**Study Name:** Influence of row spacing, plant populations, application timing, and tillage system on weed control in LL canola (conventional).

Study Number: 9903c (conventional)

**Objectives:** Determine the influence of row spacing (6 and 12-inch), canola populations (8 and 12 plants per square foot), various herbicide applications, and tillage system (conventional and no-till) on weed control in Liberty Link canola.

**Results:** The study was established on Wayne Ott's farm due to wet conditions in other fields. The second replication of the no-till trial could not be seeded due to wet conditions in a high alkali spot. The trial was destroyed by hail in July. After rating the plot for kochia control we disked the trial under. Kochia control was clearly better with Liberty than by Treflan alone.

*Table.* Influence of row spacing, plant populations, and application timing on weed control in glufosinate-tolerant canola.

|  | ·  | ·               | July 21        |
|--|--|-----------------|----------------|
| Treatment  | Rate                                     | Timing          | Kocz           |
| Treflan  | 1.5 pt                                   | PPI             | 92             |
| Liberty + AMS  | 27  fl oz + 3  lb                        | 3-4 leaf        | 7-             |
| 6-inch rows  |  |                 |                |
| 8 plants / sq ft                                       |  |                 |                |
| Tr Cl  | 1.5                                      | DDI             | 0.4            |
| Treflan  | 1.5 pt $27 \text{ fl oz} + 3 \text{ lb}$ | PPI<br>3-4 leaf | 94             |
| Liberty + AMS  | 27 11 0Z + 3 10                          | 3-4 leai        |                |
| 6-inch rows  |  |                 |                |
| 16 plants / sq ft                                      |  |                 |                |
| Treflan  | 1.5 pt                                   | PPI             | 92             |
| Liberty + AMS  | 27  fl oz + 3  lb                        | 3-4 leaf        |                |
| 12-inch rows   |  |                 |                |
| 8 plants / sq ft                                       |  |                 |                |
| Treflan  | 1.5 nt                                   | PPI             | 94             |
|  | •  |                 | 71             |
| •  |  |                 |                |
| 16 plants / sq ft                                      |  |                 |                |
|  |  |                 |                |
| Treflan  | 1.5 pt                                   | PPI             | 57             |
| Assure II  | 8 fl oz                                  | 3-4 leaf        |                |
| 6-inch rows  |  |                 |                |
| 8 plants / sq ft                                       |  |                 |                |
| Treflan  | 1.5 pt                                   | PPI             | 37             |
| Assure II  | 8 fl oz                                  | 3-4 leaf        |                |
| Treflan Assure II 6-inch rows 8 plants / sq ft Treflan | 8 fl oz                                  | 3-4 leaf        | 94<br>57<br>37 |

## 6-inch rows

16 plants / sq ft

| Treflan Assure II 12-inch rows 8 plants / sq ft           | 1.5 pt<br>8 fl oz | PPI<br>3-4 leaf | 48       |
|---|-------------------|-----------------|----------|
| Treflan<br>Assure II<br>12-inch rows<br>16 plants / sq ft | 1.5 pt<br>8 fl oz | PPI<br>3-4 leaf | 47       |
| No herbicide<br>6-inch rows<br>8 plants / sq ft           |                   |                 | 0        |
| No herbicide<br>6-inch rows<br>16 plants / sq ft          |                   |                 | 0        |
| No herbicide<br>12-inch rows<br>8 plants / sq ft          |                   |                 | 0        |
| No herbicide<br>12-inch rows<br>16 plants / sq ft         |                   |                 | 0        |
| LSD (0.05)<br>CV  |                   |                 | 15<br>19 |