CCOVI News

A NEWSLETTER FROM THE COOL CLIMATE OENOLOGY AND VITICULTURE INSTITUTE, BROCK UNIVERSITY, ST. CATHARINES, ONTARIO





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Winter Issue



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Attracting GEN Y to sparkling wine

More than 40 years ago, the song "Tiny Bubbles," was at the top of the charts. Imagine today's Generation Y swinging to the Don Ho beat.

While it might be a stretch to find the song on their IPod play list, the wine industry very much hopes this influential consumer sector will keep a healthy stock of their favourite tiny bubbles — sparkling wine that is — on their wine racks.

Brock University researchers Gary Pickering and Carman Cullen are combining their respective fields of wine science and wine marketing to better understand the factors that will influence Generation Y to drink sparkling wine.

Pickering is a sensory scientist with CCOVI and chair of Brock's Biological Sciences program. Cullen is a Fellow of CCOVI and an associate professor of Marketing in the Faculty of Business.

As it stands now, explains Pickering, there is a worldwide downturn in the consumption of sparkling wine among the majorityage segment of Generation Y – more broadly defined as those born from the late '70s to 2000.

That has the international wine industry concerned given the future market potential of this 20-something bracket. It is particularly concerning for Niagara's wine country – a region known for its excellent terroir and critical mass of wineries that are serious about producing quality sparkling wine.

Pickering and Cullen are at the early stages of their research. The first phase involved a number of focus groups in which the researchers have asked participants for their response to packaging, labels, the taste of products and price.

As might be expected, the early findings of their research point to taste as an important driver. Next steps will be to experiment on the taste side in terms of preferences for sweeter or dryer tasting sparkling wines.

The early phase of the study also has revealed some interesting data on the taste genetics among a specific segment of Generation Y wine consumers. The researchers looked at the taste sensitivity within a category of consumers who are highly involved in wine.

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Brock grad's bubbly toast of Obama gala



Cheers to Brock Graduate Rob Warren, 2002 Class of Oenology and Viticulture.

On the eve of the historic U.S. presidential inauguration of Barack Obama, guests attending the Illinois State Society's Inaugural Gala sipped on bubbly made by Warren.

Warren, winemaker at Cooper's Hawk Winery in Chicago, experienced the thrill and honour of having his Blanc de Blanc sparkling wine served during the first lady's toast at the Washington, D.C. gala, held Jan. 19. Warren has been at Cooper's Hawk, one of Illinois' largest wineries since June 2007.

RECRUIT OUR STUDENTS

Students for hire

Students in the Oenology and Viticulture program at Brock University are seeking jobs for 2009. If you plan to hire vineyard, winery or wine retail workers in 2009, recruit our students who are skilled in winemaking, viticulture and wine business.

To have a position posted for our students, call 905-688-5550, ext. 4949, or e-mail: jennifer.roberts@brocku.ca

Wine Tasting Challenge

CCOVI Co-Hosts

The Wine Tasting Challenge in Toronto

In the spirit of friendly competition and wine education Brock's Cool Climate Oenology and Viticulture Institute once again played a major role in its organization as well as serving as its auditing body. The 'Challenge' has become one of the largest and most unique wine competitions in Canada, topping more than 250 registrants in 2008. The event took place at the Four Seasons Hotel in Toronto on Monday, Nov. 24 – the prize purse, in excess of \$100,000, includes cash, trips, stemware and scholarships to the winners.



New to 2008, contestants also received their confidential individual scores by e-mail.

And the winners are:

PROFESSIONAL ROUND

- 1. Taylor Thompson
- 2. Ramesh Srinivasan
- 3. Sarah Goddard
- 4. Michael Pinkus
- 5. Julien Vincent

AMATEUR ROUND

- 1. Jonathan Kay
- 2. Peter Ledwinka and Erin Norton
- 4. Thomas Ingram
- Jonathan Salem-Wiseman

CCOVI-VQA ROUND

Norm Hardy and Ross Willness

SPIRIT ROUND

Erin Norton, Certificate Student in Oenology and Viticulture, tied for second place in the Amateur Round

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Out of this category, the individuals with more intense taste sensitivity preferred dryer sparkling wine, while those with lower taste sensitivity preferred sweeter sparkling wines. Cullen presented these results to the wine world's premier marketing conference held last July in Italy. Their study was selected as the runner-up best paper from more than 90 peer-reviewed submissions.

"The exciting challenge is taking forward the information from our study to use in product development, marketing, branding and positioning down the road," says Pickering. "There is not a lot of research into sparkling wine. Our study will make a valuable contribution to helping the wine industry, here and around the world, better understand how to create a strong consumer market for sparkling wine among Generation Y."

