THE GROWER

JANUARY 2020 CELEBRATING 141 YEARS AS CANADA'S PREMIER HORTICULTURAL PUBLICATION THEGROWER.ORG

INTERNATIONAL DISORDER

Showing face in the midst of trade wars

The backdrop of Lake Ontario conjures up the possibilities for profitable trade around the world. Bill George Jr. and his son Will have tasted that promise with exports of Icewine to China made from their Vidal grapes at Beamsville, Ontario. As chair of the Ontario Fruit and Vegetable Growers' Association, George discusses trade wars and the increasing risks in global exports with many growers across the country. Photo by Glenn Lowson.

KAREN DAVIDSON

To crack the ice, what better custom than a chilled, tulip-shaped glass of Icewine? It's become Canada's tradition when closing deals in China, the top destination for the dessert wine. Valued at $22 million annually, Icewine serves as a bellwether for trade relationships. And in 2019, trade was as frosty as the grapes that were crushed at minus 8°C.

"Icewine adds value at the end of the season," says Bill George Jr., Beamsville, Ontario. "It's very important to my business – it's about 10 to 15 per cent of our revenue."

Due to strained diplomatic relations with China during 2019, Canadian growers and agri-businesses have been skittish about visiting the world's second largest economy. One exception was Richard Slingerland, vice-president of sales for Pillitteri Estates Winery. With 50 per cent of the winery's Icewine exports destined for China, he travelled to its largest annual wine trade fair in Chengdu, a southwestern city brimming with 15 million people.

"Usually 20 Canadian wineries go to this March event, but only two of us went in 2019," says Slingerland. "It's important to show face. It's a strategy that paid off for us in maintaining export sales."

Back home, the winery as a tourist destination in Niagara-on-the-Lake, Ontario didn't fare as well. There was a 35 per cent decrease in traffic in 2019 because China issued fewer visas to its citizens for travel to Canada. As the second-most visited winery in Canada with 250,000 annual guests – many of them Chinese – the bottom line is severely dented.

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AT PRESS TIME...

Tomatoes

	2013	2014	2015	2016	2017	2018	2019p
Number of Contracts	119	85	94	98	86	83	73
Measured Acres[1]	11,618	9,401	10,639	12,305	10,467	11,252	10,520
Tons Contracted	508,923	384,452	447,300	511,763	463,704	471,624	464,747
Tons Harvested[2]	355,599	373,992	432,175	496,988	470,050	496,706	477,641
Gross Farm Value (,000)	$34,421	$41,703	$50,559	$55,671	$51,866	$48,567	$52,745

Source: OPVG

Ontario processing vegetable sector is up in arms

Ernie Hardeman, Ontario's agriculture and agri-food minister, has recommended changes to the negotiating process for tomato and carrot growers that would tip the balance in favour of processors, according to the Ontario Processing Vegetable Growers (OPVG).

On December 11, Hardeman announced: "Amendments to Regulation 440 will now allow carrot and tomato growers to vote through secret ballot on whether to negotiate directly with their processors, either individually, as a group of growers, or through a negotiating agency. The amendments also extend the guaranteed contract term for these commodities to three years, which will provide greater security and stability to growers."

The OPVG board of directors, led by chair Dave Hope, disagrees with this negotiating process in a December 18, 2019 news release.

"Shockingly, new regulations allow for processors to choose growers they would like to negotiate with, setting the stage for a sham process where the balance of power now lies firmly in the hands of processors," stated Dave Hope.

"We have spent considerable hours assessing how the recently announced regulations will impact the tomato and carrot growers but also the impact to the other commodities we represent."

"We will need to analyze the regulation in detail to determine the depth of hurt to the sector. The largest impact is a reduction in collective bargaining power being removed from the growers' elected representatives and handed to the processors."

The OPVG is a marketing board regulated under the Farm Products Marketing Act and represents nearly 340 Ontario processing vegetable growers producing crops such as tomatoes, onions, sweet corn, carrots, cucumbers, green, wax and lima beans, green peas, squash and pumpkin. Farmgate sales for processing vegetable crops in 2019 was just under $90 million. OPVG members are family-owned and operated businesses, growing vegetable crops for Ontario food manufacturing companies.

The change in the negotiating process would be for tomatoes and carrots only. However these two commodities represent about $59 million in farmgate revenue, about two-thirds of the processing industry's total revenue.

The preliminary estimate of 2019 farmgate value for Ontario processing tomatoes is $52.745 million. There were 464,747 tons contracted but 477,641 tons harvested from 10, 520 acres.

Source: OPVG December 18, 2019 news release

NEWSMAKERS

Congratulations to **Cathy McKay**, Port Perry, elected as the new chair of the Ontario Apple Growers. After serving as vice chair since 2013, she replaces outgoing chair **Charles Stevens** of Newcastle. **Brian Rideout** of Blenheim will serve as the new vice-chair.

Asparagus Farmers of Ontario held its annual general meeting in late November, re-electing **Rebecca Compton** as chair and **Mike Chromczak** as vice-chair. Newly elected director is **Tom Csoff**. The Ontario Potato Board re-elected **Shawn Brenn** as chair at its December 4 annual general meeting. He is joined by: **Harry Bradley**, vice-chair; and directors **Brad Blizman**, **Jamie Lundy**, **Steve Bradley** and **Paul Lynch**.

The Ontario Potato Board re-elected **Shawn Brenn** as chair at its December 4 annual general meeting. He is joined by: **Harry Bradley**, vice-chair; and directors **Brad Blizman, Jamie Lundy, Steve Bradley** and **Paul Lynch**.

General manager **Kevin Brubacher** confirmed that due to a strong financial position, the board has lowered 2019 grower fees for fresh potatoes to 7 cents/cwt and for processing potatoes to 9 cents/cwt.

