

Currently, research is ongoing in Saskatchewan in an attempt to develop new pulse crops. The development of new pulse crops has been primarily focused on chickpea and grass peas. Both pulse types hold potential for future production.

Grass pea is characterized by the presence of a neurotoxin which can result in the paralysis of people who consume them for long periods of time. Dr. Clayton Campbell, Agriculture Canada in Morden, has recently developed near-zero neurotoxin lines of grass pea. The new lines will be tested under different environmental conditions in order to evaluate the stability of the neurotoxin levels. Grass pea for feed purposes should be available within 8 to 11 years. It is anticipated that grass pea will also be used for human consumption within 11 to 15 years. Human consumption of the near-zero neurotoxin grass pea may take a little longer, due to the reluctance to consume products derived from a previously toxic food group.

Two types of chickpea are presently being researched for future production possibilities. Around 1980, an agronomic package was developed for kabuli chickpea production, which included the use of a ascochyta-free seed, fungicidal seed treatment to control seed rots, weed control herbicides, and different seeding times. Original yields produced seed sizes that were too small for the canning trade. Thus, new lines are being developed with a larger seed size. It is expected that a desirable line of kabuli chickpea will be available within 5 to 8 years. Research is also being concentrated on the easy growing, and lower quality standard desi chickpea. Because of outstanding nitrogen fixing capabilities and superior drought resistance, a promising line of desi chickpea should be available for full scale field production within 3 to 5 years.

The above discussed research activities are in no way an exhaustive representation of the numerous research centres in Canada working on pulse products. Universities, government departments, and private companies all are continuously engaged in pulse research. All sources are determined to develop higher quality pulse products, with the objective of injecting new ideas and products into the Canadian pulse industry. These efforts will assist the Canadian pulse industry to expand exports abroad by development of better and more comprehensive lines of pulse products. Dr. Slinkard has stated that, if he is provided with the specifications and scientific particulars of a pulse, that he could produce any type of pulse desired. It is from this base of optimism, that future research efforts across Canada must forge forward, to the benefit of the Canadian pulse industry.