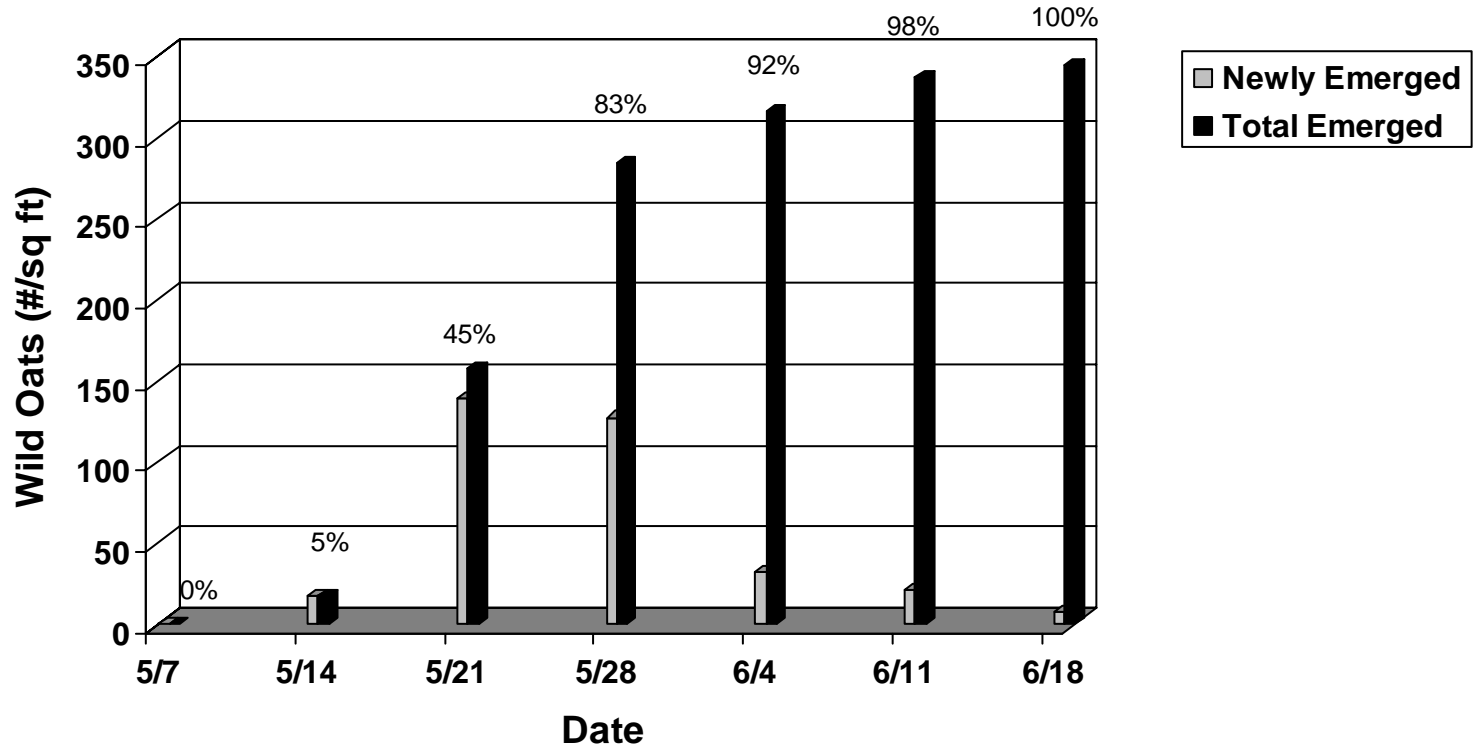


Wild oat control in spring wheat with various application times at Crookston, MN - 2013. Durgan, Beverly R., Jochum Wiersma, Jim Cameron, and Douglas W. Miller. This experiment was designed to evaluate wild oat control with several herbicides applied at three different wild oat stages. The experiment 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 plowed in the fall. In the spring of the following year, the experimental area was disked and harrowed. 'RB07' hard red spring wheat was seeded on May 7 at 1.5 Bu/A. The experimental design was a randomized complete block with three replications. Plot size was 10 by 16 ft. Target application stages were 1 leaf, 3-4 leaf and 5-6 leaf wild oat. All herbicide treatments were applied with a backpack type sprayer delivering 10 gpa at 30 psi using 80015 flat fan nozzles. Application data and environmental conditions are listed below. Crop injury and wild oat control were rated visually. Yields were measured. All data are presented in the table below.

Treatment Date	May 17	May 28	June 5
Wild oat stage	1 leaf	3-4 leaf	5-6 leaf
Air temperature (°F)	74	64	60
Relative humidity (%)	43	60	65
Soil temperature (°F)	64	54	60
Wind	5 mph	SW 4 mph	E 7 mph
Sky	overcast	overcast	overcast
Rainfall before Application			
Week 1 (inch)	0.19	2.31	1.66
Rainfall after Application			
Week 1 (inch)	0.00	2.23	0.30
Week 2 (inch)	2.31	0.22	0.03

2013 Wild Oat Emergence at Crookston, MN



Average Total Population = 344/sq ft

Wild oat control in spring wheat with various application times at Crookston, MN – 2013.

Durgan, Wiersma, Cameron, and Miller.