Fresh Vegetable Growers of Ontario held its annual general meeting on December 5, re-electing carrot and onion grower **Tom Miedema** as chair. He is joined by **Mark Srokosz**, vice-chair; regional directors are **Mark Wales**, **John Hambly**, **Henk Droogendyk**. Directors for specific crops are **Don Almas** (crucifer vegetables); **Ken Collins** (low-acreage specialty vegetables); **Teresa Van Raay**, root bulb and leafy vegetables); **John Beardsley** (tomatoes and peppers). The position for sweet corn, peas and beans is vacant.

Larry Kieswetter, Elmira, has been appointed for a three-year term to the board of directors of the Ontario Food Terminal. He has previously served on the boards of the Canadian Produce Marketing Association and the Dispute Resolution Corporation.

The CanAgPlus board, responsible for administrating the CanadaGAP food safety program, has elected **Stephanie Lariviere**, Erie James Ltd, as 2020 chair and **Mike Furi**, Federated Cooperative Ltd. as vice-chair. Stephanie Lariviere has been re-elected for another two years as has **Robert Allard**, Pommes Philip Cassidy. Newly elected directors are: **Beth Pattillo**, Noggins Corner Farm and **Ian McDonell**, Snow Road Solutions. Vice-chair **Scott Wright** and director **Keith Kuhl** have retired from the board. The annual meeting was held outside Ottawa for the first time, in Charlottetown, Prince Edward Island.

Deb Hart, seed coordinator, Potato Growers of Alberta, has retired after 15 years of service. She will continue to work on a contract basis until a replacement is identified and trained. She has contributed to numerous committees and sub committees, where her expertise and knowledge has benefited the potato industry not only provincially but nationally and internationally. **Devin Dreeshen**, the Alberta agriculture and forestry minister, was on hand to congratulate her at the annual general meeting held in Red Deer.

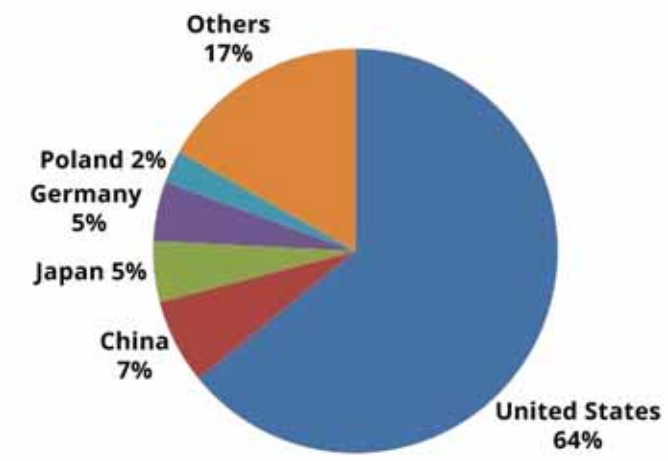
Potato Growers of Alberta has announced the 2020 board of directors: **Russ Van Boom**, chair; **Michel Camps**, vice-chair; and directors **Jeff Ekkel**, **Tony Bos**, **Lyndon Nakamura**, **James Bareman**, **JP Claassen**.

Steve Brown, a Summerland apple and cherry orchardist, has been elected president of the BC Tree Fruits Cooperative. He was first elected to the board in 2017. He succeeds **Jeet Dukhia**.

COVER STORY

Showing face in the midst of trade wars

Relative importance of Canada's top five fruit export destinations - % share of total export value



Source: Statistics Canada (CATSnet, May 2019)

Continued from page 1

For 2020, Slingerland remains optimistic and believes that Canada-China trade relations are slowly improving. However, there is still a great deal of political instability and relationship repair is required between the two countries.

China is not a diversification strategy

This is an example of the real ruts in the trading landscape that Farm Credit Canada (FCC) alludes to in its recent report: Diversifying Canada's agricultural exports. Specifically, ongoing trade tensions between Canada and China as well as accelerating weather and disease events will test resilience in 2020. The economic analysis casts doubt on how to achieve the Canadian objective of $75 billion in agricultural exports by 2025.

"It would be a mistake to think that our growing export values to China represent the fulfillment of a diversification strategy," wrote J.P. Gervais, chief agricultural economist, FCC. Agriculture Canada statistics buttress his point. In 2018, Canada exported $526 million in fruit to the U.S. and $56 million to China. That's a reliance of 64 per cent of fruit exports to the U.S. and only seven per cent to China. Gervais points out real risks of depending on China for reliable business.

His comment proves prescient on the December 13 news of an American-Chinese phase-one trade deal. The effects on Canada will vary by commodity, whether it's British Columbia cherries, Ontario ginseng or Nova Scotia wild blueberries.

What is known is that Robert Lighthizer, U.S. Trade Representative told CBS Face the Nation that the rules have been rewritten in favour of American agriculture on more than half – 56% -- of all exports from agriculture. He was referencing all the deals with Canada, Mexico, Japan and China.

"Ultimately, whether this whole agreement works is going to be determined by who's making the decisions in China, not in the United States," Lighthizer said. "If the hardliners are making the decisions, we're going to get one outcome. If the reformers are making the decisions, which is what we hope, then we're going to get another outcome."

Disruptive forces

The gorilla-sized clout of China's state-owned enterprises is not to be dismissed as Al Mussell points out. He's the lead for Agri-Food Economics Systems, a think-tank in Guelph, Ontario. His example is the largest state-owned enterprise: China Oil and Food Corporation (COFCO).

"These entities don't need to make money," explains Mussell. "Their role is to maintain food security."

While the rest of the world has a *modus operandi* of making profit, China, through its state subsidies, can swing markets based on primary needs for food security and social stability.

There's more disruption at hand. Lighthizer is touting that the new U.S.-China trade deal has an "enforceable" dispute resolution mechanism. Ironically, the U.S. does not hold the same position regarding the rules-based World Trade Organization (WTO). As of December 15, 2019, the dispute resolution trade panel is no longer operating. That's because the U.S. refuses to name representatives to the appellate body, rendering it impotent. That's a blow to a middle power such as Canada, for which dispute settlement is the central pillar of the multilateral trading system.