Experts' Tasting toasts 20 Years!

In recognition of this milestone, the annual Experts' Tasting will focus on Sparkling wine, both table and icewine.

The tasting, held as part of Cuvée weekend, will be hosted by Linda Bramble. Speakers include Tony Aspler, Peter Bodnar Rod and Gary Pickering, along with winemakers Ron Giesbrecht, Angelo Pavan and Natalie Reynolds.

This by-invitation-only event, presented by the Cool Climate Oenology and Viticulture Institute, will be both educational and a well-deserved celebration of Ontario's burgeoning bubbly!

Along with the opportunity to taste some of the best VQA Sparkling wines of Ontario, there also will be the announcement of the 2009 Promoters Awards recognizing the outstanding achievements in the promotion of VQA wines.

For a complete listing of wines and the Promoters Awards results go to www.brocku.ca/ccovi/

CCOVI has supporting role to play in Cuvée success

The Cool Climate Oenology and Viticulture Institute (CCOVI) plays a significant role behind-the-scenes in the Oscars of the Ontario wine industry, the annual Cuvée Awards.

The Cuvée Gala weekend, held this year Feb. 27 to March 1, celebrates the best of the Ontario wine industry.

CCOVI provides expertise to the all-important winemakers' selection judging and tasting. CCOVI researcher Dr. Gary Pickering is the chair of the Independent Review Panel (IRP) and works alongside a team of people to oversee the organization and implementation of the tasting and award selection. It sets the stage for the black-tie celebration.

It is a major judging and tasting exercise, unique in Canada because the selection is made by the winemakers themselves. Their job is to determine the winners of the coveted Cuvée awards. The judges also decide if the wines meet the Cuvée Standard of Excellence – it's the measure

for selecting the wines to be poured at the gala.

"The winemakers are a critical audience," says Pickering. "The selection process is a rigorous blind-tasting format that is based on some of the strictest international standards of excellence. We only reward the best."

Pickering has made an important contribution to establishing new protocols for the Cuvée selection process, raises the standards by creating an objective tasting and evaluation system for the awards.

"CCOVI is proud to be a part of an event that for more than 20 years has made a positive impact on the development of the Ontario wine industry," says Pickering. "Well-conducted wine competitions such as Cuvée help young industries grow and raise the overall quality of their wines by providing feedback on wines and styles. That feedback helps Niagara's wine industry understand what works and doesn't work toward the goal of excellence."

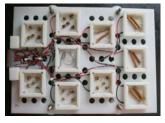
CCOVI Research Q&A

Bud Hardiness Evaluation 2008/2009

Kevin Ker, Research Associate, CCOVI, is part of a research group studying winter injury in vineyards. As part of a multi-year research project to develop a program to help growers with winter protection for grapevines, programmable freezers have been built to help monitor vine bud hardiness.

What is bud hardiness?

The ability of grape buds to resist injury from winter temperatures from dormancy (leaf fall) through to bud break in the next spring varies during the winter period. Bud hardiness testing uses bud samples in programmable freezers to measure and establish temperatures at which damage (bud death) would occur on a particular sampling date. These values are posted as the LTE values for injury.



Grape buds loaded into programmable freezer tray

What is LTE?

LTE in technical terms is the Low Temperature Exotherm as measured by freezer testing. In grower terms, it is used to estimate the temperature at which damage is likely to occur. For posted data the LTE 10 is the temperature at which 10 per cent of the buds are likely to die (or 90 per cent survival). The LTE 50 temperature is for 50 per cent bud death and the LTE 90 is 90 per cent bud death.

How can growers utilize LTE measurements?

Bud hardiness changes over the winter. Buds reach their hardiest levels in mid winter (late December to early February) with a gradual loss of hardiness from there on to bud break. Knowing the current hardiness of buds (values in mid January are very different from mid February or mid March) prior to a predicted cold event can help growers determine how best to use protection practices such as wind mahines.

What is an example of an LTE guidepost for enlisting protection practices?

In most years, we reach the LTE 10 on a number of occasions and 10 to 15 per cent bud loss is normal. However reaching the LTE 50 can severely reduce crop production and may result in some wood injury. Some wind machine operators have commented that they use the posted data and have wind machines set to start at or near the LTE 10 values posted as this allows times for the machines to become fully operational and prevent temperatures reaching the LTE 50 values. Starting machines at temperatures much warmer (three to five degrees C above the LTE 10) does not improve damage control and may lead to inefficient operation.

