

Foxtail control in spring wheat, Carrington, 2008. (Kirk Howatt and Greg Endres). The experiment was conducted at the NDSU Carrington Research Extension Center on a conventionally-tilled Heimdahl loam soil with 6.8 pH and 2.8% organic matter. The experimental design was a randomized complete block with three replicates. 'Glenn' HRS wheat was seeded April 30. Herbicide treatments were applied with a CO₂-hand-boom plot sprayer delivering 10 gal/A at 35 psi through 8001 flat fan nozzles to the center 6.7 ft of 10 by 25 ft plots. POST treatments were applied on June 14 with 55 F, 86% RH, clear sky, and 12 mph wind to 4- to 5-leaf wheat and 1- to 3-leaf yellow and green foxtail. Average plant density in untreated plots on June 16: wheat, 53 plants/ft² and 65 foxtail plants/ft². The trial was harvested by a plot combine on August 19.

Minor crop response was noted four days after application with several treatments (Table). Wheat yield was over 60 bu/A with the low rate of fenoxaprop and pinoxaden. Foxtail control two and four weeks after application was 80% or greater with flucarbazone, GF-1847, and clodinafop (all with tank mixtures of bromoxynil&MCPA).

Table.								
Herbicide			Wheat response			Foxtail control (%) ¹		
Treatment		Rate	6/19	Yield	TW	7/1	7/15	
No.		oz ai/A	injury (%)	bu/A	lb/bu	fxtl	grft	yft
1	Mess+Brox&MCPA5+MSO	0.036+8+1%	3	56.5	62.8	33	7	7
2	Flucarbazone+Brox&MCPA5+ Basic Blend	0.32+8+1%	3	54.6	62.5	80	91	89
3	Prcz&Mess+Brox&MCPA5+ Basic Blend	0.178+8+1%	6	55.8	63.0	43	0	0
4	Immb+Brox&MCPA5+Basic Blend	5+8+1%	3	54.4	63.1	0	13	13
5	Prcz+Brox&MCPA5+Basic Blend	0.32+8+1%	3	50.4	62.6	47	47	70
6	GF-1847+Brox&MCPA5+NIS	0.21+8+0.25%	0	48.8	61.6	81	85	91
7	GF-1848+NIS	1.68+0.25%	0	54.6	63.1	75	83	85
8	Tral-SC+Brox&MCPA5+ Supercharge+AMS	2.9+8+0.5%+9.5	3	50.6	62.0	74	78	83
9	Fenoxaprop+Brox&MCPA5	0.8+8	1	60.1	63.3	76	82	82
10	Fenoxaprop+Brox&MCPA5	1.32+8	2	52.3	62.0	77	78	87
11	Clodinafop+Brox&MCPA5	0.8+8	3	52.2	62.4	81	86	91
12	Pinoxaden+Brox&MCPA5+Adigor	0.86+8+0.075G	4	64.6	63.0	84	78	87
13	Difenzoquat+Brox&MCPA5	16+8	4	57.2	63.1	0	0	0
14	Untreated	0	0	50.4	62.3	0	0	0
C.V. (%)			37.5	9.4	1.3	12.0	23.4	10.7
LSD (0.05)			2	1.4	NS	11	20	10

¹foxtail=yellow and green.