Richard Slingerland, vice-president of sales, Pillitteri Estates Winery, Niagara-on-the-Lake, Ontario examines Cabernet Sauvignon grapes during harvest. Fifty per cent of the winery's Icewine is destined for China.

"This fundamental change towards protectionism is negative for world trade. The focus on reciprocity, country to country, disregards the dynamism of worldwide markets.

~ DARCI VETTER, FORMER CHIEF AGRICULTURAL NEGOTIATOR, U.S. TRADE REPRESENTATIVE"

Protectionism is negative

Darci Vetter, the former chief agricultural negotiator for the U.S. Trade Representative under the Obama administration, disagrees with America's current unilateral approach. Speaking at the Arrell Food Summit in Toronto on December 3, she said, "This fundamental change towards protectionism is negative for world trade. The focus on reciprocity, country to country, disregards the dynamism of worldwide markets. These moves increase risk and volatility at a time when the globe cannot afford to waste time or resources."

The United States is actively questioning whether it should be bound by rules of the WTO.

"Almost 60 per cent of our trade is not covered by bilateral agreements and therefore depends on the rules of the WTO to keep product moving," says Vetter. "If working outside of the WTO is the strategy of this current administration, it is a strategy that will put a lot of U.S. agriculture at risk."

"Other countries are making trade decisions without us," adds Vetter. "It is costing us more to move less with trade disruptions." Her example is China turning to Brazil as a source for soybeans and then the U.S. backfilling the Brazilian market at lower prices. These disruptive trade flows are not efficient in terms of transportation costs and the carbon imprint.

"The U.S. is now less competitive," says Vetter. "When the trade war with China is over, other country's assets will be in place around the world."

Darci Vetter showed face at the Arrell Food Summit at a critical time in trade relations. She could not have known that in days, NAFTA 2.0 would be signed in Mexico or that the U.S. would ink a deal with China. It's too early to know what's in store for horticulture in 2020, but there's one trade wind to track. And that's the hard trade numbers in dollars and volume.

The Grower goes "Behind the Scenes" of this story to connect with Darci Vetter, former chief agricultural negotiator for the U.S. Trade Representative. Based in Washington, she shares her view of the recent U.S.-China trade negotiations and looks ahead to the risks of international trade in 2020 and beyond. Photo courtesy of Calyssa Pickles.

CROSS COUNTRY DIGEST

CANADA

Canadian spud production not enough to meet demand

Despite a 2.4% increase in harvested volume, 2019 Canadian potato production was still short of needs. In fact, an unprecedented 20,000 acres were left in the ground -- primarily in western Canada -- due to freezing temperatures.

In early December 2019, Statistics Canada estimated anual Canadian potato production to be up by 2.4 per cent or 2,472,000 cwt above the five-year average. With demand growing for potato products, growers planted an additional 3.7 per cent or 13,000 acres in the spring of 2019 to meet those expansion requirements.

Unfortunately, poor harvest conditions, particularly in western Canada, nipped those expectations. Farmers abandoned the harvest of 20,296 acres. This is the second consecutive year of bitter returns after an early winter resulted in 18,049 unharvested acres from Prince Edward Island to British Columbia in 2018.

Manitoba was particularly hard hit with an October 10 winter storm that resulted in 13,000 acres abandoned in the field. That's a heavy burden after losing 5,300 acres in 2018.

Overall, Canadian potato yields of 312 cwt per acre in 2019 were slightly better than 2018's 310 cwt per acre.

Province by province details are available here: https://bit.ly/36fXITZ

Estimate of Canadian Potato Production Dec 6, 2019

Production	2017	2018	5-yr avg	2019 est.	Diff vs. 5-yr avg
NFLD	63	56	64	54	-15.6%
PEI	24,463	22,600	24,575	25,200	+2.5%
NS	432	365	409	416	+1.7%
NB	15,159	15,670	14,914	16,400	+10%
QC	12,505	11,221	11,933	12,739	+6.8%
ON	7,830	6,919	7,509	6,705	-10.7%
MB	22,200	20,300	21,154	19.700	-6.9%
SK	1,625	1,454	1,612	1,500	-6.9%
AB	20,572	21,762	19,963	21,718	+8.8%
BC	1,824	2,100	1,871	2,145	+14.6%
CANADA	**106,673**	**102,447**	**104,105**	**106,577**	**+2.4%**

Source: Statistics Canada Table 32-10-0358-01 (000cwt) Dec 6, 2019

Source: United Potato Growers of Canada December 6, 2019 news release

QUEBEC

Concrete post trellising system in apples

For a few years now, apple growers in Quebec have been switching from wood to concrete when it is time to install a trellising system in a new orchard. This technology has been proven in Europe where most of the apple orchards are using concrete instead of wood.

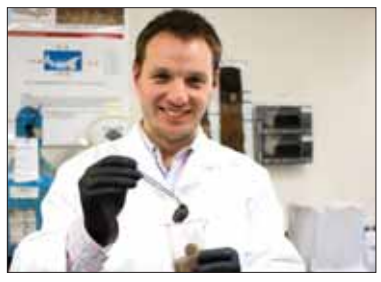
At first, many were skeptical about the adaptability of this product to Quebec's weather. In 2016 ProduceTech brought the first container of concrete posts from Valente in Italy. After four years of experience, more than 20 clients are using the Valente system on more than 150 acres. Other apple orchards in Ontario, the Maritimes and the U.S. have also purchased material from Valente with success.

Thanks to the materials used and their unique manufacturing process, the prestressed concrete posts are capable of resisting the most extreme weather conditions. They are therefore much more durable than wooden or metal posts with three times the lifespan. Unlike wood, they do not rot, harden or dry, and do not bend due to their excellent mechanical properties. This technological advantage offers ease for installation and maintenance compared to wooden posts requiring holes, staples, gripples. The trellising material supplied with the concrete post is designed to fit perfectly and is easy to install. Price wise, this solution is very competitive.

