

THE BUZZ



News about the Ontario Ministry of Agriculture, Food and Rural Affairs – University of Guelph Partnership

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Welcome Readers!

In this issue of The Buzz, you will read about the latest Partnership-funded research and innovation, including Knowledge Translation and Transfer (KTT) initiatives that ensure the Partnership outcomes reach those who can put them into action. You will also find information about upcoming events related to the Partnership.



Improving Ontario's Apple and Pear Storing Techniques



Effective storage means Ontario consumers can have delicious apples and pears all year-round. Controlled atmosphere storage (temperature, humidity, etc.) and postharvest treatment improves fruit quality and controls

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ripening, thereby extending the fresh market season. Reliable storage techniques exist for traditional apples and pears but not for novel ones. Gale Bozzo and collaborators Jennifer DeEll (OMAFRA) and Barry Shelp (UofG) are investigating the [ideal ripening inhibitor treatment](#) and controlled atmosphere for newly developed cultivars like 'Honeycrisp' apples and 'Harovin Sundown' pears.

Managing Root Veg Pests

Nematode pests (roundworms) can cause physical damage to crops and can transmit diseases to crops, both of which can cause major vegetable crop losses. Environmental concerns with a commonly used fumigant have limited producers' available options. Using carrots and radishes as example crops, Mary Ruth McDonald is [evaluating various alternatives](#) including fumigants, nematicides and biorational materials as replacement nematode control tools to help producers manage these pests.



Ketosis Monitoring Dairy App



Ketosis, which is usually characterized by partial anorexia and reduced production, is a common concern with adult cattle. Despite 15 years of research, the incidence rate of this disease in Ontario is still 40% and it remains a concern in the dairy industry. In a recently awarded KTT project, Todd Duffield and his team are [building an app](#) that will provide suggestions for management and treatment s, as

well as links to other ketosis research. A draft app was developed over the summer for both Android and Apple and is being beta-tested this fall.

Monitoring Stink Bugs

The brown marmorated stink bug (BMSB) is an invasive pest with up to 300 hosts that can cause in significant crop damage and widespread economic losses. Early detection is critical, especially since BMSB appears to have established populations in Ontario. Cynthia Scott-Dupree is [assessing the distribution and abundance](#) of BMSB in southern Ontario. This research will help farmers protect themselves and their crops from damage.



Photo Credit: T. Kunar, Virginia Tech

Sub-Surface Drip Irrigation

Efficient use of water in crop production is an essential economic and environmental practice. Under the new funding program Gryphon's LAAIR (Leading to Accelerated Adoption of Innovative Research), Rene Van Acker and his team are investigating potential commercialization and best management practices for sub-surface drip irrigation in Ontario. [Sub-surface drip irrigation](#) pushes water through drip tapes placed in the ground and can also deliver fertilizer to the crop (fertigation). This technology can provide environmental and economic benefits for farmers by refining and improving irrigation management to enhance



water-use efficiency, nutrient management and crop productivity. It can also minimize water quality degradation.

13 New HQP Scholarships

With campus humming at the start of a new academic year, the OMAFRA - U of G Partnership congratulates 13 students who have been awarded [Highly Qualified Personnel \(HQP\)](#) scholarships this year. The seven MSc and six PhD students will receive funding to assist them in their studies while also facilitating opportunities for experiential learning. Students complete in-class training in a specially designed course on business and commercialization and or may choose to complete a work study placement to further develop their skills. The students graduate with market-ready skills, ready to participate in new and emerging opportunities in the agri-food sector. The call for applications for the next round of HQP scholarships begins in February 2015.

Upcoming Events

- [Research Program Call for LOIs](#) is now open - September 15, 2014 - November 4, 2014
- [KTT Program Call for LOIs](#) is now open - October 20, 2014 - December 5, 2014
- Environmental Sustainability Day - November 24, 2014 (contact Elin Gwyn for information elin.gwyn@ontario.ca)
- [Emergency Management Research Expo](#) - December 2, 2014 - Arboretum

STAY CONNECTED



For more information on the OMAFRA - U of G Partnership Agreement, go to the website at: http://www.uoguelph.ca/omafra_partnership/en/index.asp

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