<u>Perennial weed control with aminopyralid and aminocyclopyrachlor, Sheridan County.</u> (Greg Endres and Emily Kline)

A field trial was conducted by the NDSU Carrington Research Extension Center on the Ducks Unlimited Coteau Ranch near Denhoff, ND to examine perennial weed control with aminopyralid (Milestone, ForeFront R&P, and Chaparral) and aminocyclopyrachlor (MAT28). Experimental design was a randomized complete block with three replications. Weeds were mowed during the summer of 2008. Herbicide treatments were applied with a backpack-type plot sprayer delivering 11 gal/A at 35 psi through 8001 flat fan nozzles to the center 6.7 ft of 10- by 25-ft plots. Fall herbicide treatments were applied on October 3, 2008 to 3- to 12-inch tall absinth wormwood, 2- to 10-inch tall Canada thistle, and \leq 24-inch tall (rosette to mature) sowthistle. Summer herbicide treatments were applied on July 1, 2009 to 13- to 40-inch tall absinth wormwood, 5- to 29-inch tall (bud stage) Canada thistle, and 6- to 28-inch tall sowthistle.

Absinth wormwood control was excellent (99%) and sowthistle control was good (83 to 87%) 12 months after treatment (MAT) with fall application of Milestone, ForeFront R&P and Chaparral (Table 1). All herbicides except 2,4-D provided 72 to 80% control of absinth wormwood 22 MAT. Canada thistle control 12 MAT was 85% with fall-applied Milestone at 7 fl oz/A. However, Canada thistle control did not continue when evaluated 34 MAT.

All summer herbicides provided excellent control 12 MAT of absinth wormwood and sowthistle except wormwood control with MAT28 plus Telar (Table 2). Wormwood control was good (80 to 90%) with all herbicides 25 MAT except 2,4-D. Summer-applied MAT28 or MAT28 plus Telar provided excellent control (98%) of Canada thistle 12 MAT and good control (87 to 89%) 25 MAT.

