

Weed control in CRP (2002)

The objective of this study was to evaluate weed control in CRP with different herbicide rates compared to clipping. Individual plots were 10 x 50 ft with four replications. Redeem, 2,4-D ester, and Tordon + 2,4-D were applied in June 2001. Two treatments were clipped in August 2001 with a rotary mower with the intention of following the clipping with a fall application of Redeem or Tordon + 2,4-D. However, dry conditions prevented weed regrowth, thus no herbicide treatments were applied following the August clipping. Canada thistle density was determined by averaging densities in three square-meter quadrats in each plot prior to herbicide application in June 2001.

In these small plot trials, all herbicide treatments reduced weed densities in 2002 compared to 2001 densities. 2,4-D ester reduced weed densities similar to Redeem and Tordon + 2,4-D at Sawyer (Table 1) and Minot (Table 2). Clipping also reduced Canada thistle densities, but not perennial sowthistle densities.

These results are in contrast to what we observed in larger scale plots in the same fields as the small plot trials. Herbicide treatments in the larger scale plots were 4-6 acres each. In the larger scale plots, we generally observed excellent (>95%) Canada thistle control with Tordon + 2,4-D (1 pt + 1 qt), good (80%) Canada thistle control with Redeem (2.5 pt) or Curtail (4 pt), but poor (<50%) Canada thistle control with 2,4-D ester (1 qt).

Table 1. Weed control in CRP - Sawyer

Treatment	Rate	Timing	Canada thistle		Perennial Sowthistle	
			July 2, 2001	June 17, 2002	July 2, 2001	June 17, 2002
			————— plants / m ² —————			
Redeem + NIS	1 pt + 0.25% v/v	June	15	7	10	7
Redeem + NIS	2.5 pt + 0.25% v/v	June	26	5	9	0
2,4-D ester	1 qt	June	25	4	10	2
Tordon + 2,4-D	0.5 pt + 1 qt	June	17	5	15	1
Tordon + 2,4-D	1 pt + 1 qt	June	16	4	9	5
Clipping		August	23	9	17	24
Clipping		August	26	11	13	17
LSD (0.05)			NS	NS	NS	15
CV			42	94	92	127

Table 2. Weed control in CRP - Minot

Treatment	Rate	Timing	Canada thistle		Perennial Sowth.		Absinth wormwd	
			Jul 2 2001	Jun 17 2002	Jul 02 2001	Jun 17 2002	Jul 2 2001	Jun 17 2002
			————— plants / m ² —————					
Redeem + NIS	1 pt + 0.25% v/v	June	8	2	11	0	5	2
Redeem + NIS	2.5 pt + 0.25% v/v	June	10	1	10	0	3	0
2,4_D ester	1 qt	June	15	4	16	0	3	1
Tordon + 2,4-D	0.5 pt + 1 qt	June	13	0	18	0	1	0
Tordon + 2,4-D	1 pt + 1 qt	June	14	0	16	0	8	0

Clipping	August	9	3	11	3	3	2
Clipping	August	4	3	10	2	6	6
LSD (0.05)		NS	2	NS	NS	NS	NS
CV		59	79	51	328	116	186