



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

Science and Innovation



Brandon Research Centre

Brandon, Manitoba

The Brandon Research Centre (BRC) is one of Agriculture and Agri-Food Canada's (AAFC) national network of 19 research centres. The Centre is located in the Parkland region of the Canadian Prairies in the city of Brandon, and is one of the original five experimental farms established by the Federal Government in 1886 under *The Experimental Farm Stations Act*.

The BRC conducts research on crop production, including fertilization requirements of crops, ecology and control of weeds, and biology and management of crop diseases. Scientists also conduct research on the genetics and breeding of barley, management of pastures and cattle, land resource management and impacts of agriculture on the environment.

Results of these research areas produce knowledge, technologies and management practices that enable agricultural producers of the Parkland region to produce safe and healthy food and fibre products demanded by national and international consumers; to improve their husbandry practices in order to enhance the environmental and economic sustainability of their land and water resources; to improve the efficient use of inputs and resources; and to increase their economic and market competitiveness in domestic and international markets.

Areas of Research

Researchers at the BRC conduct research on a vast array of agro-ecological processes that determine the sustainability of agricultural production and the impact of crop and animal production on the quality of the environment, including land, water and air resources.

BRC scientists plan and develop research projects within AAFC's framework of research priorities, while addressing regional needs of producers and agro-industry, and enabling new discoveries and knowledge to foster sector innovation.

Environmental Stewardship

- Conducting research on manure management methods, including composting and rates of application to land that permit producers to capture its beneficial nutrient properties as a fertilizer material, while avoiding, or minimizing, both nutrient losses from the soil and greenhouse gas emissions
- Searching for innovative fertilizer management techniques that enable agricultural producers to avoid nutrient losses to the environment and maximize the efficient use of nutrients by crops

- Advancing knowledge on soil processes, particularly those that control emission of greenhouse gases, sequestration of carbon in soil organic matter, replenishment of exhausted nutrient supplying capacity and improvement of soil physical properties and tilth
- Improving knowledge and understanding the effects of crop rotations and crop succession on carbon sequestration, of legume crop contributions to soil N accumulation and ecology of weed communities and plant diseases
- Studying the impact of cattle production on land water and air quality

Farm Profitability Through Innovative Systems

- Barley breeding and research on new varieties for western Canada that are more resistant to disease, have higher yield, better malting quality and higher nutritive value for cattle and human consumption
- Studying system for improving efficient use of land and water resources, including crop rotations, nutrient application (commercial fertilizers, animal wastes and other sources) to soils, weather conditions within the crop canopy (micrometeorology) and plant biochemistry and physiology. Knowledge developed in these studies forms the basis of management practices that minimize production cost, minimize risks and stabilize returns at the farm gate

- Researching crop management methods that minimize the adverse effect of crop diseases through the adoption of crop rotations and determining strategies to improve the efficient use of fungicides or similar farm inputs
- Developing beef production systems that take into account cattle characteristics (performance, reproduction, growth and finishing) and the availability and quality of feed and pasture resources in order to maximize returns and minimize production risks

Facts, Figures and Facilities

- 17 research scientists and a total staff of 76
- BRC is one of the five original Experimental Farms established by the Federal Government in 1886
- Greenhouse and phytotron facilities
- Land base of 890 hectares plus 445 hectares leased pasture
- Beef herd of 500 cows and overwintering facilities for 1,000 head
- Facilities and equipment for grain drying and handling
- Co-located with the:
 - Prairie Farm Rehabilitation Administration
 - Canadian Food Inspection Agency

Contact us

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