

Foxtail control in barley, Carrington, 2006. (Greg Endres) The dryland study was conducted at the NDSU Carrington Research Extension Center on a loam soil with 6.9 pH and 3.3 % organic matter. The experimental design was a randomized complete block with three replicates. 'Drummond' was direct seeded into oat stubble on April 26. 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. Treatments were applied on June 1 with 57 F, 83% RH, 80% clear sky, and 9 mph wind to 5-leaf barley and 3- to 4-leaf yellow and green foxtail. Average wheat density in untreated plots was 23 plants/ft² and grass weed density was 24 plants/ft². The trial was harvested with a plot combine on July 24.

Treatment	Herbicide Product rate fl oz/A	Foxtail control		Seed yield bu/A	Test weight lb/bu
		6/16	6/29		
		%			
Axial+Adigor	8.2+9.6	96	94	82.9	39.5
Axial+Adigor+Bronate Advanced	8.2+9.6+12.8	90	93	71.8	39.6
Axial+Adigor+AffinityTM+MCPAe	8.2+9.6+0.6oz/A+8.7	73	75	63.0	41.1
Axial+Adigor+AffinityTM+MCPAe	8.2+9.6+0.6oz/A+8.7	76	79	71.4	39.5
Axial+Adigor+AffinityTM+Starane	8.2+9.6+0.6oz/A+5.3	74	77	62.8	39.0
Axial+Adigor+Curtail M	8.2+9.6+28	74	80	57.3	39.9
Puma+Bronate Advanced	8+12.8	77	75	64.2	39.6
Untreated	0	0	0	67.7	39.9
CV		7.2	9.2	16.3	3.7
LSD (0.05)		9	12	NS	NS

Foxtail control was 90 to 96% with Axial or tank mixture of Axial plus Bronate Advanced. Foxtail control was antagonized when Axial was tank mixed with other broadleaf herbicides. No crop injury was observed with treatments. Barley yield and test weight did not differ among treatments, likely due to a competitive crop and light grass weed density.