

Sharpen for preplant weed control in wheat, Carrington, 2008. (Greg Endres). The field trial was established under conventional till on a Heimdahl-Emrick loam soil with 2.8% organic matter and 6.8 pH. The experimental design was a randomized complete block with three replicates. 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 4 with 52 F, 99% RH, 100% cloudy sky, and 4 mph wind to tillering (4-leaf) volunteer wheat, 1-inch tall common lambsquarters and 0.5- to 1-inch tall wild buckwheat. Rainfall totaled 0.32 inches during 2 days before and 1.34 inches 2 days after herbicide application. 'Faller' HRS wheat was seeded on June 17.

Volunteer wheat control ranged from 75 to 76% with all herbicide treatments (Table). Common lambsquarters control was excellent with all treatments three weeks after treatment. Sharpen plus glyphosate provided improved common lambsquarters control compared to other treatments eight weeks after application. Wild buckwheat control was highest three weeks after treatment, and control was 74% eight weeks after treatment with Sharpen plus glyphosate. No crop response was observed.

Table.		Weed control <sup>1</sup>									
Herbicide		6/9			6/26			7/18		7/29	
Treatment <sup>2</sup>	Rate	vwht	colq	wibw	colq	wibw	colq	wibw	colq	wibw	
fl oz product/A		%									
Glyphosate + NIS + AMS	32 + 0.25% + 0.5% v/v	76	98	65	90	67	57	48	53	58	
Sharpen + glyt + COC + AMS	0.72 + 32 + 1% + 0.5% v/v	75	99	99	92	88	73	73	76	74	
2,4-D + glyt + NIS + AMS	16 + 32 + 0.25% + 0.5% v/v	75	98	70	96	58	67	60	47	52	
Untreated check	0	0	0	0	0	0	0	0	0	0	
C.V. (%)		5.0	1.2	4.9	3.1	17.5	14.6	21.6	15.5	24.0	
LSD (0.05)		6	2	6	4	19	14	20	14	22	

<sup>1</sup>vwht=volunteer wheat; colq=common lambsquarters; wibw=wild buckwheat.

<sup>2</sup>Glyt=MiragePlus (UAP); NIS=Preference (WinField); AMS=Blue Diamond Activator; COC=Destiny (Winfield); 2,4-D=Cornbelt 4 lb Amine.