Wild oat control with Puma, Discover, and Everest alone and with broadleaf herbicides at Crookston, MN - 2002. Durgan, Beverly R., Jim Cameron, Douglas W. Miller and Krishona Martinson. The objective of the this experiment was to evaluate wild oat control with Puma (fenoxaprop & safener), Discover (clodinafop & safener), and Everest (flucarbazone) 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 the experimental area was disked and harrowed. '2375' hard red spring wheat and 'Robust' Barley were seeded on April 30 at 1.5 and 1.75 Bu/A respectively. 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. Yields were measured. All data are presented in Tables 1 and 2 for barley and wheat, respectively.

Treatment Date	June 4
Weed stage	3.5-4 leaf Wild Oats
Air Temperature (° F.)	0-2 E
Wind (mph)	calm
Cloud Cover	clear
Rainfall before Application	
Week 1 (inch)	0.05
Rainfall after Application	
Week 1 (inch)	3.60
Week 2 (inch)	0.43

Table 1. Wild oat control with Puma, Discover, and Everest alone and with broadleaf herbicides in barley at Crookston, MN - 2002 (Durgan, Cameron, Miller, and Martinson).

Treatment	Rate	Barley Injury					AVEFA Control			Barley
		6/12	6/18	6/27	7/3	7/9	6/27	7/3	7/9	Yield
	(lb ai/A)	(%)								(bu/A)
Fenoxaprop & safener	0.082	0	0	0	0	0	99	99	93	52
Fenoxaprop & safener + bromoxynil & MCPA ester[1]	0.082 + 0.25 & 0.25	0	0	0	0	3	98	99	90	53
Fenoxaprop & safener + bromoxynil & MCPA ester + fluroxypyr	0.082 + 0.187 & 0.187 + 0.062	0	2	3	3	0	99	99	92	52
Fenoxaprop & safener + thifensulfuron + fluroxypyr	0.082 + 0.014 + 0.062	3	5	0	2	3	99	99	96	51
Clodinafop & safener + surf[2]	0.05 + 0.8%	32	12	8	10	3	99	99	99	43
Clodinafop & safener + bromoxynil & MCPA ester + surf	0.05 + 0.25 & 0.25 + 0.8%	32	8	5	2	12	99	99	99	46
Clodinafop & safener + bromoxynil & MCPA ester + fluroxypyr + surf	0.05 + 0.187 & 0.187 + 0.062 + 0.8%	22	3	2	3	0	99	99	99	49
Clodinafop & safener + thifensulfuron + fluroxypyr + surf	0.05 + 0.014 + 0.062 + 0.8%	30	5	5	2	10	99	99	98	48
Flucarbazone + NIS[3]	0.026 + 0.25%	32	17	13	13	15	99	99	96	52
Flucarbazone + bromoxynil & MCPA ester + NIS	0.026 + 0.25 & 0.25 + 0.25%	35	30	27	33	18	99	99	96	38
Flucarbazone + bromoxynil & MCPA ester + fluroxypyr + NIS	0.026 + 0.187 & 0.187 + 0.062 + 0.25%	30	20	15	25	22	99	99	98	44
Flucarbazone + thifensulfuron + fluroxypyr + NIS	0.026 + 0.014 + 0.062 + 0.25%	37	10	13	8	25	99	99	95	55
Weedy check		0	0	0	0	0	--	--	--	30
LSD (P=.05)		9	13	9	11	ns	ns	ns	5	8

[1] Premix = Bronate Advanced 5E.
[2] surf = DSV adjuvant.
[3] NIS = Class Preference nonionic surfactant.

Table 2. Wild oat control with Puma, Discover, and Everest alone and with broadleaf herbicides in wheat at Crookston, MN - 2002 (Durgan, Cameron, Miller, and Martinson).

Treatment	Rate	Wheat Injury					AVEFA Control			Wheat
		6/12	6/18	6/27	7/3	7/9	6/27	7/3	7/9	Yield
	(lb ai/A)	(%)								(bu/A)
Fenoxaprop & safener	0.082	0	0	0	0	0	99	99	93	32
Fenoxaprop & safener + bromoxynil & MCPA ester[1]	0.082 + 0.25 & 0.25	0	3	0	0	0	99	99	92	44
Fenoxaprop & safener + bromoxynil & MCPA ester + fluroxypyr	0.082 + 0.187 & 0.187 + 0.062	0	0	0	0	0	99	99	94	48
Fenoxaprop & safener + thifensulfuron + fluroxypyr	0.082 + 0.014 + 0.062	3	0	0	0	0	99	99	98	47
Clodinafop & safener + surf[2]	0.05 + 0.8%	2	0	0	0	0	99	99	99	36
Clodinafop & safener + bromoxynil & MCPA ester + surf	0.05 + 0.25 & 0.25 + 0.8%	5	0	0	0	3	99	99	99	45
Clodinafop & safener + bromoxynil & MCPA ester + fluroxypyr + surf	0.05 + 0.187 & 0.187 + 0.062 + 0.8%	2	0	0	0	0	99	99	99	49
Clodinafop & safener + thifensulfuron + fluroxypyr + surf	0.05 + 0.014 + 0.062 + 0.8%	0	0	0	0	3	99	99	97	47
Flucarbazone + NIS[3]	0.026 + 0.25%	13	3	0	0	0	99	99	96	35
Flucarbazone + bromoxynil & MCPA ester + NIS	0.026 + 0.25 & 0.25 + 0.25%	17	8	3	3	0	99	99	96	41
Flucarbazone + bromoxynil & MCPA ester + fluroxypyr + NIS	0.026 + 0.187 & 0.187 + 0.062 + 0.25%	15	5	3	3	0	99	99	97	42
Flucarbazone + thifensulfuron + fluroxypyr + NIS	0.026 + 0.014 + 0.062 + 0.25%	18	5	3	7	0	99	99	95	40
Weedy check		0	0	0	0	0	--	--	--	7
LSD (P=.05)		5	5	ns	ns	ns	ns	ns	ns	8

[1] Premix = Bronate Advanced 5E.
[2] surf = DSV adjuvant.
[3] NIS = Class Preference nonionic surfactant.