## Research Summary of Canada Thistle Control with Fall-applied Herhicides

G.J. Endres

Canada thistle needs to be actively growing to allow foliar-applied herbicides to be translocated from foliage to the root system for satisfactory control. Early fall generally is an excellent period for perennial weed control with herbicides. Tillage at least one week after herbicide application will likely improve weed control. To assist with choosing herbicides for fall application to control Canada thistle, the following are results from visual evaluations of selected herbicide treatments from NDSU and SDSU research trials conducted during the 1990s.

Canada thistle control 8 to 12 months following post-harvest (late August to early October) herbicide application, NDSU and SDSU trials, 1990-99.

| Herbicide $^{1}$ |  | Canada thistle control $^{2}$ |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Trade name |  |  |  |  |
|  | Rate | Range | Average | Number of Trials |
|  | pt/acre | $\%$ |  |  |
| Banvel | 2 | $24-78$ | 43 | 4 |
|  | 4 | $32-53$ | 41 | 7 |
| Banvel + 2,4-D | 2 | $43-89$ | 67 | 2 |
| Roundup | 4 | $86-90$ | 88 | 4 |
|  | $1+2$ | $27-46$ | 35 | 7 |
| Fallowmaster | 2 | $71-96$ | 83 | 2 |
|  | 3 | $87-88$ | 88 | 2 |
| Roundup + Banvel | $1+1.25$ | $61-72$ | 67 | 2 |
| Curtail | $2+1$ | $56-63$ | 60 | 3 |
| Tordon + 2,4-D | 2.75 | $19-84$ | 44 | 2 |
| Distinct | 2 | $87-95$ | 91 | 8 |

${ }^{1}$ Adjuvants not listed.
${ }^{2}$ Several trials include tillage and crop competition after herbicide application to supplement
The range in percent control listed for each herbicide treatment illustrates the variability of Canada thistle control due to plant status, environment, herbicide application techniques, tillage following herbicide application, etc. Refer to herbicide labels and NDSU Extension Service circular W253 'ND Weed Control Guide' for details on pesticide use and Canada thistle management. Economics and crop rotation restrictions are additional factors to be considered when selecting herbicide options. Perennial weed control requires a longterm commitment including integration of herbicides, tillage, cultural, and other control methods.

