

CCOVI tackling climate change challenges with research vineyards

Two research vineyards filled with thousands of grapevines are being used by Brock University's Cool Climate Oenology and Viticulture Institute (CCOVI) to help Canada's grape growers and wineries.

CCOVI partnered with two commercial grape growers to plant the St. Catharines and Niagara-on-the-Lake vineyards that are being used for a clone and rootstock evaluation program of the main VQA grapevine varieties in Ontario.

"We are looking at the best plant material for Ontario's industry, not only now, but moving forward with climate change uncertainties," said Jim Willwerth, CCOVI Senior Scientist. "Cold hardiness, fruit composition, wine quality and general vine performance will be examined, so that the industry knows the best combinations to use for our core grape varieties."

Since July 2018, more than 4,000 vines have been planted between the two vineyards. One vineyard has a heavier clay soil and the other sandy soil to represent different vineyard conditions found in Ontario. There are five different grapevine varieties and up to 16 clone and rootstock combinations for each grape variety.

Planting was initially delayed because it was difficult to get certified disease-free and true to type grapevines in Canada. Starting with healthy, clean plant material is critical for this project to evaluate the best performing plant material under Ontario conditions.

"For the research we are doing there is no sense planting dirty or infected vines. Clean vines are difficult to get, so we had to wait an extra year to make sure we had clean



Thousands of grapevines have been planted in two CCOVI research vineyards in St. Catharines and Niagara-on-the-Lake for a clone and rootstock evaluation program.

vines to plant," said Bill Schenck, one of the commercial grape growers involved. "When you are planting a vineyard, the initial cost of grapevines is rather cheap compared to costs to manage the grapevines in the years that follow. Considering the length of time the grapes are in the ground, you want to make sure you are starting off on the right foot."

After an exhaustive search, certified clean plant material was sourced three years ago from outside Canada. Half of the certified grapevines were planted in July in collaboration with Huebel Grapes Estates and the support of Schenck and another grape grower, Erwin Wiens, who are each allowing the use of two acres of their land. The other half were planted last July.

Planting and management of the research vineyards was funded through the Natural Sciences and Engineering Research Council of Canada Collaborate Research and Development grant program in partnership with Ontario Grape and Wine Research Inc.

"The material is all certified, so we know these vines are true to type and are healthy," said Willwerth. "The Canadian Grapevine Certification Network (CGCN) is now working tirelessly to establish a domestic clean plant program and this is extremely important so that growers can access clean materials from nurseries so they know the vines they are planting are the healthiest and are going to be as productive as possible."

Plant performance outputs from this research trial will inform CGCN of the grapevine combinations that should enter the domestic clean plant program.

Brock student recognized as Rising Star at Grape and Wine



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Doch Dendy was the recipient of the 2019 RBC Niagara Wine Rising Star Award, receiving a \$1,000 bursary at the Niagara Grape and Wine Festival to continue his education. Presented at the festival's RBC reception Friday, Sept. 20, the award recognizes top individuals currently pursuing an education in the wine industry.

"It feels fantastic to show that I am able to make a contribution to the grape and wine industry and show how much Brock has contributed to me, as a student, to help me succeed," said Dendy. "It is a real honour to be recognized in front of my peers."

The Brockville native with a passion for science originally decided to pursue Brock's Bachelor of Science degree, but said he was quickly drawn to the Oenology and Viticulture program.

"I had very little knowledge about wine, not knowing the difference between red and white, but it has blossomed into an absolute passion of mine," said Dendy, who has succeeded academically in the highly demanding program. Barb Tatarnic, Manager of Outreach and Continuing Education at Brock's Cool Climate Oenology and Viticulture Institute (CCOVI), said Dendy's dedication and enthusiasm for the industry is contagious.

"He is thrilled to be a part of this industry and has a real drive to not only support it, but help it grow," said Tatarnic. "Because of his level of enthusiasm and ability to engage others, he has also worked to mentor new students coming into the program, doing what he can to help guide the next generation coming into this industry."

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Around the world journey brings student to Brock cider class

With a strong belief in the rising popularity of cider, David O'Flaherty travelled more than 10,000 kilometres from South Korea to learn more about producing the drink from Brock's Cool Climate Oenology and Viticulture Institute (CCOVI).

