

Perennial weed control with aminopyralid and aminocyclopyrachlor, Sheridan County. (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.

Table.1 Perennial weed control with fall herbicide treatments ¹									
Herbicide		Weed control							
		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
¹ Application on October 3, 2008.									
² 2,4-D=LV4 (Loveland); All treatments except 2,4-D include NIS=Preference (Winfield Solutions) at 0.25% v/v.									
Table.2 Perennial weed control with summer herbicide treatments ¹									
Herbicide		Weed control							
		30-Sep-09			2-Jul-10			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	96	72	93	91	65	93	75	7
Milestone	7 fl oz	99	94	93	98	86	95	90	49
Milestone	5 fl oz	99	83	93	95	72	90	83	38
Chaparral	3 oz wt	99	87	98	93	71	99	83	68
MAT28	2 oz wt	94	96	98	93	98	98	85	89
MAT28 + Telar	2 + 0.167 oz wt	89	93	99	78	98	98	80	87
C.V. (%)		7.9	6.8	4.4	5.1	9.4	3.2	12.9	59.2
LSD (0.05)		12	9	6	7	12	5	15	31
¹ Application on July 1, 2009.									
² 2,4-D=LV4 (Loveland); All treatments except 2,4-D include NIS=Preference (Winfield Solutions) at 0.25% v/v.									