



# Agronomy research

### Whole-farm approach

The launch of the Integrated Crop Agronomy Cluster (ICAC) represents a first in agricultural research – a multicrop approach that will provide farmers with tremendous value as they tackle widespread agronomic challenges.

"Farmers don't just grow one crop and that's why we're taking a whole-farm approach to agronomic research. We are very excited about the potential of this Cluster," says Terry Young, WGRF Chair. He adds that the process for developing the Cluster began with the realization that a gap had emerged in multi-crop and systems approaches to agronomic research.

"Sometimes research is approached from a fairly local perspective – the Cluster provides an opportunity for a broader geographic perspective, which can be a real advantage," says Pat Flaten, Research Program Manager with WGRF.

#### **Investment totals \$9 million**

ICAC represents an investment of \$9 million in research between 2018 and 2022. Agriculture and Agri-Food Canada (AAFC), under the Canadian Agricultural Partnership, is contributing \$6.3 million. WGRF is providing \$1.6 million in funding while industry partners are supporting the crop research with an additional \$1.1 million (see sidebar for contributing organizations).

"Demand for our grains and other field crops continues to grow around the world and the Government of Canada is working hard to help farmers meet that demand, today and for years to come, through strategic investments in science and cutting-edge research," said federal Agriculture Minister Lawrence MacAulay when he announced the funding in July.



"Coordination and collaboration was really important in bringing this Cluster together," says Garth Patterson, WGRF Executive Director. "WGRF's focus on funding research, our western Canadian membership, and our multi-crop funding scope made WGRF uniquely qualified to develop and lead this first-of-its-kind cluster."

The research is by no means a new foray for WGRF; ICAC will build upon its 'Systems Approach to Crop Sustainability' project that was funded with the support of the federal government under *Growing Forward 2*, which ended in March 2018.

## Productive, resilient and sustainable cropping systems

ICAC consists of eight research activities ranging from soil health to herbicide resistance and climate change adaptation. It also includes the coordination of crop insects and disease monitoring, assessing and managing spray drift, developing a risk model for mitigating *Fusarium* head blight, and the development and management of productive, resilient and sustainable cropping.

Collaborating research organizations include
AAFC, Alberta Agriculture and Forestry, Agri-Metrix,
Brandon University, Farming Smarter, InnoTech
Alberta, Prairie Agricultural Machinery Institute,
Smoky Applied Research and Demonstration
Association, University of Alberta, University of
Manitoba, University of Saskatchewan, and
Western Applied Research Corporation.

A strong knowledge transfer plan is built into all the activities in the Cluster. "We are really hoping to assist with the communication of pest monitoring so that agronomists and producers are up to date with what we're seeing and with what we expect will be a challenge," says Flaten.

WGRF will use various methods to communicate results to producers and agronomists, enabling them to respond to agronomic challenges in a timely way.

## \$9 MILLION

TOTAL INVESTMENT

\$**6.3** 

## Agriculture and Agri-Food Canada

MILLION

under the Canadian Agricultural Partnership

\$1.6
MILLION

Western Grains
Research Foundation

\$1.1 MILLION

### **Industry Partners**

see full list below for all contributing organizations

### **ICAC FUNDERS**

- Agriculture and Agri-Food Canada
- Western Grains Research Foundation
- Alberta Pulse Growers
- Alberta Wheat Commission
- Brewing and Malting Barley Research Institute
- Manitoba Canola Growers Association
- Manitoba Pulse and Soybean Growers
- Manitoba Wheat and Barley Growers Association
- Prairie Oat Growers Association
- Saskatchewan Canola Development Commission
- Saskatchewan Pulse Growers
- Saskatchewan Wheat Development Commission