NSIS Public Lecture

Sex-Deprived Fruit:

How a Lack of Breeding Threatens our Food's Future And How Genomics Can Help Fix the Problem

Speaker: Dr. Sean Myles

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Canada Research Chair in Agricultural Genetic Diversity

Monday, May 6, 2013
7:30pm
Great Hall, University Club, Dalhousie University

This lecture will be open to the public.
All are welcome to attend!

We recently celebrated the 200th anniversary of the McIntosh apple. But is such an anniversary a reason for celebration or a reason for despair? While pathogens continue to evolve and exert pressure on McIntosh, it has remained genetically identical for 200 years because we continue to propagate it clonally year after year. Many of our fruit crops, including apples and grapes, are sex-deprived: they have experienced very little sex over the past few thousand years due to the practice of clonal propagation. Sex is the only way to generate novel combinations of traits. We need breeders to continue to generate novel genetic combinations that are tasty, high-yielding and require less chemical input to grow. If we want sustainably grown food in the future, it is essential that we support long-term breeding efforts that make use of all of the information available, including DNA sequences. This talk will focus on how we use genetic information to make breeding more efficient and cost-effective so that we can produce tasty fruit that requires less chemical input. The research performed here in Nova Scotia by Dr. Myles and his collaborators aims to generate new apple and grape varieties that promote environmental and economic sustainability.

Photo credit: “Wine Grape Production” http://growingnovascotia.ca