

**Wild oat control in spring wheat with Everest 2.0 and various adjuvants at Crookston,**

**MN - 2014.** Durgan, Beverly R., Jochum J. Wiersma, Jim Cameron, Matthew Green, and Douglas Miller. The objective of this experiment was to evaluate wild oat control and crop injury with Everest 2.0 alone and in combination with several adjuvants. The experiment was conducted at Crookston, MN on a Donaldson and Wheaton loam soil. Following weedy fallow, the experimental area was burned to remove the standing straw and, after receiving 100 lb/A of N as urea, was chisel plowed in the fall. In the spring of the following year, a seedbed was prepared using a field cultivator with rolling baskets. 'RB07' hard red spring wheat was seeded on May 17 at 1.8 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.

<b>Treatment Date</b>	<b>June 9</b>
Wheat stage	2-4 leaf
Wild oat stage	4-4.5 leaf
Air temperature (°F)	68
Soil temperature (°F)	60
Relative humidity (%)	54
Wind	2 mph
Sky	overcast
Rainfall before Application	
Week 1 (inch)	0.70
Rainfall after Application	
Week 1 (inch)	2.69
Week 2 (inch)	1.82

No significant differences in wild oat control or wheat yields were observed between any of the herbicide/adjuvant treatments. No injury symptoms were observed. Treatments were applied to 4 to 4.5 leaf wild oat resulting in overall control ranging from 87% to 93% at the July 30 rating date. While herbicide treated wheat yields were significantly higher than the weedy check, they ranged from 15 to 20 bushels per acre lower than wheat yields in adjacent experiments where wild oat was controlled at an earlier stage and control was in the upper ninety percent range season long.

**Wild oat in spring wheat with Everest 2.0 and various adjuvants at Crookston, MN – 2014.**  
**Durgan, Wiersma, Cameron, Green, and Miller.**

Treatment	Rate (Product/A)	Wild Oat Control			Wheat	
		7/10 (%)	7/16 (%)	7/30 (%)	Injury 6/6 (%)	Yield (Bu/A)
Everest 2.0	1 oz	95	96	88	0	62
Everest 2.0 + Interlock	1 oz + 4 oz	93	94	92	0	67
Everest 2.0 + AG 13064	1 oz + 4 oz	95	96	93	0	67
Everest 2.0 + AG 14004	1 oz + 4 oz	92	92	92	0	66
Everest 2.0 + AG 13040	1 oz + 3.2 oz	95	93	88	0	65
Everest 2.0 + AG 8050	1 oz + 6.4 oz	93	85	88	0	65
Everest 2.0 + AG 14012	1 oz + 6.4 oz	91	86	88	0	67
Everest 2.0 + AG 14013	1 oz + 6.4 oz	93	83	86	0	60
Everest 2.0 + AG 14019	1 oz + 6.4 oz	94	88	87	0	66
Everest 2.0 + AG 14020	1 oz + 6.4 oz	93	93	93	0	66
Weedy Check	--	--	--	--	--	21
LSD (0.05)		ns	ns	ns	ns	ns

Everest 2.0 3.5SC = flucarbazone-sodium & cloquintacet (safener).

Interlock = drift control agent.

AG 13064 = experimental adjuvant from Winfield Solutions.

AG 14004 = experimental adjuvant from Winfield Solutions.

AG 13040 = experimental adjuvant from Winfield Solutions.

AG 8050 = experimental adjuvant from Winfield Solutions.

AG 14012 = experimental adjuvant from Winfield Solutions.

AG 14013 = experimental adjuvant from Winfield Solutions.

AG 14019 = experimental adjuvant from Winfield Solutions.

AG 14020 = experimental adjuvant from Winfield Solutions.