

ccovinews

A newsletter from
the Cool Climate Oenology
and Viticulture Institute



CCOVI

Brock University

Reducing freeze injury with geotextiles

Freeze injury continues to be a serious threat to the grape and wine industry nationally say Brock University researchers, and a new way of protecting vines from the cold is yielding promising results.

Jim Willwerth, viticulturist at Brock's Cool Climate Oenology and Viticulture Institute (CCOVI), is looking at how grape growers can use geotextiles—materials used for the winter protection of crops—to keep vines insulated in areas where it is common to experience temperatures below -25 C.

"In some areas," Willwerth said "more cold sensitive V. vinifera grapes, that our VQA wine industry has been built on, can't survive winter temperatures without some form of protection."

In viticulture regions like Prince Edward County the most common method involves burying vines in the ground. However, the process can be physically damaging to the vines and can result in rot, crown gall infection and can be detrimental to soils through aggressive cultivation.

Geotextiles may provide a way to eliminate some of these concerns while helping



Researchers found geotextile material doubled crop yields

to increase and sustain crop yields for growers.

Willwerth ran trials using the material in established vineyard blocks. He found that yield potentials doubled when the geotextiles were used, compared to vines that were buried. Vines covered in geotextiles demonstrated an improved general appearance and had healthier buds and canes. They also showed more consistent growth.

Willwerth partnered with Margaret Appleby from the Ontario Ministry of Agriculture and Food and Sugarbush Vineyard's Rob and Sally Peck to run the trials.

"When Jim first approached us we were a little skeptical," said Sally Peck, "but we've used it for a few years now

and we've seen really good results. Overall it's probably healthier for the fields and the vines."

The geotextile material proved to be very effective in protecting buds from freeze injury Willwerth said. Both vineyard size and crop value will impact if these materials are economical for a grower's operation.

Geotextiles were found most effective in controlling temperatures when placed over grapevines on a low wire system where geothermal and snow insulation could further moderate temperatures.

The type of geotextile material used and the timing of its removal were both found to impact the cold hardiness dynamics of the vine.

Students for hire

Looking to hire
vineyard, winery or
retail staff?

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

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

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Fizz Club a sparkling success

Over 35 winemakers from across the province came to Brock University on Dec. 6 to pop the cork on a new sparkling wine network—Fizz Club.

CCOVI oenologist Belinda Kemp united the group of winemakers and used her extensive sparkling wine knowledge to lead the group through discussions on the latest research. They discussed advances in technology, ingredients available for the production of sparkling wine, tirage and dosage issues.

Winemakers each supplied samples of their base wine and latest release which was used for an educational tasting. Kemp facilitated a discussion with the group after each tasting.

The sold-out session included winemakers from Prince Edward County, Lake Erie North Shore and Niagara.

“Sparkling wine production in Ontario is growing rapidly,” says Barb Tatarnic, outreach manager at CCOVI. “Fizz Club provides an excellent avenue for winemakers to

network and learn about the latest research from our experts.”

Endorsed by the VQA, this forum provides a unique learning environment for vintners.

Building on the success of Fizz Club’s first event, an Ontario sparkling wine symposium will take place May 6, 2014. The one-day event will be a blend of technical theory and practical solutions. Sparkling wine issues will be addressed scientifically with experts providing practical solutions based on global research.

The event will be targeted at winemakers, oenology students, sommeliers, researchers and winery owners.

Already confirmed to present at the symposium is Bertrand Robillard from the Institut Oenologique de Champagne.

To learn more about Fizz Club and the upcoming symposium visit: brocku.ca/ccovi/outreach-services/fizz-club

Experts Tasting celebrates 25 years

One of the CCOVI’s marquee events will celebrate its 25th anniversary March 1.

The Experts Tasting, which brings together wine writers, sommeliers, product consultants and wine educators, will take a retrospective look at the Ontario wine industry. The tasting will focus on Riesling, Chardonnay, Pinot noir and Bordeaux blends that showcase the best of VQA wines.

