Orion weed control in HRS wheat, Carrington, 2007 Greg Endres

The experimental design was a randomized complete block with three replicates. 'Alsen' HRS wheat was seeded on May 4. 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 on June 8 with 58 F, 65% RH, clear sky, and 11 mph wind to 5-leaf wheat, 1- to 4-inch tall common lambsquarters, 0.5- to 1-inch tall prostrate and redroot pigweed, and 0.5- to 3-inch tall wild buckwheat. Plots not previously receiving a graminicide were treated with Axial on June 14.

Common lambsquarters control generally was excellent (88-99%) with all treatments (Table). Pigweed control was good to excellent (83-99%) with all treatments. Kochia control generally was excellent (81-99%) with Orion plus Starane or Buctril, Bronate Advanced and WideMatch plus MCPA. Late-season (July 30) wild buckwheat control was good (83-88%) with Orion plus Buctril or Stinger, and excellent (96-99) with Orion plus Starane at 10.7 fl oz/A and WideMatch plus MCPA. Visual crop response was minimal height reduction.

Table. Orion weed control in HRS wheat, Carrington.

		Weed control ¹							Wheat		
Herbicide			7/14			7/30				injury	
Treatment	fl oz product/A	colq	piwe	KOCZ	wibw	colq	piwe	KOCZ	wibw	6/22	7/14
			-				%				
Orion	17	99	89	73	82	99	91	68	75	0	0
Orion + MCPAe	17 + 2.2	99	93	60	80	99	89	66	68	0	0
Orion + Starane	17 + 5.3	99	91	99	85	99	88	99	76	0	0
Orion + Starane	17 + 10.7	99	96	99	99	99	93	99	96	7	2
Orion +Buctril	17 + 16	99	95	96	89	96	90	96	83	5	2
Orion +Stinger	17 + 5.3	99	92	65	76	99	90	68	88	4	0
Orion + Axial BIA	17 + 16.4	99	83	68	89	99	84	63	76	0	0
Orion + Axial BIA + Tilt	17 + 16.4 + 2	99	91	57	83	99	91	60	71	2	0
Bronate Advanced	12.8	99	89	98	83	95	88	81	77	3	0
WideMatch + MCPAe	16 + 8	99	85	96	99	99	86	89	99	0	0
Affinity TM + MCPAe	0.6 oz + 8	88	96	57	68	99	99	58	70	0	2
Untreated check	0	0	0	0	0	0	0	0	0	0	0
C.V. (%)		6	10	24	13	2	10	21	10	181	346
LSD (0.05)		10	14	30	18	3	14	25	12	NS	NS

¹colq=common lambsquarters; piwe=redroot and prostrate pigweed; KOCZ=kochia; wibw=wild buckwheat.