Growers are also finding that concrete posts offer support for anti-hail, anti-rain or insect exclusion netting that could be installed afterwards on existing posts. Concrete posts have been used by the IRDA (a Quebec research center specialized in fruit growing) for its evaluation of the benefits of anti-hail and insect exclusion netting on several apple orchards in the province.

ATLANTIC CANADA

Groundbreaking soil mapping project first of its kind



Dr. Louis-Pierre Comeau

Agriculture and Agri-Food Canada (AAFC) is taking its deepest look yet into the chemistry, structure and life of soils across Atlantic Canada and parts of Quebec. In the summer of 2019, researchers took a total of 255 soil samples from farmland, wetlands and forested areas that are now being subjected to a wide range of soil tests and measurements using the latest technologies and involving Agriculture and Agri-Food Canada soil researchers and university PhD students from across the country, as well as researchers in Italy, France and Scotland.

Five hundred points across Atlantic Canada have been randomly selected for sampling. The second part of the two-year survey will happen next summer with researchers collecting samples in Nova Scotia and Newfoundland. In-depth analyses of the samples will give researchers a comprehensive look inside the soils of the region to help them understand the relationship between the levels of carbon, and bacteria, fungi, nematode and insect communities and how they interact with each other. This type of project is the first of its kind in Canada and will give researchers a baseline to track changes in soil composition over time due to agricultural practices and changes in climate.

The goal, says Fredericton Research and Development Centre soil scientist Dr. Louis-Pierre Comeau, is to pull all of the results to create detailed maps of what he calls the soil universe.

NEW TECHNOLOGY

Reducing greenhouse energy consumption

Heat loss is a significant problem for greenhouse growers during the winter months. Plants transpire during photosynthesis, causing humidity build-up in the greenhouse, so vents are opened to bring in cold, dry air, resulting in heat loss.

This has led Flowers Canada (Ontario) Inc. to launch a research project to evaluate different solutions to reduce greenhouse energy consumption.

"Dehumidification came up time and time again as a solution for the sector," says Dr. Jeanine West, the organization's environmental specialist. "With most growers heating their greenhouses with natural gas, a technology that reduces fossil fuel consumption could be really valuable."

The research team includes West, Dr. Jingjing Han of FCO, and Dr. Ann Huber with Soil Resource Group.

With funding from the Greenhouse Renewable Energy Technologies (GRET) research and development initiative, four different technologies are being tested at three different facilities for their potential to reduce fossil fuel use – and by extension, greenhouse gas emissions – during the peak greenhouse use period of fall through early spring.

These include a mechanical dehumidification system, a liquid desiccant dehumidifier that runs humid air past a brine solution to absorb the moisture and then heats the brine to regenerate it, and a heat recovery air exchange ventilation system that is located outside the greenhouse and warms up the cool, dry air as it enters the facility.

A flower greenhouse is piloting all three systems in adjacent zones, and a newly built herb greenhouse is testing mechanical and liquid desiccant dehumidification in adjacent zones alongside a similarly-sized control zone. Both locations are in the Niagara area.

The fourth technology is called State Point Liquid Desiccant, a prototype that combines the liquid desiccant approach with heat exchange into a single system. It's currently being trialed in a tomato production facility in Leamington, where approximately half the greenhouse is running the new system and the other half is serving as a control zone.

According to West, researchers also installed extensive monitoring equipment that measures everything from how often the vents are opened to how much electricity each dehumidification system uses and how much moisture is extracted from the air.

Data collection is still underway - although one site has been in place since last fall, the two others weren't up and running until spring 2019 – so conclusive results will not be available until later this winter.

However, early results show that dehumidification is an effective way of combating humidity in a greenhouse environment, especially compared to the traditional method of simply opening the vents, while also decreasing energy use and greenhouse gas emissions.

"The technologies demonstrated in this project encourage energy savings and decreased fossil fuel use by minimizing the amount of venting required by greenhouses to manage humidity – that's because the heat generated by the boilers is not lost," says West.

Optimal performance of these types of systems is seen once overnight temperatures

drop below 10C. Every greenhouse and every crop is different, though, so there is no single solution that will work equally well for all growers.

"To save energy, you have to consider the whole process at your facility – how you use a dehumidification system matters in terms of the benefit you will see," she says, adding trials starting this fall will focus on optimizing the equipment for the best benefits for growers.

Although the research is still ongoing, West encourages growers to consider the following key takeaways from the work to date:

- Better relative humidity control is definitely possible – but optimizing is key
- Dehumidification systems can't just be installed as add-ons, they must be incorporated into the existing greenhouse environmental control systems in order to save energy
- The technology may not work for all growers, especially those who need humid conditions for their crops

Tours of the pilot facilities are planned for early winter.

Source: Agricultural Adaptation Council November 25, 2019 news release

Generating electricity from waste light in greenhouses

A pilot project in a Grimsby greenhouse is demonstrating that both crops and solar energy can be harvested from the same land footprint using solar panel technology from manufacturer Heliene. It's funded through the Greenhouse Renewable Energy Technologies (GRET) research and development initiative.

The Heliene greenhouse solar panels each contain an energy-producing photovoltaic cell that generates electricity both from the top where the sunlight strikes it and from any reflection coming from underneath, and a red polyurethane back-sheet.

It's this back-sheet that transforms the green light spectrum into red before shining it on the plants below, while at the same time reflecting it back to the photovoltaic cell, which turns it into electricity that can be used in the greenhouse.

"The key is taking green light, which is less beneficial, and transforming that to red," says Scott McLorie, vice president of business development at Heliene. "Between that and the diffuse nature of the textured solar glass, we expect no reduction in plant growth."

To date, the panels have been producing the equivalent of nine per cent of the greenhouse's annual electricity consumption without any negative impacts on production. In fact, the plants have been performing better and as an unexpected side benefit, the red light has been found to be hindering the growth of thrips, a known greenhouse pest.

