

Foxtail control in HRS wheat, Carrington, 2007

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Experimental design was a randomized complete block with three replicates. 'Glenn' HRS wheat was seeded May 12, 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 4 with 63 F, 71% RH, 75% clear sky, and 4 mph wind to 3-leaf wheat and 1- to 4-leaf yellow and green foxtail. Average foxtail density on June 5 was 4 plants/ft². The trial was harvested with a plot combine on August 16.

Foxtail control was excellent (91-94%) with Vexp3, fenoxaprop at 1.32 oz, clodinafop and pinoxaden when visually evaluated on July 17 (Table). Plant chlorosis was detected when visually evaluated 4 days after application of most herbicides, with highest scores associated with pinoxaden and difenzoquat. Wheat yield was low with difenzoquat, due to little weed control and high crop injury.

Table. Foxtail control in HRS wheat, Carrington, 2007.

Treatment	Herbicide	Rate oz ai/A	Foxtail Control ¹		Wheat Injury ²		----- Wheat ----- Test	
			6/21 %	7/17 %	6/8 %	7/17 %	Yield bu/A	Weight lb/bu
Mess+Brox&MCPA5+MSO		0.036+8+1%	77	20	3	2	48.8	58.7
Flucarbazone+Brox&MCPA5+Basic Blend		0.32+8+1%	83	77	2	4	43.1	58.6
Prcz&Mess+Brox&MCPA5+Basic Blend		0.178+8+1%	85	47	3	1	33.2	59.5
Immb+Brox&MCPA5+Basic Blend		5+8+1%	89	43	3	7	47.5	58.4
Prcz+Brox&MCPA5+Basic Blend		0.32+8+1%	92	47	1	2	34.0	58.3
Vexp1+Brox&MCPA5+NIS		0.21+8+0.25%	96	83	2	3	44.2	60.2
Vexp3+NIS		1.68+0.25%	94	91	1	0	42.4	60.0
Tral-SC+Brox&MCPA5+Supercharge+AMS		2.9+8+0.5%+9.5	96	87	0	4	36.7	59.5
Fenoxaprop+Brox&MCPA5		0.8+8	78	82	1	0	44.4	60.2
Fenoxaprop+Brox&MCPA5		1.32+8	93	94	0	0	39.7	59.1
Clodinafop+Brox&MCPA5		0.8+8	95	91	1	0	49.6	60.6
Pinoxaden+Brox&MCPA5+Adigor		0.86+8+0.075G	97	93	4	0	41.2	59.0
Difenzoquat+Brox&MCPA5		16+8	23	7	4	35	17.8	56.5
Untreated check		0	0	0	0	0	46.7	60.4
C.V. (%)			6.3	9.7	37.7	71.7	17.4	2.7
LSD (0.05)			8	10	1	5	11.9	NS

¹Foxtail=Yellow and green.

²Chlorosis on June 8= 0 (green) to 9 (yellow-brown); % biomass reduction on July 17.