The Canadian Wheat Board Centre for Grain Storage Research

The Canadian Wheat Board Centre for Grain Storage Research at the University of Manitoba is the \$5 million project developed in partnership with the Canada Foundation for Innovation, the Manitoba Research and Innovations Fund, Western Economic Diversification Canada, the Canadian Wheat Board and the private sector. The state-of-the-art facility is the site of integrated studies into grain storage and handling issues. The aim of this research is to preserve stored grain in Canada and around the world.

This unique stored-grain ecosystem facility located on the Fort Garry Campus was designed to allow researchers to solve problems using a multidisciplinary approach. Engineers, entomologists, chemists, and mycologists work together to conduct innovative research related to grain storage and handling. These researchers are the first in Canada to approach problems of stored-grain ecosystems as a group. Developing cost-effective methods to control and prevent fungal and insect infestations of stored grain will help enhance Canada's global reputation as a supplier of high-quality grain.

The new facility is a 15,000 square-foot, world-class research centre equipped with the latest technology. With six research laboratories and a pilot-scale grain cleaning and handling structure, scientists can take research to new levels exploring issues such as insect management, mycotoxin research, grain drying, and structural analyses. Using machine vision technology, researchers are able to develop automated procedures for grain handling and processing.

With rising international standards for quality and chemical-residue-free grain, there is a significant need for this research facility to develop grain handling and storage solutions for Canadian producers.





Digvir S. Jayas, Canada Research Chair, Stored-Grain Ecosystems, in the Imaging Lab located in the Grain Storage Research Facility

FACILITIES/EQUIPMENT

- grain handling, cleaning, and storing laboratory including storage bins and related equipment
- an imaging processing laboratory for identifying grain and foreign material in grain and for automation of grain handling operations
- insect control laboratory
- a physical properties laboratory with equipment for measuring the properties of grains, oilseeds and legumes
- instrumentation laboratory
- fabrication laboratory for building experimental setups
- grain drying laboratory

For more information, contact Dr. Digvir S. Jayas at (204) 474-6860