

Tracking tannins
New program to monitor wine grape tannin maturity

When tannins - the flavour compounds in grapes responsible for bitterness and astringency in wine - don't reach adequate levels, the resulting wine can be light in have green aromas.

Now, a new program from the Cool Climate Oenology and Viticulture Institute (CCOVI) is looking to provide Niagara winemakers with information on managing various levels of tannin maturity to help winemakers optimize wine quality when growing seasons don't provide ideal tannin levels in the grape skins and seeds.

oenologist Belinda Kemp, will use laboratory testing to monitor tannin concentration levels for Pinot Noir, Cabernet Sauvignon and Cabernet Franc grapes in Niagara each harvest.

"The goal of the program," Kemp says, "is to help winemakers manage tannins at each stage of the winemaking process by providing them with the initial harvest levels and advice."

Launching TanninAlert has been Kemp's first priority since joining the CCOVI team in July from her previous position as a

researcher at Plumpton College in the United Kingdom. technique. A second set of

"There are a number of winemaking techniques that can be utilized to manage tannins and optimize wine colour, lack fruity flavours and quality at all ripeness levels," Kemp said. "Ensuring winemakers have the initial information at the beginning of for managing tannin the winemaking process is very concentrations in red wine will important."

When this year's crop reaches commercial ripeness levels, the tannin concentration in the grapes will be measured to set a benchmark. Based on concentration data, grapes will valuable insights to help local be classified into one of three TanninAlert, run by CCOVI's categories: low, medium or high tannin levels.

> Next fall, base level wines from the three grape varieties will be made at the low, medium and high tannin levels

using the same winemaking wines will be produced using the most suitable winemaking techniques for each tannin group, which can then be compared to the base wines.

Based on the program's findings, a best practices guide be made available to the industry.

"TanninAlert is a great addition to CCOVI's line-up of outreach programs," said CCOVI Director Debbie Inglis. "The program will provide winemakers make informed decisions."

Wineries interested in participating in the program can contact Kemp for more information at

bkemp@brocku.ca.



15.4° Brix 19.9 TA (g/L) pH 2.74



21.1° Brix 8.6 TA (g/L) pH 3.16



22.5° Brix 7.1 TA (g/L) pH 3.15

Seed tannin concentration can be monitored by visual, taste and laboratory analysis. Above is the progression from harvest 2013 in Cabernet Sauvignon grapes.

Students for hire

Looking to hire vineyard, winery or retail staff?

Our students and graduates are skilled in winemaking, viticulture and wine business. Students in the Oenology and Viticulture (OEVI) program at Brock University are seeking co-op jobs for 2014.

To have a position posted: call 905 688 5550 x 4252 or email alesia.dane@brocku.ca

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New book explores Niagara wine

The World of Niagara Wine, a recently released book, explores the combination of nature and human effort that has shaped Niagara into one of Canada's leading grapegrowing and wine-producing regions.

Edited by Brock University
geography researchers Michael
Ripmeester, Phillip Gordon
Mackintosh and Christopher
Fullerton the book took a
transdisciplinary approach including
the work of 25 scholars from across
all areas of the grape and wine value
chain.

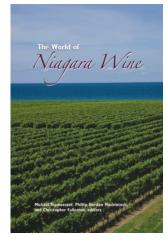
Titled Business and Bottles, the
second section focuses on the
entrepreneurship behind and the

"Brock plays an important role in terms of its wine research," Ripmeester, a Cool Climate Oenology and Viticulture Institute (CCOVI) fellow, said. "We thought this was a great opportunity to show off what the university was doing."

Instead of assigning topics to various experts and collating them, the editors decided to develop the content based on a series of workshops. These writing workshops allowed more collaboration and a chance to build a common thread through the book to tie the research together.

In the book's preface, wine writer Konrad Ejbich said "what sets The World of Niagara Wine apart is its voice and its perspective. It is authored by a group of deeply curious academics who have an abiding passion for wine and for all that happens in the Niagara Peninsula."

The first section, Niagara Wines Decanted, explores the early history of wine in Niagara, the influence of government regulation as well as its contemporary economic significance.



Titled Business and Bottles, the second section focuses on the entrepreneurship behind and the promotion and marketing of Niagara wines.

The science behind winemaking is explored in the third section titled The Vineyard to the Bottle. This section covers topics from grape growing, climate analysis, soil science wine tasting to wine production.

A cultural perspective on Niagara winemaking finishes the book with discussions on tourism, politics and everyday responses to the grape and wine industry.

"It is fully referenced, rigorous academic work but intended for a wider audience who are interested in wine in Niagara," Ripmeester said.

Other CCOVI researchers, fellows and professional affiliates who contributed to this book include: Linda Bramble, Dirk De Clercq, Debbie Inglis, Ronald Jackson, Gary Pickering, Andrew Reynolds, Anthony Shaw, Narongsak Thongpapanl and Maxim Voronov.

