



CANADIAN FIELD CROP GENETICS IMPROVEMENT CLUSTER (2013-2018)

At a glance...

- Five-year initiative led by the Canadian Field Crop Research Alliance (CFCRA)
- \$10.3 million research investment
- Breeding program for soybeans and grain corn nationally
 - Breeding program for barley and oat in eastern Canada

The “Canadian Field Crop Genetics Improvement Cluster” is a collaboration between the CFCRA and Agriculture and Agri-Food Canada (AAFC) under the Industry-Led Research and Development Stream of the Growing Forward 2 (GF2) AgriInnovation Program.

This GF2 cluster is a national research program that focuses on providing Canada's soybean, corn, oat, and barley producers with continued access to enhanced genetics for high-yielding, disease-resistant varieties while also addressing the needs of the market for value-added traits that deliver higher levels of nutrition and improved processing attributes.

Research activities under this cluster engage both AAFC scientists and scientists working in Canadian universities and other public research centers. They draw on genome mapping of field crops and the use of advanced diagnostic genetic technologies to accelerate the selection of genotypes with desired traits.

The goal of this project is the development and release of improved soybean, barley, and oat varieties and corn inbreds desired by Canadian producers and the value chains they serve. Promising varieties that are developed as a result of this research will be commercialized in Canada.

Targeted outcomes include:

- Soybean, corn, barley, and oat lines with improved disease and insect pest resistance
- Lines with higher sustained yields
- Lines with enhanced processing and health quality characteristics
- Soybean and corn lines adapted to short-season growing regions
- Development of advanced selection tools to improve breeding efficiency and effectiveness

For more information on this Cluster, please contact:

JOSH COWAN, PhD
Project Manager
Canadian Field Crop Research Alliance
joshcowan@gfo.ca