		1		treatments ¹					
					Weed c		-		
Herbicide		1-Jul-09			30-Sep-09			15-Aug-11	
Treatment ²	Rate	Absinth wormwood	Canada thistle	Sowthistle	Absinth wormwood	Canada thistle	Sowthistle	Absinth wormwood	Canada thistle
	product/A	%							
2,4-D	32 fl oz	65	33	0	62	13	0	27	0
Milestone	7 fl oz	99	98	89	99	85	87	72	7
Milestone	5 fl oz	99	84	80	99	75	83	80	13
ForeFront R&P	32 fl oz	99	89	86	99	71	83	79	0
Chaparral	3 oz wt	99	90	94	99	75	88	71	13
C.V. (%)		11.6	23.2	15.8	10.8	18.1	16.9	12.9	59.2
LSD (0.05)		16	28	17	15	17	17	15	NS
Table.2 Perenr	nial weed cor	ntrol with sum	nmer hert	picide treatm					
Herbicide					Weed c	ontrol			
Herbio	ide	3	30-Sep-0	9		ontrol 2-Jul-10		15-Aug	g-11
Herbic Treatment ²	Rate	Absinth wormwood	30-Sep-09 Canada thistle	9 Sowthistle	Absinth wormwood		Sowthistle	15-Aug Absinth wormwood	
Treatment ²	Rate product/A	Absinth wormwood	Canada thistle	Sowthistle	Absinth wormwood	2-Jul-10 Canada thistle	· · · · · · · · · · · · · · · · · · ·	Absinth wormwood	Canada thistle
Treatment ² 2,4-D	Rate product/A 32 fl oz	Absinth wormwood 96	Canada thistle 72	Sowthistle	Absinth wormwood % 91	2-Jul-10 Canada thistle 65	93	Absinth wormwood	Canada thistle 7
Treatment ² 2,4-D Milestone	Rate product/A 32 fl oz 7 fl oz	Absinth wormwood 96 99	Canada thistle 72 94	Sowthistle 93 93	Absinth wormwood 91 98	2-Jul-10 Canada thistle 65 86	93 95	Absinth wormwood 75 90	Canada thistle 7 49
Treatment ² 2,4-D Milestone Milestone	Rate product/A 32 fl oz 7 fl oz 5 fl oz	Absinth wormwood 96 99 99	Canada thistle 72 94 83	Sowthistle 93 93 93	Absinth wormwood 91 98 95	2-Jul-10 Canada thistle 65 86 72	93 95 90	Absinth wormwood 75 90 83	Canada thistle 7 49 38
Treatment ² 2,4-D Milestone	Rate product/A 32 fl oz 7 fl oz	Absinth wormwood 96 99 99 99	Canada thistle 72 94 83 87	Sowthistle 93 93 93 93 98	Absinth wormwood 91 98 95 93	2-Jul-10 Canada thistle 65 86 72 71	93 95 90 99	Absinth wormwood 75 90 83 83	Canada thistle 7 49 38 68
Treatment ² 2,4-D Milestone Milestone Chaparral	Rate product/A 32 fl oz 7 fl oz 5 fl oz 3 oz wt	Absinth wormwood 96 99 99	Canada thistle 72 94 83	Sowthistle 93 93 93	Absinth wormwood 91 98 95	2-Jul-10 Canada thistle 65 86 72	93 95 90	Absinth wormwood 75 90 83	Canada thistle 7 49 38
Treatment ² 2,4-D Milestone Milestone Chaparral MAT28	Rate product/A 32 fl oz 7 fl oz 5 fl oz 3 oz wt 2 oz wt	Absinth wormwood 96 99 99 99	Canada thistle 72 94 83 87	Sowthistle 93 93 93 93 98	Absinth wormwood 91 98 95 93	2-Jul-10 Canada thistle 65 86 72 71	93 95 90 99	Absinth wormwood 75 90 83 83	Canada thistle 7 49 38 68
Treatment ² 2,4-D Milestone Milestone Chaparral MAT28 MAT28 +	Rate product/A 32 fl oz 7 fl oz 5 fl oz 3 oz wt 2 oz wt 2 + 0.167	Absinth wormwood 96 99 99 99 99 99 99	Canada thistle 72 94 83 87 96	Sowthistle 93 93 93 93 98 98	Absinth wormwood 91 98 95 93 93 93	2-Jul-10 Canada thistle 65 86 72 71 98	93 95 90 99 98	Absinth wormwood 75 90 83 83 83 85	Canada thistle 7 49 38 68 89
Treatment ² 2,4-D Milestone Milestone Chaparral MAT28 MAT28 + Telar	Rate product/A 32 fl oz 7 fl oz 5 fl oz 3 oz wt 2 oz wt 2 + 0.167	Absinth wormwood 96 99 99 99 99 99 94 89	Canada thistle 72 94 83 87 96 93	Sowthistle 93 93 93 98 98 98 99	Absinth wormwood 91 98 95 93 93 93 78	2-Jul-10 Canada thistle 65 86 72 71 98 98	93 95 90 99 98 98	Absinth wormwood 75 90 83 83 83 83 85 80	Canada thistle 7 49 38 68 89 87
Treatment ² 2,4-D Milestone Milestone Chaparral MAT28 MAT28 + Telar C.V. (%)	Rate product/A 32 fl oz 7 fl oz 5 fl oz 3 oz wt 2 oz wt 2 + 0.167 oz wt	Absinth wormwood 96 99 99 99 99 94 89 7.9 12	Canada thistle 72 94 83 87 96 93 93 6.8	Sowthistle 93 93 93 98 98 99 4.4	Absinth wormwood 91 98 95 93 93 93 78 5.1	2-Jul-10 Canada thistle 65 86 72 71 98 98 98	93 95 90 99 98 98 3.2	Absinth wormwood 75 90 83 83 83 85 80 12.9	Canada thistle 7 49 38 68 89 87 87 59.2