



Cool  
Climate  
Oenology &  
Viticulture  
Institute

Brock University

# Harvesting Innovation for Growth and Sustainability of the Canadian Grape and Wine Industry



## Program accomplishments

Creating innovative support programs, applied practices and outreach services to the Canadian grape and wine industry has been possible with the funding received through Growing Forward's Developing Innovative Agri-Products (DIAP) program at Agriculture and Agri-Food Canada.

Brock University's Cool Climate Oenology and Viticulture Institute (CCOVI) has worked collaboratively with the project's lead the Grape Growers of Ontario (GGO) to address industry-led research priorities with this funding.

Three key activities were identified to address these priorities and the impact of this work on the wine and grape value-chain is already evident. Outlined below are the activities successes.

### Activity 1 - gain research expertise in oenology and viticulture:

- An oenologist specializing in wine flavor chemistry and viticulturist with expertise in grapevine physiology in winter hardiness were hired to research priority issues to the industry and transfer that knowledge and innovation to industry stakeholders.
- The oenologist's research and outreach activities focus on acid reduction projects, methoxypyrazine remediation and appassimento wine production to increase the market competitiveness of both Ontario and Canadian wines.
- The viticulturist's research and outreach activities function to increase grapevine cold-hardiness while maintaining premium fruit quality to overcome climatic barriers to growth.

### Activity 2— develop outreach services to the industry:

- Analytical Services, launched in 2010, provides testing services to over 70 clients in the grape and wine community. CCOVI's Analytical Services now acts as the official third party testing centre for the GGO's dispute resolution process for rejected grape loads.
- The Grape Preharvest Monitoring Program, launched in 2010, assists growers and winemakers in making informed vineyard management and harvest decisions which improves fruit and wine quality. The program follows grape development across Niagara each growing season.
- VineAlert, launched in 2010, is a risk-management tool for growers to mitigate the impact of cold weather events by assisting growers in knowing when to use wind machines.
- The VQA Winemakers Forums were expanded in 2011 to include the oenologist and viticulturist. They provide answers to winemakers in an interactive setting on best practices and techniques suitable for Ontario's climate to improve vine performance and wine quality.
- The CCOVI Outreach committee, founded in 2011, is comprised of grape growers, winemakers and staff from CCOVI. The committee develops outreach programs to further knowledge and technology transfer to improve efficiencies and increase the economic impact of the Ontario grape and wine industry.
- The Calibrate Series of outreach workshops began in 2012 with 'Calibrate Your Lab' designed for wineries to improve the accuracy of juice and wine testing. 'Calibrate Your Vineyard' is designed for growers to improve their winter pruning practices and will be in early 2013.

### Activity 3— addressing the industry priority of optimizing grapevine winter hardiness:

- CCOVI's viticulturist and his team are identifying factors that impact grapevine hardiness – crop load, disease pressure, water stress— so they can develop a best practices guide for the grower community.



## Success stories: press releases and media coverage

### Press releases on projects associated with DIAP:

(all links available at [www.brocku.ca/ccovi/news](http://www.brocku.ca/ccovi/news))

- [Federal research money will help Brock help grape growers wineries](#)
- [Brock University opens its testing lab to the grape and wine industry](#)
- [Brock joins forces with AAFC to create research network for grape and wine industry](#)
- [New Scientists help CCOVI ramp up support for Canada's grape and wine industry](#)
- [Wine grape preharvest monitoring tells the story](#)
- [Advanced cold hardiness database helps growers combat grapevine winter injury](#)
- [Scientist arrives to fill out CCOVI's industry support team](#)
- [Scientists reach across Canada to help grape and wine industry](#)
- [Wine grape preharvest monitoring service back for 2011 season](#)
- [CCOVI's VineAlert prepares Ontario grape growers](#)
- [CCOVI in Australia for the 8th Annual Cool Climate Symposium](#)
- [Grape Hardiness Update—Critical temperature and Growth Stages](#)
- [New year, new look for wine grape preharvest monitoring program](#)

### Media coverage of projects associated with DIAP funding:

(all links can be found at [www.brocku.ca/ccovi/news](http://www.brocku.ca/ccovi/news))

- [\\$1.9 Million Canadian Wine Research - Wines & Vines 12.18.2009](#)
- [Video coverage of federal funding announcement for Canadian wine research - 12.18.2009](#)
- [Brock University opens its testing lab to the grape and wine industry - winebusiness.com, 03.31.2010](#)
- [Federal research money will help Brock help grape growers and wineries - Canadians - Canadian Grapes to Wine - Spring 2010 edition](#)
- [Provinces Link for Wine Research - Wines & Vines - April 2010](#)
- [Grape and Wine Scientists Join Brock—Wines and Vines—July 2010](#)
- [Cool grapes, hot science - The Grower - October 2010](#)
- [Keeping watch over Niagara's vineyards - St. Catharines Standard - September 4, 2010](#)
- [How growing season weather patterns affect vine hardiness - Cogeco TV - March 2, 2012](#)
- [Sleepless night for fruit growers - CHCH TV - March 27, 2012](#)
- [We need to talk about ladybugs - wine-searcher.com - April 10, 2012](#)
- [Climate's impact on vine hardiness—Radio Canada—April 11, 2012](#)
- [The winds of climate change - The Grower - May 2012](#)
- [Vineyard harvest shines in summer heat - St. Catharines Standard -August 22, 2012](#)
- [Harvest 2012 - CBC Radio, Ontario Morning - August 29, 2012](#)