

Wild oat control with Puma, Discover, Everest, and Silverado alone and with broadleaf herbicides at Crookston, MN - 2004. Durgan, Beverly R., Jochum Wiersma, Jim Cameron, and Douglas Miller . The objective of the this experiment was to evaluate wild oat control with Puma (fenoxaprop & safener), Discover NG (clodinafop & safener), Everest (flucarbazone), and Silverado (AE F130060 and safener) alone and in combination with several broadleaf herbicides. The experiment was conducted at Crookston, MN on a Donaldson and Wheaton loam soil. Following weedy fallow, the experimental area received 100 lb/A of N and was fall plowed. In the spring of the following year, the experimental area was disked and harrowed. 'Alsen' hard red spring wheat was seeded on April 27 at 1.5 Bu/A. All herbicide treatments were applied with a backpack type sprayer delivering 10 gpa at 30 psi using 80015 flat fan nozzles. The experimental design was a randomized complete block with three replications and plot size was 10 by 16 ft. Application data and environmental conditions are listed below. Crop injury and wild oat control were visually rated. Yields were measured. All data are presented in the table below.

Treatment Date	June 4
Wioa stage	3 leaf
Wheat stage	3 leaf
Air temperature (°F)	73
Relative humidity (%)	31
Soil conditions	moist
Soil temperature (°F)	50
Rainfall before Application	
Week 1 (inch)	2.93
Rainfall after Application	
Week 1 (inch)	0.63
Week 2 (inch)	0.52

Table. Wild oat control with Puma, Discover, Everest, and Silverado alone and with broadleaf herbicides at Crookston, MN - 2004 (Durgan, Wiersma, Cameron, and Miller).

Treatment	Rate (lb ai/A)	Wheat Injury					AVEFA Control			Wheat Yield (bu/A)
		6/10	6/17	6/24	7/8	7/14	6/24	7/8	7/14	
		----- % -----					-----			
Fenoxaprop & safener	0.082	0	0	0	0	0	90	99	99	71
Fenoxaprop & safener + bromoxynil & MCPA ester ¹	0.082 + 0.25 & 0.25	3	0	2	0	0	90	98	96	64
Fenoxaprop & safener + bromoxynil & MCPA ester + fluroxypyr	0.082 + 0.25 & 0.25 + 0.062	12	0	2	3	0	90	95	92	57
Fenoxaprop & safener + bromoxynil & MCPA ester + thifensulfuron	0.082 + 0.25 & 0.25 + 0.014	5	0	2	3	0	90	96	95	60
Fenoxaprop & safener + thifensulfuron + fluroxypyr	0.082 + 0.014 + 0.062	0	0	2	0	0	90	98	95	66
Fenoxaprop & safener + clopyralid & MCPA ester ² + fluroxypyr	0.082 + 0.09 & 0.5	0	0	2	0	0	90	99	99	63
Fenoxaprop & safener + bromoxynil & MCPA ester + fluroxypyr	0.082 + 0.027 & 0.15 + 0.062	0	0	2	0	0	90	98	99	61
Clodinafop & safener ³	0.05	0	0	0	0	0	90	98	99	64
Clodinafop & safener + bromoxynil & MCPA ester	0.05 + 0.25 & 0.25	10	0	0	0	0	90	90	94	64
Clodinafop & safener + bromoxynil & MCPA ester + fluroxypyr	0.05 + 0.25 & 0.25 + 0.062	7	0	0	0	0	90	92	92	62
Clodinafop & safener + bromoxynil & MCPA ester + thifensulfuron + fluroxypyr	0.05 + 0.25 & 0.25 + 0.014 + 0.062	10	0	0	0	0	90	92	92	62
Clodinafop & safener + thifensulfuron + fluroxypyr	0.05 + 0.016 + 0.062	0	0	0	0	0	90	99	99	62
Clodinafop & safener + clopyralid & MCPA ester	0.05 + 0.09 & 0.5	0	0	0	0	0	90	99	99	65
Clodinafop & safener + bromoxynil & MCPA ester + fluroxypyr	0.05 + 0.027 & 0.15 + 0.062	0	0	2	0	0	90	99	99	60
Clodinafop & safener + MCPA ester + dicamba ⁴	0.05 + 0.25 + 0.062	0	0	0	0	0	88	98	99	57
Flucarbazone + NIS ⁵	0.026 + 0.25%	0	0	0	0	0	78	83	83	56
Flucarbazone + bromoxynil & MCPA ester + NIS	0.026 + 0.25 & 0.25 + 0.25%	5	0	0	0	0	85	85	68	71
Flucarbazone + thifensulfuron + fluroxypyr + NIS	0.026 + 0.016 + 0.062 + 0.25%	0	0	0	0	0	77	72	83	59
Flucarbazone + clopyralid & MCPA ester + fluroxypyr + NIS	0.026 + 0.027 & 0.15 + 0.062 + 0.25%	0	0	0	0	0	80	85	82	68
AE F130060 & safener + MSO ⁶	0.0153 + 1.9%	0	0	2	0	0	75	83	87	58
AE F130060 & safener + Quad 7 ⁷	0.0153 + 1.0%	0	0	2	0	0	83	87	90	70
AE F130060 & safener + bromoxynil & MCPA ester + MSO	0.0153 + 0.25 & 0.25 + 1.9%	13	0	2	0	0	83	80	85	64
AE F130060 & safener + bromoxynil & MCPA ester + Quad 7	0.0153 + 0.25 & 0.25 + 1.0%	20	0	2	0	0	78	84	82	62
AE F130060 & safener + bromoxynil & MCPA ester + fluroxypyr + MSO	0.0153 + 0.25 & 0.25 + 0.062 + 1.9%	17	0	2	0	0	83	77	72	65
AE F130060 & safener + bromoxynil & MCPA ester + thifensulfuron + MSO	0.0153 + 0.25 & 0.25 + 0.014 + 1.9%	10	0	2	0	0	83	77	72	63
AE F130060 & safener + bromoxynil & MCPA ester + thifensulfuron + Quad 7	0.0153 + 0.25 & 0.25 + 0.014 + 1.0%	20	0	3	0	0	68	81	80	60
AE F130060 & safener + thifensulfuron + fluroxypyr + MSO	0.0153 + 0.016 + 0.062 + 1.9%	5	0	2	0	0	80	85	78	65
AE F130060 & safener + thifensulfuron + fluroxypyr + Quad 7	0.0153 + 0.016 + 0.062 + 1.0%	0	0	2	0	0	85	86	83	64
AE F130060 & safener + clopyralid & MCPA ester + MSO	0.0153 + 0.09 & 0.5 + 1.9%	0	0	3	0	0	80	88	86	67
AE F130060 & safener + clopyralid & MCPA ester + fluroxypyr + MSO	0.0153 + 0.09 & 0.5 + 0.062 + 1.9%	0	0	3	0	0	77	85	86	62
Weedy check		0	0	0	0	0	--	--	--	30
LSD (P=.05)		6	ns	ns	ns	ns	7	7	4	11

¹ Premix = Bronate Advanced 5E.

² Premix = Curtail M 2.77E.

³ Premix = Discover NG 0.5E.

⁴ dicamba = Clarity 4L.

⁵ NIS = Class Preference nonionic surfactant.

⁶ MSO = Methylated seed oil.

⁷ adjuvant.