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## Sustainable potato production the focus of new funding for University of Lethbridge researchers

Potatoes are an important economic crop in southern Alberta and, around the world, the humble potato is a key component of global food security.

Researchers from the University of Lethbridge have been awarded nearly \$250,000 through the Agriculture Funding Consortium to improve sustainable potato production by looking at ways to reduce disease in the field and in storage and to increase production while minimizing the use of resources.

Dr. Larry Flanagan, a biology professor, has received nearly \$50,000 to test six types of potatoes used in fry and chip processing for their water-use efficiency under typical growth and irrigation practices in southern Alberta.

"Our research will benefit the potato industry in southern Alberta by providing new information to producers," says Flanagan. "The efficient use of water in crop production in an arid region like ours is an important goal for increasing sustainable potato production."

Flanagan and partners, Drs. Michele Konschuh and Dmytro Yevtushenko from ULethbridge and Dr. Jonathan Neilson from Agriculture and Agri-Food Canada, will apply stable isotope techniques to identify water-efficient potato varieties for use in crop production under expected future warmer and dryer conditions that will stress our available water resources.

In a separate project, Yevtushenko, a biology professor, was awarded \$200,000 to develop and validate protocols to detect potato pests and pathogens.

"Disease incidence in both the field and in storage remains a major limiting factor in sustainable potato production," says Yevtushenko. "The aim of this study is to develop diagnostic molecular protocols for fast and reliable identification of the major existing and emerging potato pests and pathogens in Alberta."

Yevtushenko and partners, Drs. Michele Konschuh and Jie Feng, a research scientist with Alberta Agriculture and Irrigation, will focus on identifying nematodes, which are parasites, and

fungal diseases like pink rot, potato stem canker and black scurf, that are known to cause substantial potato losses in Alberta.

The researchers expect the study will generate data and lead to the implementation of new technologies that will maintain Alberta's reputation as a leading Canadian producer of topquality potatoes and enhance the profitability and sustainability of the potato industry.

This news release can be found online at <u>sustainable potato production</u>.

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Our University's Blackfoot name is Iniskim, meaning Sacred Buffalo Stone. The University is located in traditional Blackfoot Confederacy territory. We honour the Blackfoot people and their traditional ways of knowing in caring for this land, as well as all Indigenous Peoples who have helped shape and continue to strengthen our University community.