"We believe cider is going to be the new thing that is really going to take off in Korea, so I came to learn the foundations," said O'Flaherty, who was one of the students attending the Cider and Perry Production Foundation course at Brock University last week.

While the cider industry is booming in Canada with more than 100 producers, in South Korea there are only a handful of cideries, and imported international brands are quite popular.

Originally from Ottawa, the 46-year-old O'Flaherty has lived in South Korea for 17 years and heard about the course online. He received funding from the Seoul Global Startup Centre to travel to Niagara for the five-day intensive course.

O'Flaherty said the hands-on experience he gained through the lectures, lab work, cider making and tastings will help craft his own ciders back in South Korea this fall.

"It is going to be called DMZ Orchards," he said, explaining that his orchard is located near the demilitarized zone along the North Korea border. "It is very clean and pure out there and in Koreans' minds, when they think of DMZ they think of pure and natural waters and unspoiled beauty."

He has about 10 acres of apple orchards and said there are only four or five commercially available apple types in Korea.

"But Korea also has a lot wild fruit and a lot of interesting things that we can add to it," O'Flaherty said. "So even if you are using a single type such as fuji apples, we also have Siberian and Manchurian crab apples, Quince and a whole lot of things we can add like tannin. I think we can make a pretty interesting flavour profile with the apples that we have at hand."

In Canada, cider producers have been planting cider-specific apples over the last several years as production and consumption of the beverage increases.

CCOVI continues to lead the way for this growing industry by being the only program provider in Canada to offer professional development courses at two levels of certification in cider production through the Cider Institute of North America (CINA).

"To date, more than 100 students have earned the Foundation Certificate in Cider and Perry Production through CCOVI," said Steven Trussler, the CINA-certified instructor in CCOVI's cider program. "The foundation and advanced-level courses play a key role in helping cider makers develop their technical skills and gain industry-recognized qualifications."

Barb Tatarnic, CCOVI's Manager of Continuing Education and Outreach, said with each offering of the course they are seeing more and more students travelling to Brock from across Canada, the U.S. and around the world.

"In this last course, half of the students travelled from the U.S. to take part and we had others from all across Canada," she said. "It is clear that there is a strong desire and excitement for this type of training in the rapidly growing cider and perry industry. We are thrilled to be a key player in driving the industry forward."

CCOVI also provides analytical testing services to help cider makers deliver the best possible product. To find out more about CCOVI and upcoming courses, visit brocku.ca/ccovi



David O'Flaherty (right) works on a cider blending exercise with fellow student Jesse Horwath (left) in the lab for the Cider and Perry Production Foundation course at Brock University.

Registration now open of ICCWS 2020



With more than 50 confirmed international speakers, registration is now open for the International Cool Climate Wine Symposium (ICCWS), which takes place in Canada from July 12 to 16, 2020.

Early bird pricing is now available at \$800, which gives delegates the chance to save \$350 off the total conference fee and includes access to research seminars, masterclasses, wine tastings and workshops.

Confirmed speakers include acclaimed international wine academics and experts from around the world. The 10th installment of the symposium will focus on how climate change is driving innovation in the grape and wine industry, with conference sessions including viticulture, oenology, wine business and science communication.

Brock's Cool Climate Oenology and Viticulture Institute (CCOVI) is planning the event, alongside its research and industry partners across the country. This is the first time the conference has come to Canada.

In addition to the conference sessions at Brock, those attending will also have the opportunity to participate in pre- and post-conference programming that will showcase Canada's wine regions and will be introduced to Canadian wines and local culinary offerings through a number of special events.

There are a number of sponsorship and tradeshow opportunities throughout the conference listed on the sponsorship page.

WHAT'S HAPPENING AT CCOVI



Save the date for Cuvée 2020

Early bird tickets are on sale November 1 for the Cuvée Grand Tasting to be held on April 25th! Plus the Cuvée en Route program runs the entire weekend of Cuvée April 24-26

Nominations are now open: Cuvée Winemaker of Excellence & *NEW – Cuvée Excellence in Winery Management

Fizz Club

Mark your calendars and register to reserve your spot for the 7th annual Fizz Club! **Theme:** What's new and different in the world of FIZZ

Cost: \$50 (plus HST)
Registration continues to be limited to

sparkling winemakers or winemakers considering a sparkling wine program only.