Source: Agricultural Adaptation Council December 18, 2019 news release

2ND ARRELL FOOD SUMMIT

A mantra for 2020: no more make, take and waste

Black Futzu squash with wheat berry salad, winter herbs, spiced ricotta

Root vegetables, fennel and greenhouse cucumber in dipping sauce

Chia seed pudding with greenhouse-grown strawberry

KAREN DAVIDSON

By the late 21st century, between 9.5 and 11 billion people will need food systems that are carbon neutral, resilient to extreme weather and provide safe and nutritious food. The challenge of feeding the future represents an unprecedented opportunity for Canada.

This is how Evan Fraser, director of the University of Guelph's Arrell Food Institute, kicked off its second summit at the Globe and Mail Centre in Toronto. Here are three key themes which emerged on December 3.

Addressing carbon

Get ready to hear more about regenerative agriculture. This theme surfaced several times at the Arrell Food Summit in the context of food and farming systems. This conservation and rehabilitation approach focuses on topsoil regeneration, increasing biodiversity, improving the water cycle, enhancing ecosystem services, supporting biosequestration, increasing resilience to climate change and strengthening the health and vitality of farm soil.

It's very much connected to the carbon conversation as Darci Vetter pointed out in her keynote address. She's the former chief agricultural negotiator, Office of the U.S. Trade Representative in the Obama administration.

"When it comes to carbon, for a brief window in 2008, when the Democrats were a majority, several proposals came forward for a carbon tax. But what happens when you cross borders. You're then importing carbon-intensive products. The question is how to create free trade because all foreign products should be treated equally."

Today's technology of block chain reporting creates some opportunities for best practices to account for carbon and carbon sequestration adds Vetter.

"Ultimately, we need to go in this direction," says Vetter. "Agriculture, through regeneration practices, could create new revenue streams."

Healing through local foods

Food is thy medicine, but in today's Canadian hospitals, food trays are often returned hardly touched. Not only is that food waste, but a lost opportunity to nourish bodies and spirits.

Canadian hospitals are spending $4 billion per year on food according to Hayley Lapalme, associate director of Nourish. But there needs to be incentive alignment to make food purchases that are local.

"We would never spend $4 billion on drugs with such a poor outcome," says Lapalme.

Boston Medical Centre is one example of where a rooftop farm and fresh food are making a difference. In its second growing season, the farm grew 5,000 to 7,000 pounds of fresh produce in less than 3,000 cubic feet of growing space. An in-hospital pantry was developed so that anyone screened for food insecurity could be given a "prescription" to pick up fresh, organic vegetables. The rooftop garden was also an educational site for a diabetes group.

Here in Canada, chef Joshna Maharaj has marshalled a "take back the tray" movement at Scarborough Hospital. She's developed scratch-made recipes that are locally sourced, meet sodium guidelines and reflect cultural diversity.

"We need to re-animate the string of people that bring food to the table," she told the summit. "This is not a shopping problem, but a cultural problem and a climate problem. There's a disconnection between people and the land. The exciting thing is that it's possible to make these meals with local food."

Indeed, Maharaj curated the luncheon served at the Arrell Food Summit. Some of those examples are shown above.

Training up the next generation of leaders

The fourth industrial revolution is upon us with the super computer in our hands. At the same time, there is a demographic revolution points out John Stackhouse, senior vice-president of the Office of the CEO, Royal Bank of Canada.

"By the end of this week, 5,000 baby boomers will have retired," said Stackhouse. "In their wake are 7,000 millennials with a totally different global view."

The skills required in the next generation – including farming – will be significantly different. Social skills such as collaboration, critical thinking and problem-solving are very much in demand.

"We need generation C – a nation of collaborators and communicators," he said. "Why does this matter to Canada? If we can improve productivity, the dividend is $40 billion. And that's how we'll pay for education and health care."

Stackhouse predicts that of $40 billion, $11 billion could come from agriculture. "It's a great nation-building exercise – a community of communities. Agriculture is one the of things which will keep us together."

He urges recruitment of students into agriculture through meaningful work placements.

"We have the world's best immigration system," said Stackhouse. "It's game on in Canada in agriculture – especially for a new generation – if you want to be part of a moon shot of feeding the world by 2050, you need to be in Canada."

CANADA FOOD PRICE REPORT

Fork over more for imported fruits and vegetables in 2020

Extreme weather, food recalls and the tightening of the border between U.S. and Mexico are all contributing to skyrocketing produce prices

KAREN DAVIDSON

Dalhousie University – in conjunction with University of Guelph – has published the 10th annual Canada Food Price Report, predicting that the average Canadian family will spend an additional $487 in 2020. The food bill could reach $12,667, driven mostly by higher meat prices. But prices of fruits and vegetables will also spike, mostly due to imports.

"If U.S. President Donald Trump's election campaign focuses heavily on Mexico border protection, this may result in even more costly fruit and vegetables for Canadians," warned Prof. Simon Somogyi, University of Guelph's project lead for the report and the holder of the Arrell Food Institute Chair in the Business of Food.

"We get a large amount of our fruit and vegetables from the U.S. and Mexico, and delays at the border crossing can lead to empty grocery store shelves."

Sylvain Charlebois, a professor of food distribution and policy at Dalhousie University, said that the target for food inflation is about 2 to 2.5 per cent. The 2020 prediction will exceed that bracket.

In 2020, meat will see the highest increases (4% to 6%), while restaurants, seafood and vegetables will all see increases (2% to 4%). This is followed by fruits (1.5% to 3.5%), dairy (1% to 3%), and bakery (0% to 2%).

"When rates increase quickly, families can be left behind," said Charlebois. "Vegetables are a perfect example. Canada's new Food Guide is encouraging Canadians to eat more vegetables, but they're getting more expensive."

"We are a food importing country," added Somogyi. "From November to May, our weather is too cold to grow vegetables in the traditional way."

