

Roundup Ready Canola-Optimum application timing (1998)

Roundup Ready canola was seeded on May 15 at 700,000 plants per acre. Seed bed preparation was conventional with 7.5-inch row spacing. Treatments consisted of early-post (June 6), mid-post (June 15), and late-post (June 22) applications. On June 6 canola was 2 to 3-leaf, wild oat was 3-leaf. On June 15 canola was 4-leaf, wild oat was 4-leaf. On June 22 canola was 6-leaf, wild oat was 6-leaf. Wild oat (Wioa) control was evaluated on July 4 and August 11. The canola was harvested August 18.

| <u>Treatment</u> | <u>Rate</u> | <u>7-4</u> <u>Wioa</u> -----% Control ----- | <u>8-11</u> <u>Wioa</u> | <u>Yield</u> lb/A |
|---|---------------------------------|---|----------------------------|----------------------|
| Untreated | | 0 | 0 | 1020 |
| Roundup Ultra | 16 fl oz/A | 93 | 96 | 1655 |
| Roundup Ultra (Post II) | 16 fl oz/A | 96 | 98 | 1587 |
| Roundup Ultra (Post III) | 16 fl oz/A | 97 | 99 | 1396 |
| Roundup Ultra | 32 fl oz/A | 96 | 96 | 1761 |
| Roundup Ultra (Post II) | 32 fl oz/A | 96 | 97 | 1618 |
| Roundup Ultra (Post III) | 32 fl oz/A | 98 | 99 | 1556 |
| Roundup Ultra / Roundup Ultra (Post II) | 16 fl oz/A / 16 fl oz/A | 95 | 97 | 1605 |
| Roundup Ultra / Roundup Ultra (Post III) | 16 fl oz/A / 16 fl oz/A | 99 | 99 | 1585 |
| Roundup Ultra (Post II) / Roundup Ultra (Post III) | 16 fl oz/A / 16 fl oz/A | 98 | 99 | 1617 |
| Poast + Stinger + Dash | 1 qt/A + 8 fl oz/A + 2.5% | 97 | 99 | 1719 |
| Assure II + NIS | 8 fl oz/A + 0.25% | 91 | 93 | 1832 |
| Assure II + NIS | 8 fl oz/A 0.25% | 94 | 96 | 1681 |
| C.V.% | | 2 | 1 | 22 |
| LSD .05 | | 3 | 1 | 347 |

Soil conditions were very dry for the first 30 days after seeding (0.5 inch precip). We received 8 inches of rainfall the remainder of the growing season. Flea beetle population was high in surrounding fields, but there was little or no damage to the Roundup Ready canola which had been treated with Gaucho.

Wild oat control was excellent with all herbicide treatments. Any treatments receiving the late-post application caused lower leaves to turn a purplish color and also delayed flowering. Delayed flowering was not observed with the early- or mid-post applications. Yield decreased

with later applications when Roundup Ultra was applied at 16 or 32 fl oz alone. Weed competition and/or crop injury may have contributed to the yield decrease. A decreasing yield trend was not observed in the split applications of Roundup Ultra.