

## Weed control in Clearfield HRS wheat, Carrington, 2007

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The experimental design was a randomized complete block with three replicates. 'AP604CL' HRS wheat was seeded on May 10. Herbicide treatments were applied with a CO<sub>2</sub>-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 on June 13 with 69 F, 86% RH, 10% clear sky, and 2 mph wind to 5- to 6-leaf wheat, 5-leaf (tillering) green and yellow foxtail, 1- to 2-inch tall common lambsquarters, 0.5- to 3-inch tall prostrate and redroot pigweed, and 0.5- to 1-inch tall sheperdspurse. Crop density was adequate while weed density was low. The trial was harvested with a plot combine on August 16.

Broadleaf weed control was excellent, ranging from 90 to 99% control (Table). Foxtail control ranged from 85 to 99% and volunteer wheat control ranged from 73 to 78% with all herbicide treatments. Crop response, consisting of plant height reduction, was minimal. Wheat yield and quality were similar among treatments, likely due to the competitive crop, low weed density, and minimal crop injury.

**Table. Weed control in Clearfield HRS wheat, Carrington.**

Treatment <sup>2</sup>	Herbicide Rate fl oz product/A	Weed control <sup>1</sup>											Wheat injury			Wheat		
		6/28						7/26					6/22	6/28	7/26	Yield bu/A	TW lb/bu	Protein %
		fxtl	colq	copu	piwe	shpu	vwht	fxtl	colq	copu	piwe	shpu						
		%																
Beyond + NIS + UAN	4 + 0.25% + 2.5% v/v	88	94	96	96	93	78	97	99	99	99	99	0	0	0	24.38	56.628	14.1
Beyond + MCPAe + NIS + UAN	4 + 8 + 0.25% + 2.5% v/v	89	99	90	95	92	78	99	99	99	99	99	2	3	1	20.8	56.1	14.0
Beyond + MCPAe + Buctril	4 + 8 + 8	85	99	96	99	93	73	98	99	99	99	99	2	3	0	21.9	56.0	14.3
Beyond + MCPAe + Starane	4 + 8 + 6	90	98	98	99	97	73	99	99	99	99	99	2	2	0	24.8	55.8	14.4
Beyond + MCPAe + WideMatch	4 + 8 + 8	93	97	99	98	96	73	99	99	99	99	99	0	0	0	24.7	56.8	14.3
Untreated check	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.0	55.8	14.3
C.V. (%)		0	2	6	4	3	11	2	0	0	0	0	239	204	434	27	1	1
LSD (0.05)		8	4	8	5	5	12	2	1	1	1	1	NS	NS	NS	NS	NS	NS

<sup>1</sup>fxtl=green and yellow foxtail; colq=common lambsquarters; copu=common purslane; piwe=redroot and prostrate pigweed; shpu=sheperdspurse;

<sup>2</sup>NIS=Preference (WinField); UAN=urea ammonium nitrate.