Treatment	Rate (Product/A)	Wild Oat Control						Wheat Injury					Wheat Yield (Bu/A)
		5/31	6/6	6/21	6/24	7/7	7/17	6/6	6/21	6/24	7/7	7/17	
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Application #1 (May 17)													
Everest 2.0 + Newtone	0.75 oz + 12.8 oz	10	13	3	20	32	13	0	0	0	0	0	12
Everest 2.0 + Newtone	1.0 oz + 12.8 oz	57	63	65	77	78	73	0	0	0	3	0	54
Everest 2.0 + ARY-0547-0021 + Newtone	0.75 oz + 0.4 oz + 12.8 oz	48	65	83	82	82	91	0	0	0	0	0	52
GoldSky + Newtone	1.0 pt + 12.8 oz	67	65	87	80	78	85	0	0	0	0	0	54
Huskie Complete + N-Pak AMS	13.7 oz + 1.18 pt	67	60	80	55	63	53	0	0	0	0	0	51
Rimfire Max + Destiny HC	3 oz + 0.75 pt	55	57	80	77	60	53	0	0	0	0	0	47
Axial XL	16.4 oz	73	67	90	70	80	70	0	0	0	0	0	56
Wolverive	27.4 oz	77	67	92	84	60	47	0	0	0	0	0	50
Application #2 (May 28)													
Everest 2.0 + Newtone	0.75 oz + 12.8 oz		17	85	82	82	96	3	0	0	0	0	56
Everest 2.0 + Newtone	1.0 oz + 12.8 oz		27	83	77	88	97	0	0	0	0	0	52
Everest 2.0 + ARY-0547-0021 + Newtone	0.75 oz + 0.4 oz + 12.8 oz		13	80	77	85	95	7	0	0	0	0	52
GoldSky + Newtone	1.0 pt + 12.8 oz		30	82	87	96	93	18	0	0	0	0	60
Huskie Complete + N-Pak AMS	13.7 oz + 1.18 pt		17	77	75	90	93	10	0	0	0	0	59
Rimfire Max + Destiny HC	3 oz + 0.75 pt		37	85	92	95	99	7	0	0	0	0	68
Axial XL	16.4 oz		47	93	96	98	96	0	0	0	0	0	59
Wolverive	27.4 oz		53	91	93	98	98	0	0	0	0	0	60
Rimfire Max + Huskie + MSO	3 oz + 11 oz + 1.5 pt		17	82	88	95	99	12	0	0	0	0	64
Rimfire Max + Huskie + Quad 7	3 oz + 11 oz + 0.8 pt		27	90	93	97	99	13	0	0	0	0	61
Varro + Bronate Advanced	6.85 oz + 0.8 pt		13	78	88	80	90	7	0	0	0	0	53
Application #3 (June 5)													
Everest 2.0 + Newtone	0.75 oz + 12.8 oz		--	53	53	87	87	--	0	0	3	0	44
Everest 2.0 + Newtone	1.0 oz + 12.8 oz		--	57	63	85	91	--	0	0	0	0	51
Everest 2.0 + ARY-0547-0021 + Newtone	0.75 oz + 0.4 oz + 12.8 oz		--	57	57	85	90	--	0	0	0	0	42
GoldSky + Newtone	1.0 pt + 12.8 oz		--	60	57	65	87	--	0	0	3	0	45
Huskie Complete + N-Pak AMS	13.7 oz + 1.18 pt		--	57	63	82	84	--	0	0	0	0	41
Rimfire Max + Destiny HC	3 oz + 0.75 pt		--	60	60	95	92	--	0	0	3	0	49
Axial XL	16.4 oz		--	87	82	95	99	--	0	0	3	0	51
Wolverive	27.4 oz		--	80	82	96	99	--	0	0	0	0	52
Rimfire Max + Huskie + MSO	3 oz + 11 oz + 1.5 pt		--	60	68	90	94	--	0	0	3	0	58
Rimfire Max + Huskie + Quad 7	3 oz + 11 oz + 0.8 pt		--	57	63	90	93	--	0	0	8	0	39
Varro + Bronate Advanced	6.85 oz + 0.8 pt		--	57	63	82	93	--	0	0	5	0	36
Weedy Check	--	--	--	--	--	--	--	--	--	--	--	--	3
LSD (0.05)		15	14	15	18	21	13	5	ns	ns	ns	ns	16

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

Newtone = ammonium salt, buffering agent, and surfactant blend.

ARY-0547-002 50WG = experimental from Arysta LifeScience.

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

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

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

Rimfire Max 6.67WDG = propoxycarbazone-sodium (4.76%) & mesosulfuron-methyl (1.91%).

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

Axial XL 0.42EC = pinoxaden and adigor adjuvant.

Wolverine 1.38E = fenoxaprop-p-ethyl (0.38 lb ai/gal) & pyrasulfotole (0.17 lb ai/gal) & bromoxynil octanoate (0.41 lb ai/gal) & bromoxynil heptanoate (0.42 lb ai/gal).

Huskie 2.08EC = pyrasulfotole (0.23 lb ai/gal) & bromoxynil 1.85 lb ai/gal) & safener.

MSO = methylated soybean oil.

Quad 7 = ammonium salt, buffering agent, and surfactant blend.

Varro = thiencazabone-methyl & safener.

Bronate Advanced 5E = bromoxynil (2.5 lb ai/gal) & MCPA (2.5 lb ae/gal).