

Foxtail control in hard red spring wheat, Carrington, 2001. (Endres and Howatt) The experiment was conducted on a loam soil with 6.9 pH and 3.1% organic matter at the NDSU Carrington Research Extension Center. The experimental design was a randomized complete block with four replicates. 'Parshall' HRS wheat was planted on May 5. Herbicide treatments were applied with a CO₂-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 May 31 with 58 F, 92% RH, 25% clear sky, and 8 mph wind to 3.5-leaf wheat and 2- to 4-leaf yellow and green foxtail. Average wheat density was 14 plants/ft² and foxtail density was 61 plants/ft². Weed control and wheat injury were visually estimated. The trial was harvested for seed yield with a plot combine on August 17.

Herbicide	Rate	Weed control			HRS	
		6/14	7/19		Injury	Seed yield
Treatment	oz a.i./A	Fota ^a	Yeft	Grft		
Immb+Thif&Trib+Act90	5+0.22+0.25%	71	18	13	0	45.4
Dife+Thif&Trib	12+0.22	63	3	0	11	33.1
Tral+Brox&MCPA+Supercharge+AMS	2.9+8+0.5%+20.4	90	92	98	6	48.0
Clfd+Brox&MCPA+DSV	0.8+8+0.8%	91	93	97	0	47.3
Fenx-P+Brox&MCPA	1.32+8	88	86	93	4	44.4
Flcz+Thif&Trib+24-Dioe+Act90	0.42+0.22+4+0.25%	87	90	96	0	50.4
Immb+Dife+Thif&Trib+Act90	3.7+8+0.22+0.25%	64	18	15	0	38.1
Flcz+Fenx-P+Brox&MCPA+Act90	0.28+0.48+8+0.25%	74	41	91	0	42.4
Flcz+Fenx-P+Brox&MCPA+Act90	0.28+0.66+8+0.25%	77	55	92	0	40.4
Flcz+Fenx-P+Brox&MCPA	0.28+0.66+8	83	58	88	0	41.6
Flcz+Clfd+Brox&MCPA+DSV+Act90	0.28+0.5+8+0.8%+0.25%	83	58	91	3	42.5
untreated	0	0	0	0	0	20.4
LSD (0.05)		6	21	8	5	6.8

^aFota=yellow and green foxtail.

Tralkoxydim+bromoxynil&MCPA, Clodinafop+bromoxynil&MCPA, Fenoxaprop-P+bromoxynil&MCPA, and Flucarbazone-Na+thifensulfuron&tribenuron+2,4-Dioe provided 86 to 98% foxtail control and generally the highest wheat seed yield. Also, green foxtail was controlled 88 to 96% with Flucarbazone-Na plus fenoxaprop-P+bromoxynil&MCPA or clodinafop+bromoxynil&MCPA tank mixtures. Wheat injury (reduced plant height) was minimal.