He suggested that more emphasis on indoor agriculture in Canada would produce more local vegetables, cut down on logistics costs and improve food safety.

In response to the 2019 Canada Food Price Report, Anita Stewart also pointed out an opportunity for local food. She's the food laureate for the University of Guelph.

"Culinary sovereignty is something that's pretty darn important and this is why. If there ever was an example of why we need to buy from our own foodshed and support our own, it's here. Is this not a very real opportunity for our growers?"

> **"Culinary sovereignty is something that's pretty darn important and this is why. If there ever was an example of why we need to buy from our own foodshed and support our own, it's here.**
>
> **~ ANITA STEWART**

TABLE 1: 2020 FOOD PRICE FORECASTS

Food Catagories	Anticipated Changes (%)
Bakery	0% to 2%
Dairy	1% to 3%
Fruit	1.5% to 3.5%
Meat	4% to 6%
Other	0% to 2%
Restaurants	2% to 4%
Seafood	2% to 4%
Vegetables	2% to 4%
Total Increase in Food Prices	**2% to 4%**

TABLE 2: 2020 PROVINCIAL BREAKDOWN OF FOOD PRICES

Province	2019 Changes [1]	2020 Forecasts[2]
Alberta	↑	↓
British Columbia	↑	↑
Manitoba	--	↑
New Brunswick	↓	↓
Newfoundland and Labrador	↓	--
Nova Scotia	↓	↓
Ontario	↑	--
PEI	↓	↑
Saskatchewan	↑	↓
Quebec	--	↑

[1] (↑) Expected above-average food price increase, (↓) Expected below-average food price increase, (--) Expected average food increase. Lower confidence intervals at the provincial level.
[2] (↑) Expected above-average food price increase, (↓) Expected below-average food price increase, (--) Expected average food increase. Lower confidence intervals at the provincial level.

For the full report, go here: https://bit.ly/34aUpvT

OFVGA ISSUES AND ACTIVITIES

2019 closed out with a government consultation blitz

GORDON STOCK
SENIOR POLICY ADVISOR & GOVERNMENT RELATIONS, OFVGA

This column is to keep you informed about the key issues that OFVGA is tackling on behalf of Ontario's fruit and vegetable farmers.

Provincial consultations

Although the provincial government had a shorter fall session than normal, the pace seemed to increase, and the number of consultations probably exceeded that of a normal session. This drove the need for quick work on the part of OFVGA to coordinate with members and determine appropriate responses to several important proposed policy changes. OFVGA responded to proposals related to:

Bill 132, Better for People, Smarter for Business Act, where comments were made on everything from environmental penalties and line fence disputes to changes to delivery of production insurance and requirements for agricultural organizations.

Ontario Pesticides Act, supporting the improved process for classifying new crop protection products in Ontario.

Healthy Menu Choices Act, supporting clarifications that are being made to exclude fresh fruits and vegetables from requirements to have nutritional labelling in grocery retail outlets.

Ontario Building Code Services, outlining support for increased consistency of application of the code, raising concerns about a proposed levy, and requirements for bunkhouses.

Ontario's Financial Protection Programs, suggesting changes to existing legislation to establish the ability to expand programs to sectors that currently don't have financial protection, including fruit and vegetable farmers.

The full submissions are available for viewing at www.ofvga.org/news. We anticipate that some of the proposed changes will lead to further consultations.

Farm Trespass legislation

In December 2019, the Ontario government released legislation to increase protections for the livestock value chain (farms through to processing) from unwanted visitors, including activists. While the OFVGA is pleased to see the government moving to protect farm families and their livelihood, the legislation does not address trespass issues for farms or food value chains beyond livestock. The OFVGA will be putting forward views to the government to ensure that it considers protecting farm families and food safety of all agricultural sectors a priority.

Canadian Agriculture Partnership funding

There are several intakes for Canadian Agriculture Partnership (CAP) funding available to farmers and farm organizations opening in January 2020.

Farmers can apply for funding between January 8 and January 29, 2019 under the regular CAP funding stream. Details online suggest this intake will focus on plant health projects. The Lake Erie Agriculture Demonstrating Sustainability (LEADS) program will open on January 20, 2020 with a focus on projects that increase the sustainability of the Lake Erie water basin.

The Place to Grow: Agri-Food Innovation Initiative, targeted to broader industry projects will accept applications from January 6 to January 27, 2020. This funding is typically distributed to agricultural organizations or collaborations of businesses and demonstrate broad industry benefit.

At the time of writing, program details are not available for these program intakes. Hopefully program details will be available at www.omafra.gov.on.ca/english/cap or ontariosoilcrop.org soon. Recent communications from government suggest that application processes for program intakes have been revamped. If you choose to participate, the OFVGA would be interested in hearing your experience with the process.

Call for resolutions

This is a final call for resolutions for the 2020 OFVGA annual general meeting. Resolutions are a great way to provide direction for future OFVGA activities or shape the position it takes on key issues faced by the fruit and vegetable sector. If your organization is considering submitting a resolution on a specific issue and would like some background information that might be helpful in crafting your resolution, please feel free to contact me. The deadline for submitting resolutions is January 10, 2020.

Want to see an issue highlighted here contact Gordon Stock, senior policy and government relations advisor, at gstock@ofvga.org or 519-763-6160, ext. 125. For details go to www.ofvga.org/news.

CHAIR'S PERSPECTIVE

Bringing horticulture to downtown Toronto

OFVGA recently hosted its second Queen's Park outreach day

BILL GEORGE JR.
CHAIR, OFVGA

As the voice of Ontario's fruit and vegetable growers, it's our job to make sure our government representatives and their staff know who we are. For OFVGA, that means taking our message to government in a variety of ways, including going to Queen's Park to meet directly with ministers, MPPs, and government staff teams.

That's what we did on November 26, when we held our second lobby day in Toronto – a follow-up to a very successful first such event last spring.

