

## PROJECT SPOTLIGHT -

# Herbicide Technology & Extension

This two-year project aims to modernize herbicide use in BC's tree fruit industry by improving both application practices and product understanding. Through field trials, outreach, and the development of a prototype sprayer, the project will demonstrate more effective, efficient, and environmentally responsible weed control methods. By reducing reliance on outdated equipment and overused herbicides like glyphosate, the project will support better orchard health, applicator safety, and long-term sustainability - delivering both economic and environmental benefits to growers.

## Goal

To improve the effectiveness, safety, and sustainability of herbicide use in BC's tree fruit industry by demonstrating best practices, advancing application technology, and promoting informed, efficient weed management through targeted extension and outreach.

## Objectives

The objectives of this project are to:

1. Demonstrate ways to improve the effectiveness of pre- and post-emergent herbicides.
2. Promote safer herbicide practices to protect crops and the environment.
3. Reduce spray drift through improved application methods and equipment.
4. Increase awareness of herbicide product options to help prevent resistance.
5. Introduce and test new sprayer technology to modernize application practices.

## Timeline & Funding

The project will be completed between June 2025 and December 2026. Funding is provided by the Government of British Columbia through programs and initiatives delivered by the Investment Agriculture Foundation of BC.

## Activity Highlights

### Demonstration Trials

- Conduct two trials to assess herbicide efficacy, drift reduction, and product diversity.
- Demonstrate best practices for glyphosate use and alternative full-season herbicide programs.
- Compare conventional vs. low drift nozzles and high vs. low water volumes in multiple treatments.
- Monitor post-application effectiveness and measure spray drift during application.

### Technology Improvements

- Research and develop a prototype sprayer with input from growers and industry advisors.
- Finalize design during Winter 2025–2026 and share with growers for adoption.
- Encourage field testing and grower adaptations, with learnings shared in Year-2 field days.

### Education & Outreach

- Host 2–4 grower events to share trial results and promote best practices.
- Distribute extension materials on sprayer calibration, weed ID, herbicide rotation, and application tips.
- Share information through factsheets, videos, social media, newsletters, and industry conferences.
- Align with ongoing provincial efforts to promote pesticide rotations for resistance management.