note: Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).