

Wild oat control in hard red spring wheat and barley with HOE1102 at Crookston, MN - 1997. Durgan, Beverly R., Eric Spandl, and Jim Cameron. The objective of the this experiment was to evaluate wild oat control with HOE1102 (fenoxaprop & safener) 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. 'Pioneer 2375' hard red spring wheat and 'Robust' barley were seeded on May 15 at rates of 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 dates and environmental conditions are listed below. Crop injury was visually rated on June 17, June 23, June 30 and July 14. Weed control was visually rated on June 30 and July 14. Wheat yields were measured. All data are presented in Tables 1 and 2 for wheat and barley, respectively.

Treatment Date	June 11
Target weed or crop stage	4-5 leaf Wioa
Soil Moisture	dry
Sky	clear
Wind	calm
Air Temperature (°F)	69
Rainfall before Application	
Week 1 (inch)	0.00
Rainfall after Application	
Week 1 (inch)	0.81
Week 2 (inch)	3.28
Wheat leaf no.	5
Barley leaf no.	5

Table 1. Wild oat control with HOE1102 in hard red spring wheat at Crookston, MN - 1997 (Durgan, Spandl, and Cameron).

Treatment	Rate (lb/A)	Wioa Control		Wheat				Yield (Bu/A)
		6/30	7/14	Injury				
				6/17	6/23	6/30	7/14	
		----- (%) -----						
Postemergence (June 11)								
Fenoxaprop & safener ¹	0.104	58	97	8	22	8	0	40
Fenoxaprop & safener + thifensulfuron & tribenuron ² + NIS ³	0.104 + 0.009 & 0.005 + 0.25%	62	96	7	27	10	0	39
Fenoxaprop & safener + thifensulfuron & tribenuron + NIS	0.119 + 0.009 & 0.005 + 0.25%	65	96	7	28	10	0	39
Fenoxaprop & safener + bromoxynil & MCPA ester ⁴	0.104 + 0.25 & 0.25	48	89	10	23	10	0	37
Fenoxaprop & safener + bromoxynil & MCPA ester	0.119 + 0.25 & 0.25	57	93	12	22	12	0	39
Fenoxaprop & safener + bromoxynil	0.104 + 0.25	48	91	13	22	8	0	42
Fenoxaprop & safener + MCPA ester	0.104 + 0.375	55	90	8	23	7	0	40
Fenoxaprop & 2,4-D & MCPA ⁵ + bromoxynil	0.09 & 0.12 & 0.37 + 0.25	33	70	12	27	12	0	31
Imazamethabenz ⁶ + bromoxynil & MCPA ester + NIS	0.375 + 0.25 & 0.25 + 0.25%	37	73	15	23	10	0	33
Tralkoxydim + TF8035 COC + bromoxynil & MCPA ester	0.18 + 0.5% + 0.25 & 0.25	55	85	12	25	10	0	39
Weedy check		--	--	0	0	0	0	25
LSD (0.05)		9	14	3	8	ns	ns	8

¹ HOE 1102 (1.0E)

² Premix = Harmony Extra 75DF.

³ NIS = Class Preference nonionic surfactant.

⁴ Premix = Bronate 4E.

⁵ Premix = Tiller 2.77E.

⁶ Assert 67SG.

Table 2. Wild oat control with HOE1102 in barley at Crookston, MN - 1997 (Durgan, Spandl, and Cameron).

Treatment	Rate (lb/A)	Wioa Control		Barley				Yield (Bu/A)
		6/30	7/14	Injury				
				6/17	6/23	6/30	7/14	
		----- (%) -----						
Postemergence (June 11)								
Fenoxaprop & safener ¹	0.104	62	99	3	8	12	3	99
Fenoxaprop & safener + thifensulfuron & tribenuron ² + NIS ³	0.104 + 0.009 & 0.005 + 0.25%	62	97	5	8	10	0	103
Fenoxaprop & safener + thifensulfuron & tribenuron + NIS	0.119 + 0.009 & 0.005 + 0.25%	62	99	5	8	7	0	103
Fenoxaprop & safener + bromoxynil & MCPA ester ⁴	0.104 + 0.25 & 0.25	45	95	5	13	12	0	102
Fenoxaprop & safener + bromoxynil & MCPA ester	0.119 + 0.25 & 0.25	57	96	7	12	10	0	106
Fenoxaprop & safener + bromoxynil	0.104 + 0.25	50	96	7	7	7	0	106
Fenoxaprop & safener + MCPA ester	0.104 + 0.375	50	94	7	8	8	0	105
Fenoxaprop & 2,4-D & MCPA ⁵ + bromoxynil	0.09 & 0.12 & 0.37 + 0.25	35	77	10	15	13	0	86
Imazamethabenz ⁶ + bromoxynil & MCPA ester + NIS	0.375 + 0.25 & 0.25 + 0.25%	37	76	8	12	8	0	95
Tralkoxydim + TF8035 COC + bromoxynil & MCPA ester	0.18 + 0.5% + 0.25 & 0.25	50	89	8	13	12	0	101
Weedy check		--	--	0	0	0	0	75
LSD (0.05)		11	8	4	6	6	ns	14

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⁶ Assert 67SG.