Foxtail Control in HRS Wheat

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The experiment was conducted on a Heimdahl loam soil with 6.1 pH and 3.5% organic matter at the NDSU Carrington Research Extension Center. The experimental design was a randomized complete block with three replicates. 'Reeder' HRS wheat was planted on May 1. Herbicide treatments were applied with a CO_2-hand-boom plot sprayer delivering 10 gal/A at 30 psi through 8001 flat-fan nozzles to the center 6.7 ft. of 10 by 25 ft. plots. Treatments were applied on June 9 with 54º F, 63% RH, 75% clear sky, and 12 mph wind to 4-leaf wheat and 2- to 4-leaf yellow and green foxtail. Average wheat density in untreated plots was 24 plants/ft^2 and foxtail density was 13 plants/ft^2. The trial was harvested with a plot combine on September 27.

Table. Foxtail control in HRS wheat, Carrington, 2004.

		Weed control		HRS wheat	
Herbicide		6/23	7/13	Injury	Seed
Treatment	Rate	Fota[a]		6/23	Yield
	lb ai/A	%		%	bu/A
Immb+Brox&MCPA5+MSO	5+8+0.19G	69	25	0	57.9
Flcz+Brox&MCPA5+Basic Blend	0.32+8+1%	83	82	8	53.3
Mess+Brox&MCPA5+MSO	0.036+8+1%	72	37	2	55.4
Clfp-ng+Brox&MCPA5	0.8+8	76	86	0	58.2
Fenx+Brox&MCPA5	1.32+8	96	96	0	57.4
Tral+Brox&MCPA5+Supercharge+AMS	2.9+8+0.5%+9.5	86	95	0	56.9
Flcz+Clfp-ng+Brox&MCPA5	0.11+0.25+8	79	92	0	59.9
Mess+Clfp-ng+Brox&MCPA5	0.012+0.25+8	83	92	0	57.2
Untreated	0	0	0	0	54.6
LSD (0.05)		5	7	2	NS

[a]Fota=yellow and green foxtail.

Foxtail population was primarily yellow foxtail. Fenoxyprop-P, tralkoxydim, flucarbazone+clodinofop, and mesosulfuron +clodinofop with tank mixture of bromoxynil&MCPA provided excellent foxtail control when visually evaluated on July 13 (about five weeks after herbicide application). Slight wheat injury occurred with flucarbazone or mesosulfuron tankmixed with bromoxynil&MCPA. Wheat yield did not differ among treatments, likely due to adequate crop density with good vigor and light foxtail density.