

Broadleaf weed control with Huskie 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 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 2 with 64 F, 42% RH, 90% cloudy sky, and 7 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 2-4 and 6. Average plant density (ft²) 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 pigweed control was excellent (91-94%) with Huskie when visually evaluated on June 11 (Table). Also, wild buckwheat control was good (80-87%) with all herbicides except Pulsar (73%). Broadleaf weed control was excellent (96-99%) with all herbicides except Pulsar 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. Seed yield was similar among herbicide treatments and greater than the untreated check.

| Table. | | | | | | | | | |
|--|-------------------------|---------------------------|------|------|-------|------|--------|-------|-------|
| | | Weed control ¹ | | | | | | Wheat | |
| Herbicide | | 11-Jun | | | 1-Jul | | 30-Jul | | Seed |
| Treatment ² | Rate | Colq | Piwe | Wibw | Colq | Piwe | Colq | Piwe | yield |
| | fl oz product/A | % | | | | | | bu/A | |
| Untreated check | x | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28.8 |
| Huskie + AMS | 11 + 64 | 94 | 91 | 87 | 99 | 99 | 99 | 99 | 50.0 |
| WideMatch + Sword | 12 + 6 | 80 | 52 | 81 | 99 | 91 | 99 | 96 | 47.1 |
| Affinity Tankmix + Starane + NIS | 0.6 oz + 5.3 + 0.25% | 80 | 73 | 83 | 99 | 99 | 99 | 99 | 51.5 |
| Goldsky + NIS | 16 + 0.25% | 72 | 80 | 80 | 94 | 99 | 98 | 99 | 49.8 |
| Pulsar + NIS | 8.3 + 0.25% | 78 | 58 | 73 | 75 | 78 | 76 | 88 | 48.2 |
| C.V. (%) | | 4.3 | 22.6 | 8.5 | 0.9 | 5.1 | 1.3 | 4.3 | 14.2 |
| LSD (0.05) | | 5 | 24 | 11 | 1 | 7 | 2 | 6 | 12.1 |
| ¹ Colq=Common lambsquarters; Piwe=prostrate and redroot pigweed; Wibw=wild buckwheat. | | | | | | | | | |
| ² AMS=N-Pak (Agri-Solutions); NIS=Preference (Winfield Solutions). | | | | | | | | | |