

## **Control of Japanese brome in barley**

### Project objectives

Japanese brome is an agricultural weed that contaminates seed and grain and its presence in seed could potentially affect the value and/or intended use of seed lots. It is a common contaminant in Canadian wheat grain (western and eastern), and to a lesser extent, in barley, rye, canola, flax, lentils and peas (Canadian Grain Commission (CGC) data). This coupled with the fact its chemical control measures have not been registered in barley necessitated a study like this to give farmers option for its control to prevent grain downgrade.

This project therefore aims to:

1. Determine the tolerance level of barley to different herbicides and herbicide combinations for the control of Japanese brome in barley.

The proposed research will evaluate the barley response to varying rates of herbicides applied either pre- or post-emergence. The results will be correlated with phyto ratings of same products in other crops they are registered for use in.

2. Determine the efficacy of the herbicides in controlling Japanese brome in barley.  
An overall objective is to determine which herbicide or combinations of herbicides work to control Japanese brome and what timing works best (pre- or post-emergence)

3. Pursue a potential Minor Use Registration for control of Japanese brome in barley. Data will be submitted to Provincial Pesticide Minor Use Coordinator annually.