The VQA Promoters Awards for outstanding achievements in the promotion of VQA wine will also be presented at the tasting.

Wine Tasting Challenge returns

The world’s largest wine tasting competition will return this spring to test the palates of amateurs and professional wine lovers.

The tenth edition of the competition will take place Monday April 14 at the Liberty Grand building at Exhibition Place in Toronto.

Registration for the 2014 Wine Tasting Challenge opens Friday, March 7 at 10 a.m. and has a history of filling up fast. The challenge is free to enter and offers more than \$100,000 in prizes including cash, trips, stemware and scholarships.

Registration information and more details are available at: winetastingchallenge.com

CCOVI Fellow heading to Napa

From March 19 to 22 a prominent business conference, the Western Academy of Management, will focus on wine research.

This year’s conference will be held in Napa, California and be based on the theme of In Vino, Veritas. The committee invited wine researchers to share their work.

CCOVI Fellow Tek Thongpapanl will be leading the ethics and spirituality track of the proceedings.

After the event, conference papers and program will be available at:

Eiseverywhere.com/ehome/wam14



Ontario winemakers hear from CCOVI’s oenologist Belinda Kemp

Graduates toast to new degrees

Luis Moreno has graduated from the MSc in biotechnology program under the supervision of CCOVI Researcher Andy Reynolds. Moreno's thesis was titled: The impact of crop level and hang time on the composition of four wine grape cultivars from the Niagara region.

Caitlin Heit successfully defended her MSc in Biotechnology under the supervision of CCOVI director Debbie Inglis. Heit's thesis investigated hyperosmotic stress in wine yeast during high sugar fermentations and the impact it had on metabolite formation and its link to redox balance.



External examiner George van der Merwe, Caitlin Heit and her supervisor Debbie Inglis

Continuing education

Students looking to take advanced wine education courses will have the opportunity to do so in both the classroom and online this spring.

The Wine and Spirit Education Trust (WSET) Level 2 course will be offered at Brock University Tuesday nights from April 8 until June 3. The eight-week course looks at all aspects of wine, and uses the WSET systematic approach to tasting.

For those not able to attend in person, there are three online offerings of the WSET Level 2 courses this spring. The online offering is five-weeks in length, with a final exam that takes place at Brock. Online learners will be connected to classmates through social media activities each week.

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

Brock alumnus joins CCOVI team

CCOVI has recently welcomed Steven Trussler as the team's newest addition.

Trussler, a graduate of the Oenology and Viticulture degree program at Brock University, takes over the role of CCOVI technologist in the Analytical Services laboratory.

He brings with him significant winemaking experience from his most recent role at Coyotes Run Winery.

"I wanted to join a team that was working to improve the industry as a whole," Trussler said. "CCOVI was the perfect place for that."

Trussler also has a BSc in Biology from the University of Guelph.

Contact Trussler in analytical services at: ccovilab@brocku.ca, or 905 688 5550 x3510.



Steven Trussler in the lab

CCOVI programs help growers respond to cold snap

When the polar vortex ushered in frigid temperatures across Ontario in Jan., Brock researchers were ready to respond.

Thanks to CCOVI's VineAlert program, growers were able to monitor the cold hardiness levels of their vines, to make informed decisions.

Following the cold events, CCOVI's viticulture experts Jim Willwerth and Kevin Ker sampled for bud survival data at vineyards across the province and relayed that data to growers to use while making vineyard management decisions.

Next, growers were able to attend a timely workshop to hear from CCOVI's team. Calibrate Your Vineyard's Niagara session sold-out Jan. 16 with participants learning the latest on cold-hardiness research while learning best

practices for pruning and managing winter injury.

Willwerth and Ker have also put together cold injury strategy sheets to assist growers. These cover a variety of topics including dealing with cold injury, strategies to recover from winter damage and making decisions after winter damage. They can be found here: brocku.ca/ccovi/research/research-updates/cold-injury-strategies.



