

Summer 2014

CCOVInews

A newsletter from
the Cool Climate Oenology
and Viticulture Institute



CCOVI

Brock University

Sparkling wine research receives funding

Even as Ontario VQA sparkling wine production has doubled in just five years, opportunities still exist in local and international markets, and Ontario winemakers are looking to produce sparkling wine with regional identity.

Now with the support of provincial and federal funding, CCOVI researchers are working on two projects that will identify elements that will create a uniquely Ontario sparkling wine.

The first project is looking at the complete sparkling wine value chain, from the vineyard to the sales shelf. The research team made up of CCOVI associates includes team lead George van der Merwe, a University of Guelph researcher, and Brock researchers Debbie Inglis, Tek Thongpapanl, Jim Willwerth and Belinda Kemp.

“Sparkling wine production in Ontario is a very logical fit,” van der Merwe said, “because of the growth climate and the fact that we have all the materials and conditions needed to produce really good sparkling wine.”

The researchers received \$240,000 through a funding partnership between the Ontario Ministry of Agriculture, Food and Rural Affairs and the University of Guelph. The research team is working with industry partners Chateau des Charmes and Trius Winery at Hillebrand.

Starting in the vineyard, the researchers will study:

- several grape varieties as well as clones planted on different soil



CCOVI sparkling wine researchers: (left to right) Belinda Kemp, Tek Thongpapanl, George van der Merwe and Debbie Inglis, Jim Willwerth is missing from the photo

types, to see which are best suited to produce a signature Ontario sparkling wine;

- the foaming ability of each variety in the final sparkling wine;
- how the quality and sensory characteristics of Ontario sparkling wine is affected by different yeast strains, including yeasts isolated by Brock and Guelph researchers; and
- methods that winemakers can use to decrease the aging time of sparkling wine after the second fermentation.

Marketing researchers will identify the product attributes of sparkling wine that consumers feel are important. This will help the team determine the features and characteristics that are most sought after by consumers, which is important for the positioning of Ontario sparkling wine in a competitive market place.

National funding for dosage trials

Inglis and Kemp have also received Natural Sciences and Engineering Research Council (NSERC) funding to work with Trius on sparkling wine dosage trials, through a program that helps Canadian companies access the expertise of Canadian universities to address specific scientific questions.

The NSERC project examines how different types of wine used in *dosage* solutions—the liquid added at the final stage of sparkling wine production—can affect sparkling wine aroma, and looks to see which solution is preferred by consumers. Kemp said what’s unique about this partnership is how willing Trius is to divulge the results to other wineries.

“They want to share the research findings for the good of growing the Ontario industry,” Kemp said. “This is a real collaboration between industry and academia.”

What’s inside

Research Q&A	2
Wine Tasting Challenge winners announced	2
CCOVI director honoured	3
School of Cool recap	3
Educate Your Senses at the Niagara Wine Festival	4
Continuing education offerings	4
Briefs and publications	4

Wine Tasting Challenge winners announced

Over 300 participants gathered at Toronto's Liberty Grand last April to put their palates to the test at the 2014 Wine Tasting Challenge.

Hosted by CCOVI, the competition was open to all professional sommeliers, food and wine industry professionals, students and wine enthusiasts. Congratulations to the 2014 winners listed below.

Professional round

Grand award winner: Ben James

2nd place: Chris Craig-Neil

3rd place: Jordan Mills

Amateur round

1st place: Ryan Dewitte

2nd place: David Jarvis

3rd place: Sue Demers

CCOVI VQA round: Ted Han

Spirit round: Lesley Provost

Symposium highlights sparkling wine

At a time when consumer interest is growing, winemakers from across North America gathered at Brock May 6 to focus on sparkling wine. Hosted by CCOVI, the sold-out Ontario Sparkling Wine Technical Symposium was a blend of technical theory and practical solutions.

The event featured international experts who shared global success stories as well as the latest developments in sparkling wine research. Speakers included renowned researcher Bertrand Robillard, winemakers Ed Carr and Larry Mawby and wine writer Jamie Goode.

The symposium is the latest in sparkling wine outreach events organized by CCOVI. The idea for the event originated with Fizz Club – a winemakers-only networking group organized by CCOVI.

Save the date

The next meeting of Fizz Club will be held Dec. 2 at Brock. This will give winemakers an opportunity to focus on base wine quality. A session scheduled for May 2015 will focus on viticultural effects on sparkling wine presented by expert Fiona Kerslake.

Research Q & A

The impact of viticulture practices on wine aroma

Andy Reynolds is a CCOVI researcher and a professor of biological sciences at Brock University. This project was part of the thesis of MSc grad Luis Moreno and was supported by Fred Di Profio and Pondview Estate Winery.

What did this project look at?

This study analyzed how crop level and hang time impacted the composition of Pinot Gris, Riesling, Cabernet Franc and Cabernet Sauvignon grapes from the Niagara region to see which had a greater positive impact on wine aroma.

