

Wild oat control with Everest at Crookston, MN - 2001. Durgan, Beverly R., Jim Cameron, Douglas W. Miller and Krishona Martinson. This experiment was designed to evaluate wild oat control and wheat / barley injury with Everest (flucarbazone) in tank mix combinations with 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 May 14 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 oats control were visually. Wheat yields were measured. Barley yields were not measured due to heavy rainfall and subsequent stand damage. All data are presented in Tables 1 and 2 for barley and wheat, respectively.

Treatment Date	June 12
Target weed or crop stage	4-5 leaf grain
Barley Height (inch)	12
Wheat Height (inch)	10
Wild Oat Height (inch)	12
Leaf Stage	4
Air Temperature (degrees F.)	65
Relative Humidity (%)	56
Wind (mph)	calm
Cloud Cover	cloudy
Rainfall before Application	
Week 1 (inch)	0.28
Rainfall after Application	
Week 1 (inch)	0.73
Week 2 (inch)	0.13

Table 1. Wild oat control with Everest in barley at Crookston, MN - 2001 (Durgan, Cameron, Miller, and Martinson).

Treatment	Rate (lb ai/A)	Barley Injury			Wioa Control	
		6/21	7/09	7/22	7/09	7/22
		----- % -----				
Flucarbazone + 2,4-D ester + NIS ¹	0.027 + 0.25 + 0.25%	23	30	30	99	98
Flucarbazone + bromoxynil & MCPA ester ² + NIS	0.027 + 0.25 & 0.25 + 0.25%	28	45	40	99	97
Flucarbazone + thifensulfuron + fluroxypyr + NIS	0.027 + 0.014 + 0.062 + 0.25%	30	38	35	99	97
Flucarbazone + thifensulfuron + carfentrazone + MCPA ester + NIS	0.027 + 0.014 + 0.008 + 0.25 + 0.25%	20	30	27	99	97
Flucarbazone + carfentrazone + MCPA ester + NIS	0.027 + 0.008 + 0.25 + 0.25%	32	38	37	99	97
Flucarbazone + MCPA ester + NIS	0.027 + 0.25 + 0.25%	28	40	38	99	97
Flucarbazone + thifensulfuron + 2,4-D ester + NIS	0.027 + 0.014 + 0.25 + 0.25%	18	35	33	99	97
Flucarbazone + fluroxypyr + 2,4-D ester + NIS	0.027 + 0.062 + 0.25 + 0.25%	22	33	17	99	98
Flucarbazone + tribenuron + 2,4-D ester + NIS	0.027 + 0.008 + 0.25 + 0.25%	22	32	33	99	98
Fenoxaprop & safener + bromoxynil & MCPA ester	0.0825 + 0.25 & 0.25	12	0	0	99	97
Clodinafop & safener + bromoxynil & MCPA ester + DSV adjuvant	0.05 + 0.25 & 0.25 + 0.8%	30	25	23	99	99
Weedy check		0	0	0	--	--
LSD (P=.05)		9	13	14	ns	ns

¹ NIS = Class Preference nonionic surfactant.

² Premix = Bronate 4E.

Table 2. Wild oat control with Everest in hard red spring wheat at Crookston, MN - 2001 (Durgan, Cameron, Miller, and Martinson).

Treatment	Rate (lb ai/A)	Wheat Injury			Wioa Control		Wheat Yield Bu/A
		6/21	7/09	7/22	7/09	7/22	
		----- % -----					
Flucarbazone + 2,4-D ester + NIS ¹	0.027 + 0.25 + 0.25%	17	0	0	99	96	70
Flucarbazone + bromoxynil & MCPA ester ² + NIS	0.027 + 0.25 & 0.25 + 0.25%	18	0	0	99	98	67
Flucarbazone + thifensulfuron + fluroxypyr + NIS	0.027 + 0.014 + 0.062 + 0.25%	22	3	3	99	97	56
Flucarbazone + thifensulfuron + carfentrazone + MCPA ester + NIS	0.027 + 0.014 + 0.008 + 0.25 + 0.25%	15	0	0	99	97	64
Flucarbazone + carfentrazone + MCPA ester + NIS	0.027 + 0.008 + 0.25 + 0.25%	18	0	0	99	98	65
Flucarbazone + MCPA ester + NIS	0.027 + 0.25 + 0.25%	18	0	0	99	97	66
Flucarbazone + thifensulfuron + 2,4-D ester + NIS	0.027 + 0.014 + 0.25 + 0.25%	15	0	0	99	96	64
Flucarbazone + fluroxypyr + 2,4-D ester + NIS	0.027 + 0.062 + 0.25 + 0.25%	15	0	0	99	98	67
Flucarbazone + tribenuron + 2,4-D ester + NIS	0.027 + 0.008 + 0.25 + 0.25%	15	0	0	99	98	68
Fenoxaprop & safener + bromoxynil & MCPA ester	0.0825 + 0.25 & 0.25	12	0	0	99	97	68
Clodinafop & safener + bromoxynil & MCPA ester + DSV adjuvant	0.05 + 0.25 & 0.25 + 0.8%	7	0	0	99	97	64
Weedy check		0	0	0	--	--	49
LSD (P=.05)		7	ns	ns	ns	ns	11

¹ NIS = Class Preference nonionic surfactant.

² Premix = Bronate 4E.