Jim Willwerth leading the Calibrate Your Vineyard Niagara session

Lecture series has global impact for grape and wine institute

What a difference a year makes.

Last winter, oenologist Belinda Kemp was sitting in her home in England, watching live webcasts of Brock University's CCOVI Lecture Series.

"The CCOVI webcasts were a great resource for me," Kemp said. "In fact they're a great resource for the wine industry and wine researchers anywhere in the world."

This year she's a researcher at Brock and will be one of the presenters in the 2014 edition of the renowned lecture series.

Kemp, the latest addition to the CCOVI team, will take the podium on March 17 to speak about her research on managing tannins during wine production.

Again this year, the nine-week series takes timely research out of the lab and into the hands of industry.

"Having the series online has allowed CCOVI to expand our outreach activities from our own backyard to a truly global audience," said CCOVI director Debbie Inglis.

Now in the seventh season, the series doesn't end with the final lecture. The online videos have been viewed over 2,000 times in over 35 countries around the world.

Topics for this year's series span the grape and wine value chain from consumer behaviour, marketing, and wine law to oenology and viticulture science.

All lectures take place Monday

afternoons at 2 p.m. in room H313 of the Mackenzie Chown complex at Brock University and are free for anyone to attend.

To watch the live webcasts or archived videos, go to brocku.ca/ccovi.

Lineup and dates for the 2014 CCOVI Lecture Series:

- * Feb. 3: Narongsak Thongpapanl
"Unveiling the influence of consumer wine appreciation dimension on purchasing behaviour"
- * Feb. 10: Alexandra Mayeski,
"Current legal issues facing the Ontario wine industry"
- * Feb. 24: Linda Bramble
"The influence of wine writers on consumer behaviour"
- * March 3: Michael Ripmeester
"Wine as heritage across Niagara"
- * March 10: Jim Willwerth
"Cold hardiness: current issues and research developments"
- * March 17: Belinda Kemp
"Tannin Alert: A wine tannin management system for Niagara wineries"
- * March 24: Andy Reynolds
"Mediterranean horticulture: Travels in Tunisia and Portugal"
- * March 31: Antonia Mantonakis
"Consumer perceptions: The influence of subtle label changes on consumer behaviour"
- * April 7: Gary Pickering
"SNPs, snobs and snouts: The influence of biology, expertise and taste in wine preference segmentation of North American consumers"

Publications

Business

- Joordens, S., Walsh, D. and A. Mantonakis (2013). Intelligence as it relates to conscious and unconscious influences. *Canadian Journal of Experimental Psychology*, 67(3), 165-174.
- Voronov, M., De Clercq, D. and C.R. Hinings (2013). Institutional complexity and logic engagement: An investigation of Ontario Fine Wine. *Human Relations*, 66(12): 1563-1596.

Oenology

- Kemp, B., Kerslake, F. and A. Nesbitt (2013). Global wine regions with a new sparkle. *Australian and New Zealand Grape Grower and Winemaker Magazine Online*.

Viticulture

- Ledderhof, D., Reynolds A.G. and R.B. Brown (2013) Influence of water status on sensory profiles of Ontario Pinot noir wines. *LWT- Food Science and Technology*. doi: 10.1007/s00344-013-9354-4.
- Reynolds, A.G., Taylor G., and C. de Savigny (2013). Use of GPS and GIS for elucidation of the basis for terroir, soil texture and vine size effects on wine sensory attributes. *American Journal Enology and Viticulture*, 64:180-194.
- Reynolds, A.G., and J. Hakimi Rezaei (2013). Spatial variability in Cabernet franc vineyards in the Niagara Peninsula of Ontario. *Journal of Applied Horticulture*.

Briefs

Business

- Mantonakis, A. and K. Kettle (2013). Look for the signature: Personal signatures as a cue for quality. *Enometrics Conference*, Talca, Chile, Sept. 2013.

Oenology

- Kemp, B. (2013). How to predict harvest using grape skins and seeds. *South Western Horticulture Expo*, Leamington, Ontario, Nov. 19-20, 2013.