Vines from a single vineyard were subjected to a combination of two viticultural factors; crop level (full crop or half crop) and hang time (normal harvest or an

additional three weeks on-vine) during the 2011 and 2012 growing seasons. After the wine was made, selected aroma compounds were measured to see what impact both factors had on favourable and unfavourable wine aromas.

What did you find?

We found that both viticulture treatments impacted the aroma composition of the wines produced.

The project showed that delays in harvest had a greater magnitude of impact in the overall wine aroma profile than crop reduction.

Also, weather conditions and vintage were found to play an important role on the development and presence of aroma compounds and should be taken into consideration when making decisions on viticulture practices.

To read more about this project, visit: <http://hdl.handle.net/10464/5217>

Howard Staff was a loyal friend to Brock

Many in the Brock community were shocked and saddened to learn of the death on June 27 of Howard Staff, a longtime friend of the University who was well known throughout the Niagara region as a community builder and an iconic figure in Ontario's grape-growing industry.

Staff, who was 71, was the sixth generation to operate the family farm that has been a vineyard since the 19th century.

The Staff family has had a close relationship with Brock. In the 1990s, Howard joined other grape and wine industry leaders in forming the founders committee that helped create CCOVI.

Howard's wife, Wendy Staff, was a member of Brock's Board of Trustees from 2002 to 2008, and for several years has been on the

organizing committee of the President's Golf Tournament, which raises thousands of dollars to support student athletes. Their daughter Sue-Ann Staff is one of Canada's top winemakers and is a former Winemaker of the Year in Ontario.

CCOVI director Debbie Inglis, who is also a grape grower, praised Howard Staff's commitment to his friends and to the industry that he worked tirelessly to help shape and lead for half a century.

"He was an inspiration to so many, including myself," said Inglis. "His generosity, sense of values and genuine nature will be sadly missed. I take comfort in knowing the qualities we all so admired in Howard live on through his children and grandchildren."

Chamber of Commerce honours CCOVI director

CCOVI director Debbie Inglis has been recognized with the Greater Niagara Chamber of Commerce's award for Excellence in Science, Technology and Innovation at its annual Women in Business luncheon.

The award celebrates the achievements of women whose business and community contributions have made a significant difference in Niagara. Inglis, who received the award at a June 13 luncheon, was honoured and surprised to be recognized. She said she accepted the award on behalf of her team at CCOVI, noting the collective effort required to have a positive impact through research on the region's grape and wine industry.

"I'm very fortunate at Brock to be encouraged in my job to think outside the box, be creative and innovative, and work to break down barriers that prevent progress," Inglis said at the presentation.

Besides being CCOVI's director, Inglis is one of its core researchers and is also a faculty member in the Department of Biological Sciences. As a biochemist, her research focuses on topics of economic importance to Ontario's grape and wine industry.

Exploring careers in science

CCOVI was once again pleased to participate in Brock's annual Scientifically Yours event held in May. The two-day workshop encouraged Grade 11 girls to continue their studies in science at the university level.

CCOVI's activity titled The Yeast Crime was facilitated by graduate student Jen Kelly and research assistant Mary Jasinski. Students had to determine if one of the spoilage yeasts found in the winery infected a Chardonnay wine.

The activities gave the students exposure to what they could expect to see over their undergraduate career.

"I was honoured to participate in a program that encourages girls to pursue advanced sciences," Kelly said. "The girls were incredibly driven and have a clear plan for their educational futures."

Cool Climate Chardonnay Celebration kicks off at Brock

Winemakers, grape growers and sommeliers went back to school July 18 as the International Cool Climate Chardonnay Celebration (i4c) kicked off its weekend event at Brock University. The educational session gave participants an opportunity to learn more about the impact various viticulture and winemaking practices have on Chardonnay.

The sold-out session titled 'School of Cool' was presented by CCOVI and the Grape Growers of Ontario as part of the i4c's annual event that highlights the diversity of Chardonnay from Canada and around the world through a variety of food and wine events.

Keynote speaker Tim Atkin, a prominent wine writer and Master of Wine (MW), described Chardonnay as the world's greatest white wine variety.

"Chardonnay is an expression of place and production, terroir and technique," Atkin said.

The event featured three panels that examined the role of innovation and technology in

winemaking, grapevine yield as it relates to wine quality and a discussion on the factors that influence viticulture practices.

Master sommelier John Szabo moderated the discussions which featured CCOVI viticulturist Jim Willwerth as well as 11 winemakers, grape growers and wine writers from around the world.

Following the expert panels, participants attended a lunch at the Lowenberger Residence Dining Hall that featured a tasting of 117 Chardonnays.

CCOVI director Debbie Inglis said the institute is always pleased to work alongside industry partners to help develop and host educational sessions as part of the i4c's annual event lineup.

"Chardonnay is a wine style Ontario does very well, but it's also wonderful to have the opportunity to celebrate and appreciate Chardonnays from other cool climate regions around the world," she said.



A sold-out crowd of winemakers, grape-growers and wine enthusiasts gathered at Brock to learn more about Chardonnay.

