

Wild oat control in spring wheat with Varro and Everest 2.0 plus various adjuvants at Crookston, MN - 2015. Durgan, Beverly R., Jochum J. Wiersma, Jim Cameron, and Douglas Miller. The objective of this experiment was to evaluate wild oat control and crop injury with Varro and 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 standing residue was shredded and, after receiving 100 lbs/A as urea, was chisel plowed. In the spring of the following year, a seedbed was prepared using a field cultivator with rolling baskets. 'Linkert' hard red spring wheat was seeded on April 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.

Treatment Date	May 26
Wheat stage	3 leaf
Air temperature (°F)	81
Soil temperature (°F)	70
Relative humidity (%)	38
Wind	5 mph
Rainfall before Application	
Week 1 (inch)	0.0
Rainfall after Application	
Week 1 (inch)	0.85
Week 2 (inch)	2.42

Results

Overall wild oat control ranged from fair to good. No significant treatment differences were observed at the first three rating dates. Wheat yields were extremely variable and no significant differences could be detected.

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Treatment	Rate (Product/A)	Wild Oat Control				Wheat	
		6/4 (%)	6/16 (%)	6/30 (%)	7/10 (%)	Injury 6/6 (%)	Yield (Bu/A)
Varro	5 oz	52	83	80	73	0	39
Varro	6.85 oz	63	87	85	87	0	45
Varro + Preference	5 oz + 3.2 oz	50	88	83	78	0	38
Varro + Preference + Interlock	5 oz + 3.2 oz + 4 oz	50	87	85	83	0	40
Varro + MasterLock	5 oz + 6.4 oz	67	88	78	78	0	35
Varro + Destiny HC	5 oz + 12.8 oz	65	91	85	87	0	44
Varro + AG 14039	5 oz + 4 oz	67	83	77	84	0	40
Varro + AG 14039	5 oz + 6.4 oz	63	85	75	77	0	37
Varro + AG 14039	5 oz + 12.8 oz	67	88	78	85	0	42
Varro + AG 14019	5 oz + 6.4 oz	65	87	90	92	0	46
Varro + AG 14019	5 oz + 12.8 oz	65	87	86	87	0	42
Varro + AG 14020	5 oz + 6.4 oz	60	88	85	85	0	48
Varro + AG 14020	5 oz + 12.8 oz	62	92	93	93	0	44
Everest 2.0	0.75 oz	55	85	92	88	0	46
Everest 2.0 + Preference	0.75 oz + 3.2 oz	57	88	92	87	0	46
Everest 2.0 + Preference + Interlock	0.75 oz + 3.2 oz + 4 oz	52	85	86	91	0	36
Everest 2.0 + MasterLock	0.75 oz + 6.4 oz	53	87	90	75	0	26
Everest 2.0 + Destiny HC	0.75 oz + 12.8 oz	48	83	90	87	0	31
Everest 2.0 + AG 14039	0.75 oz + 4 oz	53	83	85	90	0	39
Everest 2.0 + AG 14039	0.75 oz + 6.4 oz	52	82	95	87	0	38
Everest 2.0 + AG 14039	0.75 oz + 12.8 oz	65	90	96	90	0	38
Everest 2.0 + AG 14019	0.75 oz + 6.4 oz	53	87	97	89	0	35
Everest 2.0 + AG 14019	0.75 oz + 12.8 oz	52	87	98	90	0	41
Everest 2.0 + AG 14020	0.75 oz + 6.4 oz	50	87	92	87	0	37
Everest 2.0 + AG 14020	0.75 oz + 12.8 oz	52	87	93	90	0	37
Weedy Check	--	--	--	--	--	--	7
LSD (0.05)		ns	ns	ns	9	ns	ns

Varro 0.083L = thiencazalone-methyl.

Preference = nonionic surfactant.

Interlock = drift control agent.

MasterLock = surfactant and drift control agent.

Destiny HC = methylated soybean oil, high fructose corn syrup, sorbitan fatty acid esters.

AG 14039 = experimental adjuvant from Winfield Solutions.

AG 14019 = experimental adjuvant from Winfield Solutions.

AG 14020 = experimental adjuvant from Winfield Solutions.

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