



## Objectives

Collect field agronomic information and data to optimize productivity of locally adapted canola cultivars in Idaho.

To identify advantageous and detrimental practices to optimize canola production.



## Introduction

Small grain cereal crops dominate throughout the Pacific Northwest dryland region. Adoption of spring and winter canola as a rotation crop has been limited by lack of information about optimal agronomic conditions for maximum crop productivity and seed quality. Despite being a relatively new crop to the region, many farmers now have experience growing canola but have had different degrees of success and frustration. The University of Idaho is currently conducting a survey of current and past canola growers in Idaho and the Pacific Northwest region.

## Materials and Methods

Fourteen canola farmers from across the Pacific Northwest have participated in the first year regional canola grower survey. Annual field data is presented from the first of a two-year study. Information was collected from three separate surveys. The first survey that was sent immediately after planting requested information regarding previous crop, cultivation, cultivar, seeding rate, and fertility management.

The second survey covered growing the crop and included pesticide application, post emergence, and pre-harvest treatments. The final survey included harvest, yield, and marketing of canola. All survey data was strictly confidential and no information is presented on individuals who responded to the survey. Growers can complete surveys on paper via mail or electronically via our Canola website.

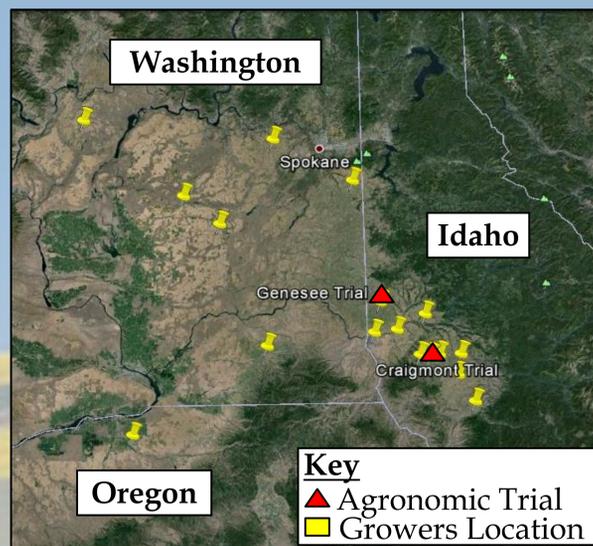


Figure 1. Map of survey participants.

Table 1. Number of responding farmers, average acreage, and yield from the 2013 grower survey.

Canola Type	Number of Growers	Mean Acreage	Seed Yield		
			Mean	Max	Min
			<i>lbs per acre</i>		
Winter	6	104	3,277	4,000	2,400
Spring	8	194	1,621	2,125	750

Table 2. Table of problems encountered by farmers throughout growing canola.

Problems Encountered	Winter Canola	Spring Canola
Planting	+++	++++
Establishment	+++	+++++
Insects	+	++++
Weeds	+	++
Disease	+++	+
Fertility	+	++
Harvest	++	+++
Marketing	+++	+++

## Results and Discussion

The first year survey data was collected from fourteen growers who farmed throughout the Pacific Northwest (Figure 1). Survey results were grouped according to whether they grew winter or spring canola. The number of farmers growing crop-type and the average number acres of canola grown by each are shown in Table 1. Fifty seven percent of farmers grew spring canola while the others grew winter types. Although there were fewer acres of winter canola compared to spring canola, the average yield of winter crops produced was more than twice the harvested yield of spring crops (Table 1). The lower winter canola yield recorded exceeded the highest spring canola crop production. Higher yields are expected from winter canola, which has a longer growing season with flowering and seed fill occurring during cooler times and with less moisture stress that is usual for spring canola.

Identifying growers' problems in canola production is useful to help determine necessary research areas to reduce crop failures (Table 2). Planting and crop establishment were the most difficult periods for both winter and spring canola, and others have shown that good crop establishment is critical for sustainable production. Weeds were not considered to be a problem, perhaps due to good crop competition in winter canola, and use of herbicide resistant cultivars in spring production. Diseases in winter canola and insects in spring canola were greatest pest problems. All growers had concerns with harvest and marketing.