Remember, the posted values are for vines tested in different areas. Hardiness of vines can be reduced significantly after exposure to periods of above freezing temperatures. Hardiness values will vary depending on cultivar, cropping history, location, vine health (free from injury by pests and diseases) so they are merely a guide to assist in decision making. Site specific testing will always provide the best results and information.

Consumer

Behaviour

Antonia Mantonakis, an Associate Fellow of CCOVI, has released new findings about consumer behaviour based on her ongoing research at CCOVI's Consumer Perception and Cognition Laboratory. A recent study focused on the impact of external cues on consumer's choice process in buying wine and on brand familiarity.

What is meant by the term external cues?

External cues are the extraneous variables involved in consumer decisions that are independent of the actual quality of wine or the attributes of the wines itself. Advertising, promotional activities and marketing communications are some external cues that influence consumer choice. These are situations in which people are engaged in or exposed to a variety of general product communications – from shopping at the LCBO to the promotional activities of Grape and Wine Festival.

What is the role of these types of external cues on the consumer decision-making process?

Research findings suggest that when consumers are faced with situations that involve repeated exposure to brands, there is a greater likelihood that consumers will chose moderately familiar or popular brands over less familiar brands.

On the other hand, if consumers have not been exposed to marketing communications related to wine, when given a choice, they will chose a less familiar brand at an equal rate as a popular brand.

How exactly does brand familiarity play a role in how consumers choose?

Brand familiarity can play a very powerful role in consumer choice to the extent that it interferes with the ability to create alternate brand awareness. Here is an example: A restaurant patron asks his server for a glass of a popular brand of cabernet. Instead, the server tells the patron the restaurant is featuring a different brand that is quite comparable to the popular brand.

By comparing the two, will the server's efforts result in increasing the patron's familiarity with the featured wine on a longer-term basis? Research shows that this is not the case.

In fact, the more mental effort the consumer puts into the cognitive comparison process, generating and thinking about each brand, how familiar each is, comparing attributes of each, and so on, the less likely the consumer will remember the featured brand from the restaurant.

What can the server do to compensate for this? The server can repeat the name of the featured brand again later, while not comparing it to anything else.

Brock harvests another graduate in wine biotechnology



DiQing Tang (centre), Dr. Debra Inglis, MSc supervisor (right), and Dr. Ramón Mira de Orduña, external examiner (left) in the cellar tasting room in Inniskillin Hall, following Tang's thesis defence in November 2008.

DiQing Tang, graduate of the MSc program in Biotechnology at Brock University, defended her MSc thesis in November. Her dissertation, "Metabolite changes during Riesling Icewine fermentation when yeast micronutrients are used," is part of a broader research program of CCOVI Director Debbie Inglis in understanding yeast stress responses during Icewine fermentation and the impact on Icewine quality.

DiQing defended her MSc thesis before Examinging Committee members: Rick Cheel, Chair; Ramón Mira de Orduña, Department of Food Science and Technology, Cornell University, External Examiner; Debra Inglis, Supervisor; Jeffrey Stuart, Tony Yan, committee members.

CCOVI and Brock University congratulate DiQing for her hard work and diligence in completing her MSc.

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Go to: www.brocku.ca/ccovi/ (Continuing Education)

CCOVI Briefs

D. Inglis, The Science of Icewine: Extreme Winemaking. Royal Canadian Institute for the Advancement of Science Lecture Series, November 4, 2008 Mississauga Central Library, Mississauga.

A.G. Reynolds Understanding terroir in Ontario vineyards. Determining its basis using spatial variability in vine vigor, soil texture, and vine water status. Lecture, Marlborough Winegrowers, Blenheim, New Zealand, 19 August 2008

A.G. Reynolds Bragato Address: Vineyard and winery management to enhance flavor quality of aromatic white varieties. Proc. 14th Mario Bragato Conf., pp. 21-43. Christchurch, New Zealand, 21-23 August 2008.

A.G. Reynolds It's all about water. Proc. 14th Mario Bragato Conf., pp. 21-43. Christchurch, New Zealand, 21-23 August 2008. **and** Central Otago Growers Meeting, Cromwell, New Zealand, 24-26 August 2008

A.G. Reynolds Cluster thinning and basal leaf removal—a focus on color and phenolics. Proc. 14th Mario Bragato Conf., pp. 21-43. Christchurch, New Zealand, 21-23 August 2008. **and** Central Otago Growers Meeting, Cromwell, New Zealand, 24-26 August 2008

M.R. Bajec and G.J. Pickering Oral phantasies: the perceptual world of thermal tasters. XV International Symposium on Olfaction and Taste. Association for Chemoreception Sciences, July 21-26, 2008, San Francisco, California. *Chem Senses* 33: S1–S175, 2008

G.J. Pickering, G.J. Soleas, A. Blake and M. Spink Origin and remediation of ladybug taint in wine. In Blair, R., Williams, P. and Pretorius, S. (eds). Proceedings of the 13th Australian Wine Industry Technical Conference. Adelaide Convention Centre, Adelaide, South Australia, 28th July – 2nd August, 2007. Australian Wine Industry Technical Conference Inc, Waite Road, Urrbrae, South Australia 5064, Australia, 275-276.

