



Another project brought to you by

GenomeCanada

CTAG - Canadian Triticum Advancement through Genomics

Status	Approved
Competition	2010 Large-Scale Applied Research Project Competition
Sector	Agriculture
Genome Centre	Genome Prairie
Project Leaders	Curtis J. Pozniak and Pierre Hucl, University of Saskatchewan

Project Description

Maintaining the breadbasket of Canada. Wheat is a major Canadian crop, generating over \$11 billion annually in value-added food. Current breeding programs utilize some genomic tools, but the full potential of genomics is not being realized. New breakthroughs in sequencing technology allow scientists to characterize genes at the most basic level - the DNA sequence. It is this sequence that holds the key to enhancing the rate of genetic gain in wheat. Remarkably, the wheat genome is five times the size of the human genome and is being coordinated by the International Wheat Genome Sequencing Consortium. With funding from Genome Canada, Canadian scientists are playing a key role in the consortium, sequencing chromosome 6D which is itself larger than the genome of rice. Together with its international partners, Canada is identifying the genes that wheat breeders can use to develop the next generation of wheat cultivars.

GEL3S researchers are examining the role of public-private partnerships in wheat genomics and breeding research and will recommend strategies to maximize return on investment. This is particularly timely, given the increasing private investment in wheat genomics and breeding.