Continuing Education Courses

WSET Level 3 Award in Wine January 13 to May 4

Intro to Wines of Ontario January 13 to March 1

Online Certificate in Ontario Wines February 7 to March 13

Wine Appreciation II - Explore the Wine Regions of the World January 15 to April 1

Online WSET level 1 & 2 in wine, WSET level 1 & 2 in Spirits
Various dates available

Record crowd for Triggs Lecture Series



Vaughn Bell, Senior Scientist at the New Zealand Institute for Plant and Food Research, speaks to a crowd of growers and wine industry professionals during the Ontario leg of the Triggs Lecture Series in Niagara-on-the-Lake.

It was an opportunity to talk about key issues in the wine industry in two provinces.

The Triggs International Premium Vinifera Lecture Series, held every two years and organized by Brock University's Cool Climate Oenology and Viticulture Institute (CCOVI), took place over two days last week in Ontario's Niagara region and again on Tuesday, Aug. 13 and Wednesday, Aug. 14 in B.C.'s Okanagan Valley.

More than 200 grape growers and wine industry professionals attended over the four days to discuss disease pressures and attend a lecture with Vaughn Bell, Senior Scientist at the New Zealand Institute for Plant and Food Research.

"Hosting an international viticulture expert in key winemaking regions in Ontario and British Columbia allows our growers and winemakers to collaboratively discuss strategies to further advance and grow the industry on a national level," said CCOVI Director Debbie Inglis. "Vaughn shared a wealth of knowledge about vineyard health and insect vector management strategies taking place at home and abroad."

Bell said he was honoured to be selected as the featured speaker and said it was clear the researchers, and the specialized equipment and technology at their disposal, have made many positive advances toward helping the wine sector achieve economic sustainability goals.

"I was impressed with the spirit of co-operation that exists between CCOVI and the wine sector," said Bell. "From my experience in New Zealand, positive collaborations inevitably deliver the best results in the shortest possible timelines to those with a financial stake in the wine sector."

Bell visited three vineyards in Niagara-on-the-Lake on the first day of the series, discussing vineyard health and disease pressures. The next day, he summarized the discussions held during the vineyard tours in a public lecture at Brock's Pond Inlet.

After his stop in Ontario, he headed to B.C. for the second leg of the series.

"The level of awareness around the interaction between vineyard disease and the insects that spread it has developed significantly since my last visit in February 2018," Bell said. "That's all credit to your sector leaders and those funded by the sector to bring about positive change."

To ensure the national lecture series continues to be held in two key wine-producing regions, BASF Canada, a company that provides crop protection products, again sponsored the event.

"BASF is pleased to be able to continue our support of the Triggs Lecture Series and to give it its national scope," said Tom Clarke, Horticultural Specialist at BASF Canada for the Niagara region. "It is important for all of us to work together and I think the discussions between Dr. Bell and the growers who attended were very productive when it comes to further developing our industry."

For anyone unable to attend, the Ontario and B.C. public lecture slides, as well as a video of the Ontario public lecture, are available on CCOVI's website.

PUBLICATIONS & BRIEFS

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- T Lowry, JR Urbez Torres, K Dieter, S Poojari. 2019. Field strategies to reduce the impact of grapevine viruses. The 19th Bi-annual Enology & Viticulture Conference, Penticton, BC Canada. July 17-18, 2019.
- · Belinda Kemp. Fizz Club BC. (2019). Summerland Research & Development Centre, British Columbia. 7th August 2019.
- · Margaret Thibodeau, Jessica Mitchell, John Castura, Hannah Pickering, Gary Pickering. (2019). Consumer Perception of Beer: The Role of Individual Differences. Canadian Food Summit, Halifax. Canada.
- · Gary Pickering and Shannon Ruzgys. (2019). Frankfurter or Frankenfood? Understanding and optimizing consumer acceptance of cultured meat.13th Pangborn Sensory Science Symposium, Edinburgh, United Kingdom.
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