Broadleaf weed control with Wolverine herbicide in spring wheat, Carrington, 2010. (Greg Endres). The experiment was conducted at the NDSU Carrington Research Extension Center in cooperation with Bayer CropScience. Experimental design was a randomized complete block with three replicates. 'Glenn' HRS wheat was seeded April 23 on a conventionally-tilled loam soil. Herbicide treatments were applied with a CO_2-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. Treatments were applied on June 2 with 65 F, 42% RH, 50% clear sky, and 8 mph wind to 4-leaf wheat, 0.5- to 3-inch tall common lambsquarters, 1-inch tall prostrate and redroot pigweed, and 2-inch tall wild buckwheat. Puma herbicide at 6.4 fl oz/A was sequentially applied on June 2 to plots previously receiving treatment numbers 3 and 4. Average plant density (ft^2) in untreated plots on June 2: wheat=26, common lambsquarters=103, pigweed species=7 and wild buckwheat=1. The trial was harvested with a plot combine on August 6.

Common lambsquarters and redroot pigweed control was good to excellent (88-92%) with Wolverine when visually evaluated on June 11 (Table). Broadleaf weed control generally was excellent among herbicides when evaluated on July 1 and 30. A dense stand of green and yellow foxtail was present below the crop canopy on July 30. No crop response was noted when visually evaluated on June 11. Highest seed yield was associated with Wolverine, WideMatch plus Sword, and Goldsky.

Table.

		Weed control[1]						Wheat
Herbicide		11-Jun		1-Jul		30-Jul		Seed
Treatment[2]	Rate	Colq	Rrpw	Colq	Rrpw	Colq	Rrpw	yield
	fl oz product/A	%						bu/A
Untreated check	x	0	0	0	0	0	0	37.0
Wolverine	27.4	92	88	99	96	99	99	55.1
WideMatch + Sword	12 + 6	73	57	98	80	96	95	48.5
Orion	17	70	68	97	90	99	99	44.4
Goldsky + NIS	16 + 0.25%	71	NA	92	99	87	99	52.4
C.V. (%)		5.2	13.8	2.0	6.8	6.5	2.9	10.7
LSD (0.05)		6	15	3	9	9	4	9.6

[1]Colq=Common lambsquarters; Rrpw=redroot pigweed.

[2]NIS=Preference (Winfield Solutions).