G.J. Pickering and M.R. Bajec (2008). Genetic basis for individual differences in wine flavour perception. In Blair, R., Williams, P. and Pretorius, S. (eds). Proceedings of the 13th Australian Wine Industry Technical Conference. Adelaide Convention Centre, Adelaide, South Australia, 28th July – 2nd August, 2007. Australian Wine Industry Technical Conference Inc, Waite Road, Urrbrae, South Australia 5064, Australia, 275.

CCOVI Publications

A.G. Reynolds and T.K. Wolf, 2008. Chapter 5: Pruning and Training. In: Wolf, T.K. (ed.) and **Chapter 6: Grapevine Canopy Management.** Wine Grape Production Guide for Eastern North America

G. Wiens and A.G. Reynolds 2008. Research Note. Efficacy Testing of Organic Nutritional Products for Niagara Vineyards. Int. J. Fruit Science 8(1):125-44.

A.G. Reynolds, E.G. Pearson, C. de Savigny, J. Coventry, and J. Strommer, 2008. Interactions of vine age and reflective mulch upon berry, must and wine composition of five *Vitis vinifera* cultivars. Int. J. Fruit Sci. 7(4): 85-119.

composition of five *Vitis vinifera* cultivars. Int. J. Fruit Sci. 7(4): 85-119. **G.J. Pickering** and C.W. Cullen (2008). The Influence of Taste Sensitivity and Adventurousness on Generation Y's Liking Scores for Sparkling Wine. Proceedings of the Fourth International Conference of the Academy of Wine Business Research, Signa, Italy, July 17, 19, 2008 (in press)

Research, Siena, Italy, July 17-19, 2008 (in press).

G.J. Pickering, M. Spink, Y. Kotseridis, D. Inglis, I. D. Brindle, M. Sears and A-L Beh. (2008). Yeast strain affects 3-isopropyl-2-methoxypyrazine concentration and sensory profile in Cabernet Sauvignon wine. Australian Journal of Grape and Wine Research, 14, 230–237.

CCOVI Events

CCOVI Fellows and Professional Affiliates Lecture Series

Everyone is Welcome - Admission is FREE!

Parking is available in Lot A/Zone 1 Cost: \$6.00

<u>Lecture Location</u> - <u>H313</u> - located up the stairs – Inniskillin Hall lobby (watch for signs).

Date and time: Mondays at 12 noon

Note: Dates and times may be subject to change – go to www.brocku.ca/ccovi "CCOVI Events"

 Dr. Janet Dorozynski, Trade Commissioner, Canadian Wine, Beer and Spirits, Global Business Opportunities Bureau, Foreign Affairs and International Trade

TOPIC: Canadian Wines in the International Marketplace

Date: Monday, February 23, 2009

 Dr. Antonia Mantonakis; Marketing Department, Faculty of Business, Brock University

TOPIC: Consumer Behaviour Date: Monday, March 9, 2009

- Dr. George Soleas; VP Quality Assurance LCBO

TOPIC: Global Survey of Levels of Undesirable Metabolites in

Wine

Date: Monday, March 16, 2009

- Kevin Ker; Research Assoc., CCOVI, Brock Univ.;

KCMS Applied Research & Consulting Inc.

TOPIC: Chilling Out – Making Better Winter Protection Deci-

sions

Date: Monday, March 23, 2009

- Dr. Pat Bowen; Pacific Agri-Food Research Centre.

TOPIC: Environmental Effects on Grapevine Photosynthesis &

Crop Performance in the Okanagan Valley

Date: Monday, April 6, 2009

- Dr. Tony Shaw; Geography Department, Brock University

TOPIC: to be confirmed Date: Monday, April 20, 2009

- Dr. Ralph Brown; School of Engineering, College of Physical

and Engineering Science, University of Guelph

TOPIC: Precision Viticulture Date: Monday, May 11, 2009

• **Dr. Linda Bramble**; Wine Writer, Author and Educator TOPIC: An Ontario Story of Sustainable Leadership in the

Wine Industry Date: Monday May 25, 2009

CCOVI *News* is a publication of the **Cool Climate Oenology and Viticulture Institute** at Brock University. The newsletter is produced quarterly.

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