

Project #8750

Evaluation of Herbicides on Fresh Market Vegetables for Future Minor-Use Applications

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I. Brief Project Description

Growers of fresh-market vegetable crops in Ontario do not have access to the same weed control products that their competitors in other parts of the world have. Weed control is one of the major problems facing these growers, with high input costs for hoeing and mechanical weeding and reduced competitiveness. This industry needs improved weed control products to remain competitive. Field crop growers have access to safe/reduced risk herbicides that are environmentally safe, used at ultra-low doses, are of low toxicity and control serious weed problems. The agrichemical industry have expressed little interest to use their resources to develop new weed control products for low-acreage, "minor" crops. The User Requested Minor Use Label Expansion (URMULE) program provides growers with quick access to newer, safer, and more effective herbicides. This project will help provide growers of fresh-market vegetables crops the same modern, reduced risk, more effective, weed control products that are available to growers of major crops resulting in better weed control options. It will reduce the need for labor for hand-hoeing and weeding, thereby reducing the cost of production to the growers. More cost effective weed control will improve farm productivity, increase yield potential and will improve the long-term competitive position of the industry.

II. Project Objectives

- 1 Evaluate new herbicides (for weed control efficacy and crop safety) to control weeds in fresh market vegetable crops (Solonacea, Alium, Beets, Swiss Chard, Spinach)
- 2 Evaluate products that are currently available in the US and elsewhere for use in fresh market crops (Solonacea, Alium, Beets, Swiss Chard, Spinach)
- 3 Evaluate new products to enhance weed control efficacy of weeds within adequate crop safety margins.

4 In collaboration with the Ontario Minor-Use Co-coordinator (Jim Chaput), provide product performance data on crop safety and efficacy on a range of herbicides to the AAFC Pest Management Centre to support URMULE submissions to the PMRA

5 Make available reduced risk and safer weed control products for growers of fresh market crops (Solanacea, Alium, Beets, Swiss Chard, Spinach) by obtaining registration of minor use products under URMULE. These weed control products will offer more effective and lower-risk alternatives to benefit growers.