The World of Niagara Wine is available at the Brock Campus Store as well as through Wilfrid Laurier University Press and amazon.com.

Nominations open for VQA Promoters Awards

Do you know someone who has made a significant contribution to the awareness and promotion of Ontario's VQA wine?

Nominations are now open for the 2014 VQA Promoters awards in the following categories: media, LCBO, hospitality, retail, education and lifetime achievement. The awards will be presented at the Experts Tasting event Saturday March 1, 2014.

For more details and to view the nomination form visit: brocku.ca/ccovi/ outreach-services/experts-tasting.

Calibrate Your Vineyard returns

The Calibrate series of workshops returns in Jan. Calibrate Your Vineyard is being offered Jan. 16 in Niagara, Feb. 11 in Norfolk also servicing Lake Erie North Shore growers, and in April in Prince Edward County.

Spots for this popular hands-on program will fill up fast, so be sure to register early.

Full details on the Calibrate series as well as registration details, can be found at: brocku.ca/ccovi/outreach-services/

CCOVI researcher Australia bound

Gary Pickering, a Cool Climate Oenology and Viticulture (CCOVI) researcher, has recently been appointed as an adjunct professor at the National Wine and Grape Industry Centre at Charles Sturt University in Australia. He will spend the winter semester in Australia collaborating with his new research partners.

Pickering is actively involved with research collaborations on two projects that will have relevance for the Ontario wine industry. The first is looking at understanding the wine avoider—the 30 per cent of the alcohol-consuming public who don't drink wine. The second project is looking at how taste phenotypes affect wine liking and consumption.

Charles Sturt University hosts the world's largest grape and wine teaching program.

Graduates toast to new degrees

Andreea Botezatu successfully defended her PhD thesis in Biological Sciences under the supervision of CCOVI researcher Gary Pickering. Botezatu's thesis looked at the effects of methoxypyrazines (ladybug) taint in wine.

Byron Tan has graduated from the MBE program under the supervision of CCOVI fellow Lester Kwong and Tomson Ogwang. Tan's research paper was titled "Predictive Accuracy: The Comparative Advantage of Semiparametric over Parametric Hedonic Pricing Models of Ontario Wines".

Weijia (Jamie) Jiang has also completed her major research paper as part of the MBE program. Working under the supervision of CCOVI fellow Lester Kwong and Ling Sun, Jiang's work looks at wine score aggregation using percentile ranks and its effects on the wine market.

Educate Your Senses seminars a hit at the Niagara Wine Festival

Visitors to this year's Niagara Wine Festival were able to hear the stories behind the wines they tasted at the Educate Your Senses wine and food seminars in Montebello Park.

Coordinated by Brock University's Cool Climate Oenology and Viticulture Institute (CCOVI) the seminars featured a food demonstration from the Canadian Food and Wine Institute at Niagara College at the 1 and 5 p.m. sessions and a cheese pairing from the Dairy Farmers of Canada at 3 p.m. session.

CCOVI professional affiliate Linda Bramble led participants on an exploration of taste while showcasing the stories of each presenter to guests from around the world.

This year's seminars featured Brock alumni Fred DiProfio (Pondview Estate Winery) and Marc Pistor (Constellation Brands). Other presenters included Marc Bradshaw (Strewn Estate Winery), Chris Colaneri (Colaneri Estate Winery), Debi Pratt (Inniskillin Wines) and Jay Johnston (Flat Rock Cellars).

Fizz Club to unite sparkling wine producers

The Cool Climate Oenology and Viticulture Institute (CCOVI) is popping the cork on a new outreach program this winter—Fizz Club.

Led by Belinda Kemp, CCOVI's oenologist, participants in this winemakers only workshop will have an opportunity to discuss the regions sparkling wine production, issues and latest research.

The first session will be held Wednesday Dec. 4 from 10 a.m. to 3 p.m. The cost of attending is \$20 which includes lunch, parking and a handout package.

Drawing on her experience as a wine producer and researcher, Kemp will guide winemakers through a tasting of winemaker's base wines, as well as a tasting of the latest sparkling releases.

Kemp will also present the latest advances in research, technology and ingredients available for the production of sparkling wine, tirage and dosage issues.

All winemakers are asked to bring their own base wine as well as their latest vintage on current release for the group tasting.

Endorsed by the VQA, this session will fill fast with registration limited to the first 40 participants.

If your winery does not currently have a sparkling wine program, but you are interested in attending contact Barb Tatarnic at btatarnic@brocku.ca to be placed on a wait list. Registration for these winemakers will begin Nov. 20 if there is space available.

Register at: ccovi.ca/ce/
node/1125.

