

Foxtail control in hard red spring wheat, Carrington, 2002. (Endres and Howatt) The experiment was conducted on a Heimdahl 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 three replicates. 'Munich' durum wheat was planted on May 29. Herbicide treatments were applied with a CO<sub>2</sub>-hand-boom plot sprayer delivering 8.5 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 24 with 73 F, 83% RH, 25% clear sky, and 9 mph wind to 3.5- to 4-leaf wheat and 1- to 3-leaf yellow and green foxtail. Average wheat density on July 1 was 10 plants/ft<sup>2</sup> and foxtail density was 21 plants/ft<sup>2</sup>. Glyphosate at 0.75 lb/A + AMS at 5% v/v was applied across the trial for preharvest burn-down of foxtail. The trial was harvested for seed yield with a plot combine on September 12.

Treatment	Herbicide	Rate oz a.i./A	Weed control			Seed yield bu/A	
			7/9 Fota <sup>a</sup>	7/16 Yeft	8/19 Grft		
Im m b + T h i f & T r i b + A c t 9 0		5 + 0.22 + 0.25%	76	50	70	48	9.3
F l c z + T h i f & T r i b + 2,4-D - S a l v o + A c t 9 0		0.42 + 0.22 + 4 + 0.25%	93	93	99	86	9.9
C l f p + B r o x & M C P A 5 + S c o r e		0.8 + 8 + 1%	83	86	95	66	8.6
F e n x + B r o x & M C P A 5		0.8 + 8	80	70	90	62	12.9
T r a i l + B r o x & M C P A 5 + S u p e r c h a r g e		2.9 + 8 + 0.5%	94	86	94	77	14.2
F l c z + F e n x + B r o x & M C P A 5 + A c t 9 0		0.42 + 0.8 + 8 + 0.25%	79	85	90	47	5.2
F l c z + F e n x + B r o x & M C P A 5 + A c t 9 0		0.21 + 0.6 + 8 + 0.25%	70	72	88	45	6.2
F l c z + C l f p + B r o x & M C P A 5 + S c o r e + A c t 9 0		0.42 + 0.8 + 8 + 1% + 0.25%	85	93	98	75	11.3
F l c z + C l f p + B r o x & M C P A 5 + S c o r e + A c t 9 0		0.21 + 0.6 + 8 + 1% + 0.25%	80	82	95	73	11.7
D i f e + T h i f & T r i b		12 + 0.22	70	69	72	43	4.8
D i f e + I m m b + T h i f & T r i b + A c t 9 0		3.7 + 8 + 0.22 + 0.25%	74	70	73	59	11.8
u n t r e a t e d		0	0	0	0	0	5.2
LSD (0.05)			12	12	9	2.2	NS

<sup>a</sup>Fota=yellow and green foxtail.

Good to excellent green foxtail control (88 to 99%) was present on July 16 with all treatments except with Assert and Avenge. Yellow foxtail control was 82 to 93% on July 16 with Discover, Achieve, and all Everest treatments except with the reduced rates of Everest + Puma. In August, foxtail control declined with mid-summer rain and as the crop approached physiological maturity. Crop injury from herbicides was not detected.