

Developing tools for faba bean breeding

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SPG Contributions	Project Status	Duration/Timeline of Project (Year to Year)	Co-funders	Total Project Cost
\$122,331.00	Completed	August 2012 – August 2015	University of Saskatchewan – Continuing Research Fund (B. Vandenberg)	\$244,662.00

Project Description

This research project was focused on developing appropriate tools that can assist plant breeders in developing better faba bean varieties for production and marketing in Saskatchewan.

Outcome

Progress was made in developing genotypic and phenotypic tools to allow for the quick testing for presence or absence of vicine, the major anti-nutritional compound found in faba bean seeds. Breeding populations of faba bean were developed to increase the frequency of low vicine breeding lines in locally adapted breeding populations. Faba bean genotypes that can potentially produce seeds with reduced levels of phytate were developed. Germplasm resources of faba beans for use in future breeding activities were developed. This research project helped to set the stage for future expansion of faba bean production and processing in Saskatchewan.

Research Objective

OBJECTIVE 1

To develop fundamental tools for genetic improvement geared to accelerating the rate of genetic gain for faba beans.