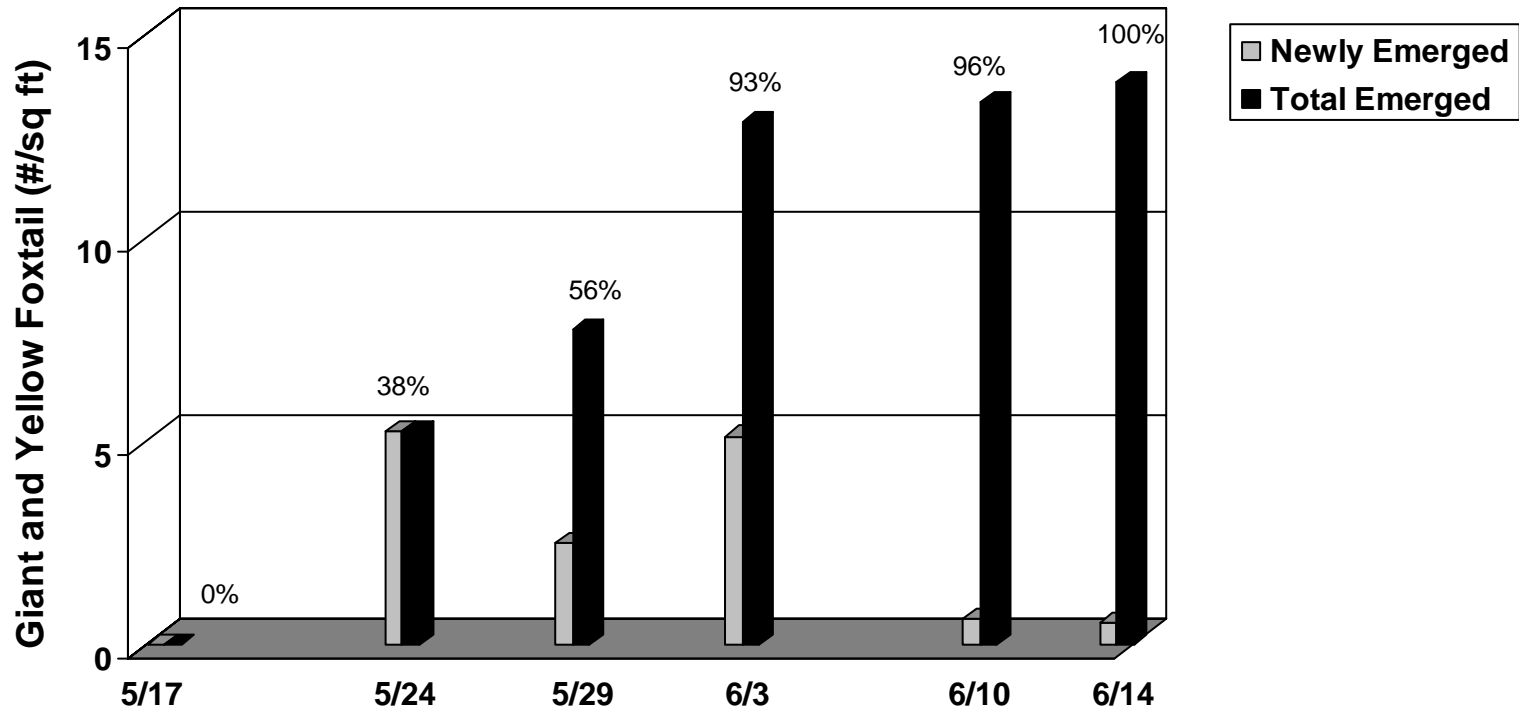


Foxtail control in spring wheat with with various application times at Rosemount, MN - 2013. Durgan, Beverly R. and Douglas W. Miller. This experiment was designed to evaluate foxtail control with several herbicides applied at three different foxtail stages. The experiment was conducted at Rosemount, MN on a Waukegon silt loam soil with pH 6.3 and 4.3% organic matter. Soil test for P and K were 34 lbs/A and 280 lbs/A, respectively. Following soybeans, the experimental area was fall chisel plowed. On May 7, the area was fertilized with 83 lbs/A N, 16 lbs/A P, and 145 lbs/A K and field cultivated twice. 'RB-07' hard red spring wheat was seeded at 115 lbs/A. The experimental design was a randomized complete block with three replications. Plot size was 10 by 24 ft. Target application stages were 1 leaf, 3-4 leaf and 5-6 leaf foxtail. All herbicide treatments were applied with a backpack type sprayer delivering 10 gpa at 35 psi using 11001 flat fan nozzles. Application data and environmental conditions are listed below. Visual weed control, wheat injury and yield data are presented in the table.