Triggs lecture a national success

In Aug. the Triggs International Premium Vinifera Lecture Series returned to both Ontario and British Columbia for sold-out sessions.

International guest speaker Kobus Hunter gave insight to growers on managing viticulture practices in changing environmental conditions.

The slides from both presentations and the video of the Ontario lecture is available at: brocku.ca/ccovi/ outreach-services/.



International guest speaker Kobus Hunter talks to Niagara grape growers

Preharvest program monitored Niagara's harvest

For the fourth consecutive harvest, researchers at the Cool Climate Oenology and Viticulture Institute (CCOVI) helped Niagara winemakers and grape growers make informed harvest decisions.

Coordinated by CCOVI's Jim Willwerth and Belinda Kemp, the preharvest monitoring program tracked the progress of Chardonnay, Riesling, Cabernet Sauvignon and Cabernet Franc and Pinot Noir grapes. Weekly updates on key indicators of fruit ripeness were provided on an interactive website.

Compare the past four growing seasons at ccovi.ca/preharvest.

New crop of OEVI students start at Brock



Brock alumnus Gabriel DeMarco gives OEVI students a tour of the crush pad at Cave Spring Cellars

New Oenology and Viticulture (OEVI) students received their first culture and it will be a rewarding lesson this year from some of the program's most recent alumni.

The orientation event took place Sept. 3 and combined an annual BBQ with faculty and staff with a wine tour to visit recent graduates.

The tour started with a visit to Cave Spring Cellars to visit alumnus Gabriel DeMarco. His advice to students was to go in looking for a hands-on experience.

"Use your co-op experience wisely," DeMarco said. "Find a job where you fit into the winery's experience."

Next, the students visited alumni Kent Macdonald and Dan Wright at Henry of Pelham Family Estate Winery. The students toured the vineyard and received a behind the scenes look at the winery's sparkling production.

This year the OEVI program gained 20 new students, 11 joined the BSc. in Oenology and Viticulture degree program while nine enrolled in the Certificate in Grape and Wine Technology.

Winter continuing education offerings

Is expanding your knowledge of resolution list for 2014?

If so, be sure to register early for CCOVI's winter course offerings. certification can enroll in WSET

Wine Regions of the World runs Wednesdays nights, starting Jan. 15. Students will refine their wine tasting skills as they learn about international wine regions.

Wines of Ontario runs Monday nights starting Jan. 20 and focuses on how VQA wines are grown and made. Participants who receive an

85 per cent or higher will receive a wine and spirits on your New Year's certification from the Wine Council of Ontario.

> Students looking for advance Advanced Award in Wine and Spirits Level 3 which runs Thursday evenings starting Jan. 23, 2014. WSET Level 2 will be offered both online and in-class in early 2014.

For a complete listing of CCOVI's continuing education courses and to register, visit: ccovi.ca/ce/courses.

Publications

Viticulture

- Balint, G. and A.G. Reynolds (2013). Impact of water status level on abscisic acid and its catabolites profiles in leaves and berries from two grape cultivars. II. Baco noir. Journal of Plant Growth Regulation, DOI 10.1007/s00344-013-9354-4.
- Balint, G. and A.G. Reynolds (2013). Effect of different irrigation strategies on vine physiology, yield, grape composition and sensory profile of Sauvignon blanc (Vitis vinifera L.) in a cool climate area. Journal International des Sciences de la Vigne et du Vin, 47:1-23.
- Marciniak, M., Reynolds, A.G., and R.B. Brown (2013). Influence of water status on sensory profiles of Ontario Riesling wines. Food Research International 54:881-891.
- Pagay, V., Reynolds, A.G. and K. H. Fisher (2013). The influence of bird netting on yield and fruit, juice, and wine composition of Vitis vinifera L. Journal International des Sciences de la Vigne et du Vin, 47:35-45.

Briefs

Business

• Philip, M., Mantonakis, A. and R. Hastie (2013). The Impact of Sequence Disruptions on Order Effects in Choice: A Script Theoretical Perspective. Association for Consumer Research Conference, Chicago, Illinois, Oct. 5, 2013.

Viticulture

- Baker, L., Reynolds, A.G., Di Profio, F., Jasinski, M., Kögel, S. and G.J. Pickering (2013). Impacts of natural yield variance on wine composition and sensory quality of Riesling and Cabernet Franc. 18th International Symposium GiESCO 2013, Porto, Portugal, July 7-11, 2013, 855-861.
- Reynolds, A.G., Di Profio, F., Hakimi Rezaei, J., Jasinski, M. and J.J. Willwerth (2013). A hierarchal terroir model for Great Lakes viticulture. 18th International Symposium GiESCO 2013, Porto, Portugal, July 7-11, 2013, 976-986 (invited paper).

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