

**Wild oat control in spring wheat at Crookston, MN - 2017.** 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 various herbicide treatments. The experiment was conducted at Crookston, MN on a Donaldson and Wheaton loam soil. Following weedy fallow, the standing residue was burned and, after receiving 149 lbs/A N and 52 lbs/A P, was chisel plowed in the fall of 2016. In the spring of 2017, a seedbed was prepared using a field cultivator with rolling baskets. 'Linkert' hard red spring wheat was seeded on May 3 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>May 26</b>
Air temperature (°F)	67
Soil temperature (°F)	69
Relative humidity (%)	40
Wind	SW 6 mph
Sky	clear
Rainfall before Application	
Week 1 (inch)	0.50
Rainfall after Application	
Week 1 (inch)	0.75
Week 2 (inch)	0.40

## Wild oat control in spring wheat at Crookston, MN – 2017.

Durgan, Wiersma, Cameron, and Miller.

Treatment	Rate (Product/A)	Wild Oat Control			Wheat Injury		Wheat Yield (Bu/A)
		6/16 (%)	6/30 (%)	7/12 (%)	5/31 (%)	6/16 (%)	
Varro + Bison + AMS	6.85 oz + 1 pt + 1.18 pt	82	83	87	2	0	49
Varro + Weld + AMS	6.85 oz + 18 oz + 1.18 pt	83	90	85	2	0	55
Varro + Carnivore + AMS	6.85 oz + 1 pt + 1.18 pt	83	90	85	2	0	58
Varro + Widematch + 2,4-D ester LV6 + AMS	6.85 oz + 1 pt + 0.34 pt + 1.18 pt	83	90	88	5	0	50
Varro + Widematch + MCPA ester + AMS	6.85 oz + 1 pt + 0.5 pt + 1.18 pt	87	93	88	3	0	67
Varro + Widematch + Affinity Tankmix + AMS	6.85 oz + 1 pt + 0.6 oz + 1.18 pt	85	90	90	3	0	52
Varro + Preference + AMS	6.85 oz + 3.2 oz + 2.35 pt	88	92	93	2	0	62
Varro + Preference	6.85 oz + 3.2 oz	87	87	91	2	0	59
Huskie Complete	13.7 oz	83	88	88	3	0	53
Huskie Complete + AMS	13.7 oz + 1.18 pt	85	90	85	2	0	62
Wolverine Advanced	24.7 oz	85	88	87	0	0	57
A21996	15 oz	95	95	99	0	0	65
GoldSky + Preference	1 pt + 3.2 oz	87	92	96	2	0	59
PerfectMatch + Preference + AMS	1 pt + 3.2 oz + 3.5 pt	88	95	98	3	0	52
PerfectMatch + 2,4-D ester LV6 + AMS	1 pt + 0.5 pt + 3.5 pt	88	92	98	3	0	56
TeamMate + Hat Trick + Activator 90 + AMS	1 oz + 1.5 pt + 1.6 oz + 3.5 pt	87	92	98	2	0	57
Axial XL + Widematch + AMS	16.4 oz + 1 pt + 3.5 pt	83	95	99	0	0	59
Axial XL + Talinor + CoAct+	16.3 oz + 16.4 oz + 3.28 oz	90	95	98	0	0	57
Everest 2.0 + Widematch + Activator 90 + AMS	0.75 oz + 1 pt + 3.2 oz + 3.5 pt	85	93	95	0	0	52
Everest 2.0 + Preference + AMS	0.75 oz + 3.2 oz + 2.35 pt	88	90	95	2	0	49
Everest 2.0 + Preference + AMS	1.0 oz + 3.2 oz + 2.35 pt	87	92	90	0	0	41
AL-X1581ac + Preference + AMS	2.0 oz + 3.2 oz + 2.35 pt	88	92	92	2	0	41
AL-X1581af + Preference + AMS	2 oz + 3.2 oz + 2.35 pt	88	93	95	5	0	55
AL-X1581ag + Preference + AMS	2 oz + 3.2 oz + 2.35 pt	88	96	96	2	0	47
AL-X1581ag + Audit 1:1 + Preference + AMS	2 oz + 0.4 oz + 3.2 oz + 2.35 pt	90	95	99	3	0	58
AL-X2678aa + Preference + AMS	16.4 oz + 3.2 oz + 2.35 pt	88	95	95	5	0	54
AL-X2682aa + Preference + AMS	13.7 oz + 3.2 oz + 2.35 pt	85	95	96	5	0	43
AL-X2678aa + Audit 1:1 + Preference + AMS	16.4 oz + 0.4 oz + 3.2 oz + 2.35 pt	87	95	99	3	0	56
AL-X2682aa + Audit 1:1 + Preference + AMS	13.7 oz + 0.4 oz + 3.2 oz + 2.35 pt	88	93	90	3	0	54
Weedy Check	--	--	--	--	0	0	16
LSD (0.05)		ns	6	7	ns	ns	14

Varro 0.083L = thien carbazono-methyl.

Bison 4E = bromoxynil (2 lb ai/gal) & MCPA (2 lb ae/gal).

N-Pak AMS = 34% ammonium sulfate solution (3.4 lbs ammonium sulfate/gal).

Weld 2.89E = clopyralid (0.50 lb ai/gal) & MCPA (1.75 lb ae/gal) & fluroxypyr (0.64 lb ae/gal).

Carnivore 4E = bromoxynil (1.67 lb ai/gal) & MCPA (1.67 lb ae/gal) & fluroxypyr (0.67 lb ae/gal).

Widematch 1.5E = clopyralid (0.75 lb ae/gal) & fluroxypyr (0.75 lb ae/gal).

2,4-D Ester LV6 (5.6 lb ae/gal).

MCPA Ester 4E.

Affinity Tankmix 50SG = thifensulfuron (40%) & tribenuron (10%).

Preference = nonionic surfactant.

Huskie Complete 1.76L = thien carbazono-methyl (0.042 lb ai/gal) & pyrasulfotole (0.26 lb ai/gal) & bromoxynil phenol equivalent (1.46 lb ai/gal).

Wolverine Advanced 1.58E = fenoxaprop-p-ethyl (0.40 lb ai/gal) & pyrasulfotole (0.13 lb ai/gal) & bromoxynil (1.05 lb ai/gal).

A21996 = experimental from Syngenta.

GoldSky 0.84L = pyroxsulam (0.11 lb ai/gal) & fluroxypyr (0.71 lb ae/gal) & florasulam (0.018 lb ai/gal).

PerfectMatch 1.61SE = clopyralid (0.75 lb ae/gal) & fluroxypyr (0.75 lb ae/gal) & pyroxsulam (0.11 lb ai/gal).

TeamMate 21.5WG = pyroxsulam.

Hat Trick 2.82SE = clopyralid (0.51 lb ae/gal) & fluroxypyr (0.51 lb ae/gal) & MCPA ester (1.8 lb ae/gal).

Activator 90 = nonionic surfactant.

Axial XL 0.42EC = pinoxaden and adigor adjuvant.

Talinor = bicyclopyrone & bromoxynil.

CoAct+ = adjuvant.

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

AL-X1581ac = experimental from Arysta.

AL-X1581af = experimental from Arysta.

AL-X1581ag = experimental from Arysta.

Audit 1:1 50WDG = thifensulfuron (25%) & tribenuron (25%).

AL-X2678aa = experimental from Arysta.

AL-X2682aa = experimental from Arysta.