Foxtail control in HRS wheat with Axial XL, Carrington, 2007

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Experimental design was a randomized complete block with three replicates. 'Steele-ND' HRS wheat was seeded May 14, 2007 on conventionally-tilled ground. 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 13 with 66 F, 94% RH, 5% clear sky, and 2 mph wind to 4- to 5-leaf wheat and 3- to 4-leaf yellow and green foxtail. Average foxtail density on June 13 was 6 plants/ft². The trial was harvested with a plot combine on August 16.

Foxtail control was excellent (93-99%) with Axial XL alone or with broadleaf herbicide tank mixtures (Table). Minor plant chlorosis was detected when visually evaluated 5 days after herbicide application, but no injury was noted on June 29 (data not shown). Wheat yield and test weight were similar among all treatments including the untreated check. This was likely due to a competitive wheat stand and generally low foxtail density.

Herbicide		Foxtail Control ¹			Wheat Injury ²	WI	Wheat	
_ 3							Test	
Treatment ³	product/A	6/29	7/9	7/30	6/18	Yield	Weight	
			%		%	bu/A	lb/bu	
Axial XL	16.4	99	98	97	2	42.0	58.3	
Axial XL + Bronate Advanced	16.4 + 12.8	97	98	98	2	39.9	58.4	
Axial XL + Bronate Advanced + Tilt	16.4 + 12.8 + 2	96	98	97	2	42.8	59.4	
Axial XL + WideMatch + MCPAe	16.4 + 16 + 8	96	98	97	2	37.2	59.1	
Axial XL + Affinity TM + MCPAe	16.4 + 0.6 oz + 8	94	96	93	1	37.1	58.5	
Everest + Bronate Advanced	0.6 oz + 12.8	67	73	75	2	38.6	58.4	
Rimfire + Bronate Advanced + MSO	2.25 oz + 12.8 + 24	67	72	70	3	39.9	59.3	
Untreated check		0	0	0	0	39.9	58.9	
C.V. (%)		2.5	3.4	4.5	40.9	10.5	1.1	
LSD (0.05)		4	5	6	1	NS	NS	

¹Foxtail=Yellow and green.

²Chlorosis= 0 (green) to 9 (yellow).

³MSO=Destiny, a methylated seed oil from WinField; POST=June 13.