

Cool grapes, hot science

By Karen Davidson

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Core of cherry jam. Nuances of mineral and dry earth. Lively spice and chewy tannins. This is the language of wine critics.

Titrable acidity. Grape sour rot. Ladybug taint. Now that's the language of growers.

After one of the most ideal growing seasons on record, this year's highly anticipated Ontario vintage is invested with its fair share of science. No one knows that better than the latest Grape King honoree of the Grape Growers of Ontario: vineyard owner and scientist, Debbie Inglis.

"I've pulled brush, suckered, thinned, hoed, picked, planted - all those glamorous things," says Inglis. It's how she met her husband Rob years ago, recruiting him to pick up rocks in a field before planting grapevines at the vineyard of her parents Stan and Doreen Murdza.

Today, they're equal partners in Niagara Vintage Harvesters Ltd. with 20 acres of Chardonnay, Riesling and Cabernet Franc grapes contracted to Vincor Canada.

Setting aside the model stewardship of their Virgil, Ontario vineyard, it's her scientific leadership and natural connection with fellow grape growers that sets her apart. Just two years ago, she became director of the Cool Climate Oenology and Viticulture Institute (CCOVI) based at Brock University. She had been there since its inception, as a professor, teaching courses and working in the research laboratory. With this position came restructuring. What Inglis has executed, along with her team, is a focus on industry-set research priorities, outreach to the grape and wine community and continuing education for professionals as well as wine enthusiasts.



The partnership between Grape Growers of Ontario (GGO) and the Cool Climate Oenology and Viticulture Institute (CCOVI) is never more real than at harvest. Near Virgil, Ontario, Matthias Oppenlaender, vice-chair GGO opens the harvester door to share a moment with Debbie Inglis, director, CCOVI. The grape industry honoured her just days before with the year's ambassadorship as Grape King for outstanding stewardship of her own vineyard. Photos by Denis Cahill.

Communications technologies have been her loyal servants in this regard with webinars, a quarterly on-line newsletter and podcasts that can reach a national audience. Locally, she's promoted a lecture series, workshops and training sessions.

Science is at the heart of it all. Cold-hardiness research is the centerpiece, not only in the Niagara Peninsula but the other viticultural appellations in Prince Edward County and Lake Erie North Shore. In the next five years, CCOVI's goal is to develop a best practices guide to maximize winter hardiness of the vines while ensuring quality grape production. From witnessing winter injury in 2003 and 2005, Inglis has installed two wind machines on her farm, actively following the science on appropriate times to protect the vines.



Matthias Oppenlaender (L) and Debbie Inglis agree that these Chardonnay grapes will make a fine vintage from this season's ideal growing season.

Inglis has never let the science be boxed on a shelf. Her strength is marrying technical knowledge with practical know-how in the vineyard. Perhaps this explains her drive to set up CCOVI as a conduit of research to local farmers.

CCOVI's governance structure is worth study. The Grape Growers of Ontario, the Wine Council of Ontario and the Winery Growers Alliance of Ontario fund Ontario Grape and Wine Research Inc. Through a levy on every tonne of grapes and every litre of wine, they raise about \$250,000 for research. Grape grower Matthias Oppenlaender chairs the research entity, aligning research goals with practical concerns.

"To move our industry to the next level, science, technology and innovation are needed," says Oppenlaender. "It's exciting to see that research is filtering to the grassroots." It's this industry-driven research model that has allowed the GGO and CCOVI to secure \$1.9 million in federal government funding to hire a viticulturist and oenologist for research and outreach programs. The results are already on the ground.

Just this fall, viticulturist Jim Willwerth is monitoring the pre-harvest, posting weekly results of brix levels, pH, titrable acidity and volatile acidity of Chardonnay, Riesling, Cabernet Franc and Cabernet Sauvignon in four vineyard locations. The 2010 baseline will probably not hold many surprises, especially in such an ideal growing season. However, the statistics will become more valuable as they accumulate year after year for growers dealing with climatic changes. Grapes mature uniquely depending on the year, variety and terroir.

On a second front, laboratory technician Linda Tremblay can now offer growers precise chemical analysis on grapes -- and wine - to assist in harvesting decisions. This critical mass of scientific expertise also has links with the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), well-respected for its extension acumen. In a recent grape tailgate tour organized by Wendy McFadden-Smith, OMAFRA/CCOVI research was shared on

grape sour rot. And earlier this year, CCOVI cemented a partnership with the Pacific Agri-Food Research Center in Summerland, linking research efforts between British Columbia and Ontario.

Science-based, community-endorsed and industry/government funded, CCOVI is now in a place to contemplate its next decade. "A huge change is underway to expand the grape and wine value chain," explains Inglis. "We need to go beyond the sciences to business, marketing, policy, consumer behaviour and wine culture."

To that end, a consortium of CCOVI, Vineland Research and Innovation Centre, University of Guelph and Niagara College has applied for a provincial grant to strategize a plan for long-term sustainability of the grape industry.

"We have a world class industry right here in our backyard," says Inglis. "Being Grape King for a year gives me another vantage point to share that messaging with Ontario wine consumers."

As Grape King, Debbie Inglis is fluently bilingual. She can speak to the science and to the art.