

PULSE RESEARCH IN CANADA

The dimensions of pulse research in Canada are vast, dealing with all aspects of pulse production. Researchers who work with pulses are continuously attempting to develop better methods of production; higher yielding cultivars; more disease resistant cultivars; more effective pesticides; and a wide array of efficient agronomic practices. The research is conducted by devoted people at numerous research centers across Canada. Some of the research centers are operated by Agriculture Canada, while others are located within universities, such as those at the University of Guelph and University of Saskatchewan. It is from within these, and other research centers, that the majority of research initiatives are undertaken for the pulse industry. Since the fundamental focus of this publication is international trade, the only research to be discussed will be in the area of new pulse cultivars.

Pulse research in Canada has a long history dating back over a century. One important location for research has been the Ontario Agriculture College founded in 1874. In the late 1800's, the OAC was conducting experiments on different crop cultivars; different cultural practices; crop rotations; planting dates; and fertility levels. During the early research period, extensive experimentation was conducted on Phaseolus beans. In 1927, C.A. Zavitz authored the landmark OAC Bulletin 352, "Forty Years Experiments with Grain Crops". The publication has been heralded for the pioneering crop research that was conducted, and has since been nicknamed "Forty Years in the Wilderness". The OAC has maintained its work in bean research, while at the same time providing valuable information to farmers on cultivars and production. In 1964, the OAC with its two sister colleges formed the basis for the present day University of Guelph.

During the 1970's, there were four dominant cultivars of white pea beans grown in Ontario; Sanalac, Seafarer, Kentwood, and Fleetwood. The potential for improvement was recognised, and in 1976 a white pea bean breeding program was initiated at OAC. Cultivars of common beans were obtained from Colombia and successes were found. The most successful was Ex Rico 23, which out yielded other cultivars by 50%. Ex Rico 23 became the most widely grown cultivar and captured about 50% of the white bean acreage in Ontario.