

Wild oat control with Axial, Puma, Discover, Rimfire and Everest alone and with broadleaf herbicides at Crookston, MN - 2006. Durgan, Beverly R., Jochum Wiersma, Jim Cameron, and Douglas Miller. The objective of this experiment was to evaluate wild oat control with Axial (pinoxaden), Puma (fenoxaprop & safener), Discover NG (clodinafop & cloquintocet), Rimfire (propoxycarbazone & mesosulfuron), and Everest (flucarbazone) alone and in combination with several broadleaf herbicides. The experiment was conducted at Crookston, MN on a Donaldson and Wheaton loam soil. Following weedy fallow, the experimental area received 100 lb/A of N and was fall plowed. In the spring of the following year, the experimental area was disked and harrowed. 'Alsen' hard red spring wheat was seeded on May 12 at 1.5 Bu/A. All herbicide treatments were applied with a backpack type sprayer delivering 10 gpa at 30 psi using 80015 flat fan nozzles. The experimental design was a randomized complete block with three replications and plot size was 10 by 16 ft. Application data and environmental conditions are listed below. Crop injury and wild oat control were visually rated. Yields were measured. All data are presented in the table below.

| | |
|--------------------------------|-----------|
| Treatment Date | June 1 |
| Wheat stage | 3.5 leaf |
| Wild oat stage | 3 leaf |
| Air temperature (°F) | 84 |
| Relative humidity (%) | 52 |
| Soil temperature (°F) | 67 |
| Wind | S 2.5 mph |
| Rainfall before Application | |
| Week 1 (inch) | 0.11 |
| Rainfall after Application | |
| Week 1 (inch) | 0.64 |
| Week 2 (inch) | 0.13 |

**Wild oat control with Axial, Puma, Discover, Rimfire, and Everest alone and with broadleaf herbicides at Crookston, MN - 2006.
Durgan, Wiersma, Cameron, and Miller.**

| Treatment | Rate Product/A | Wild Oat Control | | Wheat Injury | | | | Wheat |
|--|--|------------------|-------------|--------------|-------------|------------|-------------|-----------------|
| | | 7/3 (%) | 7/12 (%) | 6/8 (%) | 6/15 (%) | 7/3 (%) | 7/12 (%) | Yield (Bu/A) |
| Axial + Adigor Adjuvant | 8.2 oz + 0.6 pt | 100 | 99 | 0 | 0 | 0 | 0 | 49 |
| Axial + Adigor Adjuvant + Bronate Advanced | 8.2 oz + 0.6 pt + 0.8 pt | 100 | 99 | 0 | 0 | 0 | 0 | 54 |
| Axial + Adigor Adjuvant + Widematch + MCPA-Ester | 8.2 oz + 0.6 pt + 0.6 pt + 0.4 pt | 100 | 96 | 2 | 0 | 0 | 0 | 47 |
| Axial + Adigor Adjuvant + Widematch + Affinity Tankmix | 8.2 oz + 0.6 pt + 0.6 pt + 0.6 oz | 100 | 99 | 2 | 0 | 0 | 0 | 56 |
| Axial + Adigor Adjuvant + Harmony GT XP + MCPA-Ester | 8.2 oz + 0.6 pt + 0.4 oz + 0.5 pt | 100 | 99 | 0 | 3 | 0 | 0 | 56 |
| Axial + Adigor Adjuvant + Clarity | 8.2 oz + 0.6 pt + 2 oz | 100 | 99 | 0 | 2 | 0 | 0 | 60 |
| Puma | 0.6 pt | 100 | 99 | 0 | 0 | 0 | 0 | 55 |
| Puma + Bronate Advanced | 0.6 pt + 0.8 pt | 83 | 85 | 0 | 2 | 0 | 0 | 47 |
| Puma + Widematch + MCPA-Ester | 0.6 pt + 0.6 pt + 0.4 pt | 90 | 93 | 0 | 0 | 0 | 0 | 58 |
| Puma + Widematch + Affinity Tankmix | 0.6 pt + 0.6 pt + 0.6 oz | 85 | 85 | 0 | 0 | 0 | 0 | 52 |
| Puma + Clarity | 0.6 pt + 2 oz | 78 | 83 | 0 | 0 | 3 | 0 | 46 |
| Discover NG | 12.8 oz | 100 | 95 | 0 | 0 | 0 | 0 | 45 |
| Discover NG + Bronate Advanced | 12.8 oz + 0.8 pt | 100 | 99 | 0 | 0 | 0 | 0 | 55 |
| Discover NG + Widematch + MCPA-Ester | 12.8 oz + 0.6 pt + 0.4 pt | 100 | 99 | 0 | 0 | 0 | 0 | 58 |
| Discover NG + Affinity Tankmix | 12.8 oz + 0.6 oz | 100 | 99 | 0 | 0 | 0 | 0 | 58 |
| Rimfire + Quad 7 | 1.75 oz + 0.8 pt | 100 | 99 | 10 | 0 | 3 | 0 | 49 |
| Rimfire + Widematch + Affinity Tankmix + Quad 7 | 1.75 oz + 0.67 pt + 0.6 oz + 0.8 pt | 100 | 98 | 7 | 0 | 8 | 3 | 50 |
| Everest + Quad 7 | 0.4 oz + 0.8 pt | 100 | 99 | 2 | 0 | 2 | 0 | 55 |
| Everest + Starane + Salvo + Affinity Tankmix + Quad 7 | 0.4 oz + 0.3 pt + 0.5 pt + 0.6 oz + 0.8 pt | 100 | 99 | 3 | 0 | 12 | 0 | 45 |
| Weedy Check | -- | -- | -- | 0 | 0 | 0 | 0 | 7 |
| LSD (0.05) | | 3 | 5 | 2 | ns | 5 | ns | 10 |

Axial 0.83 EC = pinoxaden.

Adigor Adjuvant = emulsifiable oil adjuvant.

Bronate Advanced 5E = bromoxynil (2.5 lb ai/gal) & MCPA (2.5 lb ae/gal).

Widematch 1.5 E = clopyralid (0.75 lb ae/gal) & fluroxypyr (0.75 lb ae/gal).

Affinity Tankmix 50SG = thifensulfuron (40%) & tribenuron (10%).

Harmony GT XP 75 DF = thifensulfuron.

Clarity 4L = dicamba.

Puma 1EC = fenoxaprop and safener

Discover NG 0.5 EC = clodinafop and cloquintocet (safener).

Rimfire 10.2 WDG = propoxycarbazone (8.14%) & mesosulfuron (2.03%).

Quad 7 = ammonium salt, buffering agent, and surfactant blend.

Everest 70 WG = flucarbazone.

Starane 1.5 E = fluroxypyr.

Salvo 5E = 2,4-D ester.