

Characterization of protein composition and quality from different pea cultivars

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SPG Contributions	Project Status	Duration/Timeline of Project (Year to Year)	Co-funders	Total Project Cost
\$87,500.00	Completed	April 2012 – March 2016	Saskatchewan Ministry of Agriculture – Agriculture Development Fund (ADF)	\$167,500.00

Project Description

To evaluate the amino acid profiles and surface characteristics of proteins extracted from a diverse set of pea cultivars and the functionality of protein isolates; to evaluate the effect of cultivar, environment and their interaction on the protein's physicochemical and functional properties and the impact of isolate production methods on protein performance.

Outcome

Cultivar-type or the environment did not alter isolate functionality to a degree that would warrant secondary processors to be concerned about variety differences within the raw material feedstock.

Research Objective

OBJECTIVE 1

To evaluate the amino acid profiles and surface characteristics of proteins extracted from a diverse set of pea cultivars and the functionality of protein isolates.

OBJECTIVE 2

To evaluate the effect of cultivar, environment and their interaction on the protein's physicochemical and functional properties and the impact of isolate production methods on protein performance.