Publications

Business

• Cyr, D. Kushner, J. and T. Ogwang (2014). The changing size distribution of California's North Coast wineries. *Journal of Wine Economics*, 9(1): 51-61.

•De Clercq, D., Thongpapanl, N. and M. Voronov (2014). Explaining SME's engagement in local sourcing: The roles of location-specific resources and patriotism. *International Small Business Journal*, pending.

Viticulture

•Marciniak, M., Brown, B., Reynolds, A. and M. Jollineau(2014). Use of GPS, GIS and remote sensing to understand the terroir of the Niagara Peninsula. *Journal of International Science Vigne Vin* (accepted).

•Reynolds, A., Lixin, N. and C. de Savigny (2014). Use of electrolytic conductivity to assess irrigation impacts on grapevine winter hardiness. *International Journal of Fruit Science*,14(3): 267-283.

Briefs

Business

• Mantonakis, A., Cardwell, B., Beckett, R., Newman, E. and M. Garry (2014). The mere presence of a photo on a product label can change taste perception. *Academy of Wine Business Research Conference*, Geisenheim, Germany, June 28-30.

• Kettle, K. and A. Mantonakis (2014). Look for the signature: How the infusion of personal signatures affects product evaluations and purchase behavior. *Society for Consumer Psychology Conference*, Miami, Florida, March 8.

Oenology

•Kelly, J., Dowling L., DiProfio, F., van Rooyen, T., Brownbridge, M., De Luca, V., Pickering, G. and D. Inglis (2014). Characterizing *Saccharomyces bayanus*—Brock isolate yeast for use in Appassimento winemaking in

Ontario. 65th American Society for Enology and Viticulture National Conference, Austin, TX, June 23-27.

•Hogan, C., Kemp, B., Xu, S., Inglis, D. and W. McFadden-Smith (2014). The effect of wine-based dosage solutions on the volatile aroma composition and flavour of Ontario sparkling wine. 65th American Society for Enology and Viticulture National Conference, Austin, TX, June 23-27.

Viticulture

•Reynolds, A., Balint, G., Lowrey, W., Ehtaiweshsh, A. and L. Tomek (2014). Irrigation scheduling in Northeastern North America. *ASEV Water Use Efficiency Symposium*, Austin, TX, June 24.

•Reynolds, A., Jasinski, M., Diproffio, F., Pasquier, A., Touffet, M. and R. Fellman (2014). The terroir of winter hardiness: A three year investigation of spatial variation in winter hardiness, water status, yield and berry composition of Riesling in the Niagara Region using geomatic technologies. *Proc. 10th International Terroir Congress*, Tokaji, Hungary, July 7-10.

•Reynolds, A., Jasinski, M., Diproffio, F., Pasquier, A., Touffet, M. and R. Fellman (2014). The terroir of winter hardiness: A three year investigation of spatial variation in winter hardiness, water status, yield and berry composition of Cabernet Franc in the Niagara Region using geomatic technologies. *Proc. 10th International Terroir Congress*, Tokaji, Hungary, July 7-10.

•Willwerth, J. (2014). Cold damage: Vineyard cultural practices to manage it, panel presentation with Russ Smithyman. 65th American Society for Enology and Viticulture National Conference, Austin, TX, June 23-27.

• Willwerth, J., Jasinski, M. and L. Dowling (2014). Impact of cultural practices on cold hardiness dynamics of six V. vinifera cultivars. 65th American Society for Enology and Viticulture National Conference, Austin, TX, June 23-27.

Wine and cheese seminars return to the Niagara Wine Festival

Visitors to this year's Niagara Wine Festival will be able to once again educate their senses with wine and cheese seminars.

The sessions are organized by CCOVI and provide participants an opportunity to learn more about the wines being poured at the festival while enjoying cheese pairings presented by the Dairy Farmers of Canada.

Bestselling food and wine author Linda Bramble will host the winemaker as they tell the stories behind the wines being poured. Debra Levy from the Dairy Farmers of Canada will showcase the cheese selected to match each of the wines presented.

The seminars will take place both Saturdays of the festival Sept. 20 and 27 at 2, 3 and 4 p.m., rain or shine, in the culinary theatre in Montebello Park in St. Catharines. Admission is two tokens or \$6 plus HST online.

As part of Brock's 50th anniversary celebrations, alumni will receive a free wine glass and half off the seminar price.

Register today at: niagarawinefestival.com

Continuing education courses

Students looking to further their studies in wine education will have options this fall as CCOVI's online and in-class continuing education courses return.

The wine appreciation Exploring Varietals course begins Sept. 15 and runs Monday nights through Dec. 8. This course helps students improve their tasting skills and develop an ability to distinguish wine varietals.

Students looking to take the Wine & Spirit Education Trust Level 2 course will once again be able to do so online or in person. The in-class option starts Oct. 8 and runs Wednesdays until Dec. 2. Online offerings of the course begin Nov. 8 or Dec. 6. This course provides students with fundamental product knowledge including major grape varieties and wine styles from key wine producing countries.

For more details, and to register, visit:

ccovi.ca/ce/courses