Treatment Date	May 24	June 3	June 14
Foxtail (giant and yellow mix)			
Leaf stage	1-3 (most 1-2)	1-5 (most 3-4)	2-6 (most 5-6)
height (inch)	0.25-1 (most 0.5 to 0.75)	0.25-4 (most 1.5 to 2.5)	0.5-6 (most 3 to 0.4)
density (#/ft ²)	5	11	12
Wheat			
stage	2.0-2.5 leaf (Zadoks Z12-13)	4.0-4.5 leaf (Zadoks Z14-15, Z21-23)	5.8-6.3 leaf, jointed (Zadoks Z16, Z22-23, Z31)
tillers	0	1-3	2-3
height (inch)	5-6	6-12	11-15
Air temperature (°F)	57	67	65
Relative humidity (%)	42	41	75
Dewpoint (°F)	37	43	56
Sky	15% clouds	cloudy	30% clouds
Wind	SSW 0-4 mph	ESE 3-8 mph	ESE 0-5 mph
Soil conditions	moist	moist	moist
Soil temperature (°F)	60	66	63
Rainfall before Application			
Week 1 (inch)	3.32	1.14	1.31
Rainfall after Application			
Week 1 (inch)	0.85	0.90	1.54
Week 2 (inch)	0.50	1.37	1.03

2013 Foxtail Emergence at Rosemount, MN



Average Total Population = 14/sq ft

Foxtail control in spring wheat with various application times at Rosemount, MN – 2013.

Durgan and Miller.

Treatment	Rate (Product/A)	Foxtail Control				Wheat Injury				Wheat Yield (Bu/A)
		6/30 (%)	7/5 (%)	7/20 (%)	8/13 (%)	6/30 (%)	7/5 (%)	7/20 (%)	8/13 (%)	
Application #1 (May 24)										
Everest 2.0 + Newtone	0.75 oz + 12.8 oz	82	85	91	83	0	0	0	0	38
Everest 2.0 + Newtone	1.0 oz + 12.8 oz	82	88	90	82	0	0	0	0	42
Everest 2.0 + ARY-0547-0021 + Newtone	0.75 oz + 0.4 oz + 12.8 oz	85	83	91	83	0	0	0	0	41
GoldSky + Newtone	1.0 pt + 12.8 oz	88	87	91	85	0	0	0	0	40
Huskie Complete + N-Pak AMS	13.7 oz + 1.18 pt	99	98	95	92	0	0	0	0	39
Rimfire Max + Destiny HC	3 oz + 0.75 pt	87	82	90	85	0	0	0	0	40
Axial XL	16.4 oz	99	92	96	88	2	0	0	0	41
Wolverive	27.4 oz	99	90	99	87	0	0	0	0	43
Application #2 (June 3)										
Everest 2.0 + Newtone	0.75 oz + 12.8 oz	85	85	88	80	0	0	0	0	42
Everest 2.0 + Newtone	1.0 oz + 12.8 oz	88	87	88	86	0	0	0	0	34
Everest 2.0 + ARY-0547-0021 + Newtone	0.75 oz + 0.4 oz + 12.8 oz	88	87	90	87	0	0	0	0	38
GoldSky + Newtone	1.0 pt + 12.8 oz	88	90	88	87	0	0	0	0	35
Huskie Complete + N-Pak AMS	13.7 oz + 1.18 pt	99	96	90	92	0	0	0	0	35
Rimfire Max + Destiny HC	3 oz + 0.75 pt	83	87	91	88	3	0	0	0	39
Axial XL	16.4 oz	99	98	99	93	0	0	0	0	35
Wolverive	27.4 oz	96	95	99	92	0	0	0	0	36
Rimfire Max + Huskie + MSO	3 oz + 11 oz + 1.5 pt	88	86	87	85	5	0	0	0	33
Rimfire Max + Huskie + Quad 7	3 oz + 11 oz + 0.8 pt	88	88	85	85	0	0	0	0	40
Varro + Bronate Advanced	6.85 oz + 0.8 pt	96	90	93	92	0	0	0	0	46
Application #3 (June 14)										
Everest 2.0 + Newtone	0.75 oz + 12.8 oz	87	88	88	85	0	0	0	0	42
Everest 2.0 + Newtone	1.0 oz + 12.8 oz	88	90	85	90	0	0	0	0	43
Everest 2.0 + ARY-0547-0021 + Newtone	0.75 oz + 0.4 oz + 12.8 oz	87	85	87	83	0	0	0	0	40
GoldSky + Newtone	1.0 pt + 12.8 oz	82	85	87	82	2	0	0	0	37
Huskie Complete + N-Pak AMS	13.7 oz + 1.18 pt	98	96	93	92	2	2	0	0	40
Rimfire Max + Destiny HC	3 oz + 0.75 pt	85	90	91	85	0	0	0	0	39
Axial XL	16.4 oz	99	96	99	93	0	0	0	0	41
Wolverive	27.4 oz	95	98	98	93	0	0	0	0	42
Rimfire Max + Huskie + MSO	3 oz + 11 oz + 1.5 pt	78	80	88	73	5	0	0	0	40
Rimfire Max + Huskie + Quad 7	3 oz + 11 oz + 0.8 pt	77	77	87	78	0	0	0	0	36
Varro + Bronate Advanced	6.85 oz + 0.8 pt	99	95	91	92	5	2	0	0	34
Weedy Check	--	--	--	--	--	--	--	--	--	38
LSD (0.05)		7	10	4	9	3	ns	ns	ns	ns

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