

Broadleaf weed control in spring wheat, Carrington, 2013. Greg Endres and Mike Ostlie. 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 on May 15 at 1.8 million seeds/A in conventionally tilled soil. 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. Treatments were applied on June 21 with 72 °F, 74% RH and 5 mph wind to 4- to 5-leaf wheat, 0.5- to 3-inch tall common lambsquarters and 0.5- to 3-inch redroot and prostrate pigweed. Axial XL at 16.4 fl oz/A was sequentially applied on June 21 to plots previously not receiving a grass herbicide except the untreated check. The trial was harvested for seed yield on August 28.

Control of common lambsquarters generally was excellent among herbicide treatments (Table). Pigweed control generally was good to excellent (78-95%) 4 weeks after treatment (WAT) and excellent 8 WAT. Wheat injury was not observed 11 days after treatment (July 2). Wheat seed yield did not improve with herbicide treatments compared with the untreated check, likely due to low weed density. Also, yield with several treatments was less than the untreated check.

Table.									
Herbicide		Weed control ¹						Wheat	
Treatment ²	Rate	2-Jul		19-Jul		16-Aug		Seed yield	bu/A
		colq	pigw	colq	pigw	colq	pigw		
	fl oz product/A	%							
Untreated check	x	0	0	0	0	0	0		55.2
Huskie + AMS	11 + 18.8	97	80	99	87	99	94		56.1
Huskie + AMS	13.5 + 18.8	98	83	99	91	99	98		51.1
Huskie Complete + AMS	13.7 + 18.8	99	82	99	95	99	99		55.3
Varro + Bison	6.9 + 15.4	98	75	99	87	99	98		53.7
Varro + Affinity TankMix + Starane Ultra	6.9 + 0.6 (oz wt) + 4.3	85	81	95	85	99	98		42.9
WideMatch + MCPA	12 + 8	92	82	99	78	99	96		49.8
Affinity TankMix + Starane Ultra + NIS	0.6 (oz wt) + 4.3 + 0.25%	90	84	94	93	99	99		50.4
C.V. (%)		5.1	5.8	3.6	9.6	0.2	3.1		3.6
LSD (0.05)		7	7	5	13	1	5		3
¹ Colq=common lambsquarters; pigw=redroot and prostrate pigweed.									
² AMS=Npak AMS liq; NIS=Preference (Winfield).									