

Evaluation of herbicides for in-season Canada thistle control (2003)

Mountrail durum was seeded May 21 into 7.5-inch rows at 120 lb/A. Individual plots were 10 x 30 ft and replicated four times. Treatments were applied to 4 to 6-inch Canada thistle (Cath) on June 16.

| Treatment | Rate | Wheat | | Cath | | | Yield | Test Wt |
|--------------------------------------|--------------------------------------|--------------|--------|---------------|--------|--------|--------|---------|
| | | Jun 23 | Aug 13 | Jul 3 | Jul 15 | Aug 13 | Aug 18 | |
| | | — % injury — | | — % control — | | | lb/A | lb/bu |
| Curtail | 2 pt | 0 | 0 | 88 | 86 | 100 | 39 | 61.4 |
| Curtail M | 1.75 pt | 0 | 0 | 86 | 81 | 96 | 37 | 61.1 |
| Bronate ^a | 0.8 pt | 0 | 0 | 24 | 29 | 45 | 37 | 61.1 |
| Express + 2,4-D Ester + NIS | 0.167 oz + 0.75 pt + 0.25% v/v | 0 | 0 | 71 | 72 | 94 | 36 | 60.8 |
| Harmony Extra + 2,4-D Ester + NIS | 0.3 oz + 0.75 pt + 0.25% v/v | 0 | 0 | 68 | 65 | 98 | 43 | 60.7 |
| Clarity + 2,4-D Amine | 3 fl oz + 0.5 pt | 0 | 0 | 74 | 71 | 91 | 41 | 60.7 |
| 2,4-D Amine | 1 pt | 0 | 0 | 72 | 69 | 97 | 39 | 61.0 |
| Bronate | 1 pt | 0 | 0 | 23 | 30 | 56 | 37 | 61.3 |
| Stinger + Starane + MCPA Ester | 4 fl oz + 0.5 pt + 0.75 pt | 0 | 0 | 88 | 83 | 100 | 40 | 61.5 |
| Stinger + Starane | 4 fl oz + 0.5 pt | 0 | 0 | 86 | 80 | 98 | 39 | 61.6 |
| Untreated | | 0 | 0 | 0 | 0 | 0 | 37 | 60.9 |
| LSD (0.05) | | -- | -- | 5 | 9 | 19 | NS | NS |
| CV | | 0 | 0 | 5 | 10 | 16 | 8 | 1.1 |

^aBronate Advanced

None of the treatments caused visible crop injury. Canada thistle densities were quite variable throughout the plot area, but almost all individual plots had at least a few plants present.

In the June and July evaluations, Curtail, Curtail M, and Stinger treatments provided 80-88% Canada thistle control. Express, Harmony Extra, and Clarity combined with 2,4-D or 2,4-D alone provided 65-74% Canada thistle control. Bronate or Bronate Advanced provided poor Canada thistle control (23-30%). At the pre-harvest evaluation in August, all treatments except Bronate or Bronate Advanced provided excellent Canada thistle control. However, this excellent control was influenced significantly by the plants being severely drought stress. We would not typically see this level of control under more favorable growing conditions. There were no significant differences in wheat yield between treatments.