



For immediate release — Tuesday, Aug. 1, 2017

## Ongoing monitoring program finds potato psyllids but no evidence of bacteria that causes zebra chip disease

University of Lethbridge biogeography professor Dr. Dan Johnson and his team have been monitoring Prairie potato fields for the past few years, looking for evidence of the potato psyllid insect and a bacterium it can carry that can lead to zebra chip disease in potato crops.

“We found hundreds of potato psyllids last year, but we have found under 10 so far this year and none have the bacteria that cause zebra chip,” says Johnson, who coordinates the Canadian Potato Psyllid and Zebra Chip Monitoring Network.

DNA testing for the bacteria is done in the Larry Kawchuk lab at the Lethbridge Research Centre, where Johnson is also a visiting scientist. Zebra chip has affected potato crops in the United States, Mexico and New Zealand, causing millions of dollars in losses. Potatoes with zebra chip develop unsightly dark lines when fried, making affected potatoes unsellable. The pathogen was found by researchers in Idaho as early as May this year, says Johnson. Given Alberta’s potato industry is worth more than a billion dollars alone, scientists and field workers want to ensure the province’s and Canada’s potato fields are being monitored.

At the end of last summer, Johnson found potato psyllids in Saskatchewan and Manitoba, thanks to cards collected and sent by network members there. This year, nearly 50 fields in Alberta are being monitored every two weeks and sometimes more frequently. Slightly sticky cards are placed on stakes in the fields and later examined under microscopes. With the expansion of the Canadian monitoring network, the researchers can map locations where the psyllids are found and compare their numbers to weather patterns and natural enemies of the pests.

Johnson and his team have produced a network [newsletter](#) with a colour photo guide so growers can more easily watch for the stages of the potato psyllid.

The Canadian monitoring program began in 2013 in cooperation with Scott Meers, an insect management specialist with Alberta Agriculture and Forestry. No psyllids were found in 2013 or 2014 and small numbers were detected in 2015 and 2016. That none have carried the bacteria that leads to zebra chip is good news, says Johnson.

The research and monitoring network is supported by Alberta Agriculture and Forestry and Agriculture and Agri-Food Canada, Growing Forward 2 (a federal-provincial-territorial partnership), the Canadian Horticultural Council and the Potato Growers of Alberta.

—30—

**Contact:**

Caroline Zentner, public affairs advisor  
403-394-3975 or 403-795-5403 (cell)

[caroline.zentner@uleth.ca](mailto:caroline.zentner@uleth.ca)