Our day included meetings with Ernie Hardeman (Minister of Agriculture, Food and Rural Affairs), Bill Walker (Associate Minister of Energy), Lindsey Park (Parliamentary Assistant to the Attorney General), Sam Oosterhoff (Parliamentary Assistant to the Minister of Education), Ted Arnott (Speaker), and John Vanthof (Deputy NDP leader and agriculture critic).

Other MPPs and ministers, including Caroline Mulroney (Minister of Transportation and Minister Responsible for Francophone Affairs) and Lisa Thompson (Minister of Government and Consumer Services) attended our evening reception where we were able to chat in a more social format and our entire board was able to take part in that portion of the day.

Although part of our goal was to raise awareness of our sector and the significant role it plays in the provincial economy, we headed to Queen's Park with three very specific topics to address: timely payment for growers, protecting and strengthening risk management programming, and drawing attention to the importance of the Seasonal Agricultural Worker Program and the Temporary Foreign Worker Program to the production of fruits and vegetables in Ontario.

Ensuring growers are paid for the produce we sell is critically important and nationally, the sector has been pushing the federal government for legislation to ensure growers are protected in the event of buyer insolvency. Ongoing payment in a timely fashion is also important, though, and we had some good discussions in several meetings around provincial programming that might help ensure prompt payment for growers.

We also highlighted the value of seasonal labour in Ontario, particularly the Seasonal Agricultural Worker Program. We recognize that the program itself is federal, but we believe strongly that it's important for provincial ministers and MPPs to understand how essential it is to growing fruits and vegetables in Ontario.

This generated a lot of questions from MPPs wanting clarity around the program, and it's clear that we need to do more to ensure our political representatives and their staff are aware of what SAWP is, how it works, and how it is different from other temporary worker programs.

The biggest topic we addressed, however, is the re-design of the Self-Directed Risk Management program that Minister Hardeman has tasked us to undertake in conjunction with OMAFRA staff.

The Minister has made it clear to us and the commodities that are part of the provincial Risk Management Program that the government wants the programming to be more insurance and risk-based and that SDRM in its current form does not meet those criteria.

Unlike other sectors that produce a single commodity, horticulture is very unique. We have more than 120 different crops to consider when designing a program, which makes the process very challenging and we wanted to ensure the Minister is aware of the unique nature of our sector.

The re-design process has been underway since spring 2019 and some program options have been put forward to OMAFRA for actuarial analysis. We hope to have the results of this review by February 2020 so that we can consult on this issue with you, our members, at our annual general meeting and get your feedback on program design.

We recognize the government's need to ensure business risk management programming meets the needs of taxpayers and are working to balance that against our need for a program that will support growers when they need it.

We look forward to being able to consult with growers on this issue and while we are very much aware of the difficulty in finding a solution that will work equally well for all our commodities, we are committed to achieving the best program we can for our sector.

WEATHER VANE

The sounds of summer – tractors, bird bangers, boom boxes – fade into memory as this Niagara-on-the-Lake, Ontario orchard takes a rest. Still life. Happy New Year! Photo by Denis Cahill.

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URBAN COWBOY

Brazil sets it sights on the global fruit market – including Canada

OWEN ROBERTS
U OF GUELPH

DANIEL AZEVEDO DUARTE & OWEN ROBERTS

Export-minded Brazil, already a world power in commodities such as coffee, soybeans, sugar, poultry, orange juice and beef, is setting its sights on taking a big stake in the global fruit market by doubling exports. And Canada is among the countries where it thinks it can have a stronger presence.

Brazil is the world's third-largest fruit producer, with almost 45 million tonnes of production, right behind China and India. Growing conditions are ideal for the likes of mangoes, melons and lemons, which routinely end up on Canadian plates.

But overall, the country lags in fruit exports. Despite doubling exports over the past 20 years, it still ranks just 32nd among fruit-exporting countries, sending less than two per cent of its production abroad.

Luiz Roberto Barcelos, president of Abrafrutas (the Brazilian Fruit Exporters' Association), says the country's producers need to reach agreements with some of the main importers around the globe – especially the EU, which is responsible for more than half of all the world's fruit imports -- the way other South American producers such as Chile or Peru have done.

"Although we are very good at producing fruit, we're not good at promoting our production," says Barcelos. "That is starting to change and many producers are gaining ground abroad. We have a huge potential and will increasingly focus on exports. Our best fruit producers are aware and prepared for this."

Barcelos says the main challenges facing an increase in Brazilian fruit exports are government support for promoting Brazilian fruit, clear legislation to align with international phytosanitary certifications, and greater development of an export culture among growers.

But he believes these challenges can be overcome. He expects exports to rise to US$1 billion worth this year, then increase by 15 per cent annually.

That seems like a realistic goal, at least in the short term -- exports earned the country US$975 million last year. And compared to the first half of 2018, they've increased 21 per cent in volume and 15 in sales. Long term, Barcelos sees three strengths for Brazil.

First, the country already grows a wide variety of fruit, particularly tropical fruit such as mangoes, limes, lemons, melons, pineapple, avocados, watermelons, bananas and papayas. "We are perfectly able to face other exporters on many of these varieties," says Barcelos.

Vast agricultural land development and wide climate variations means Brazil also produces temperate-climate fruit like that found in countries such as Canada. Apples and grapes come to mind.

All told, the country has huge biodiversity. That has resulted in the continual discovery of new fruit, over its five biomes: Amazon, Caatinga, Cerrado, Pantanal, Atlantic Forest and Pampas. Modern-era discoveries include açaí, graviola (also known as soursop or Brazilian paw paw), cupuaçu (a rainforest tree related to cocoa) and mangaba, a plum-like fruit. There are hundreds of varieties of unexploited fruits.

Another plus for Brazil is the rising world demand for fruit. Globally, the International Trade Center valued the world fruit market at US $135 billion in 2018. That's almost 20 per cent higher than five years earlier.

Barcelos likes Brazil's chances of increasing its market share throughout the world, and has definite thoughts about Canada.

"Canada is an interesting market for us," he says. "It has a multicultural society, a developed economy and a demand for all sort of fruits. Moreover, the country has good infrastructure and logistics to receive products." Indeed, in the first half of this year, processed fruit exports to Canada were up nearly 70 per cent.

However, Brazil's success in opening up more markets could be highly influenced by how the international community views its treatment of the rainforest – a treatment that has met with poor international reviews lately.

Many Brazilians, including their development-oriented president, Jair Bolsonaro, have a hands-off attitude towards global involvement in the rainforest. They consider it distinctly Brazilian. Bolsonaro even rebuked international offers (including $15 million from Canada) to help contain fires raging there during the last few months, to the chagrin of the global community.

But very little fruit production -- less than two per cent – takes place in the nine states comprising the Amazon biome, even though it covers more than half of the entire country. Production that does occur there is mostly conducted by small, local producers, who count on the sale of fruit such as açaí or cupuaçú for community sustainability…and most agree that community sustainability is imperative for promoting rainforest preservation.

Daniel Azevedo Duarte is a Brazilian agricultural journalist based in Sao Paulo. Owen Roberts, a regular columnist with The Grower, travelled to agriculture centres in Brazil in 2019.

CROP PROTECTION

Federal court rules in favour of Pest Management Regulatory Agency

CropLife Canada is pleased with the recent ruling from the federal court that stands firmly in support of the Pest Management Regulatory Agency's (PMRA) authority to set phase-in periods for amended pesticide registrations. This is a win for modern, sustainable agriculture in Canada.

The legal case, which was brought forward by a number of activist groups – the David Suzuki Foundation, Friends of the Earth Canada, Équiterre and Wilderness Committee – challenged the PMRA's authority to set reasonable timelines for the implementation of label changes for a pesticide following a re-evaluation or special review decision. The impracticality of what these groups were suggesting demonstrates their lack of understanding of the scientific regulatory process and their disregard for Canada's agricultural and food systems.

The groups who filed this lawsuit have a long-standing history of opposing advances in modern agriculture. They are unhappy that the science continues to demonstrate the safety of pest control products and are now trying to use the courts to create an unworkable system that prevents farmers from using modern and effective pest control tools.

The case was never about health and safety but rather about process. The PMRA already has the ability to expedite a phase-out of a pesticide if it determines there is an imminent and serious risk to human health or the environment.

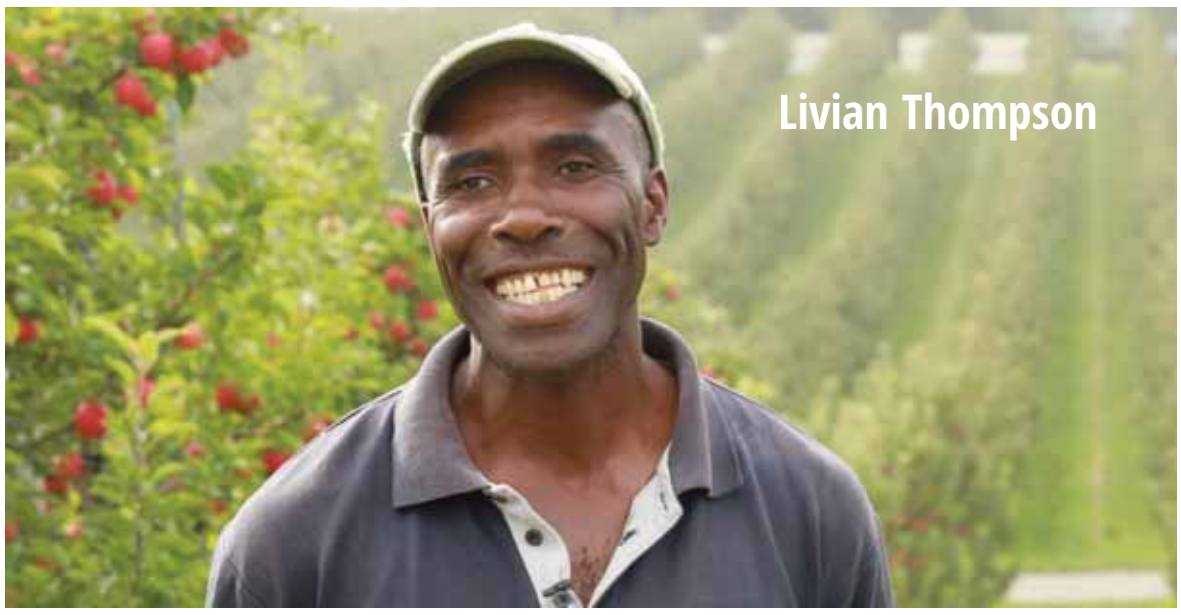
Without providing any benefits to Canadians, a result in favour of the plaintiffs would have handcuffed Canadian farmers by imposing immediate changes to use patterns for pesticides without consideration of the disruptions this would cause for businesses and farmers, and the impact it would have on the competitiveness of the agriculture industry in Canada. Some segments of the industry would have experienced immediate removal of tools from their toolbox for which they would have no alternatives.

It would have also created a significant amount of unpredictability in the regulatory system that would have almost certainly driven innovation away from Canada, costing farmers, the Canadian economy and Canadian consumers as a whole.

The court's ruling confirms that the PMRA can continue to protect the health and safety of Canadians and the environment while at the same time recognizing the practical implications of changing what's available to farmers to protect their crops.

Source: CropLife Canada December 19, 2019 news release

FarmFood360° highlights importance of seasonal agricultural workers



JESSICA SILLS

Farm & Food Care Ontario (FFCO) has continued to expand the FarmFood360° project throughout 2019, releasing seven new tours, including free range and free run egg farms, egg processing facility, pig farm, feed mill and apple orchard. The website, started more than a decade ago and modernized with the release of 360° technology in recent years, is in high demand from teachers, clubs and agricultural societies. In 2019, www.FarmFood360°.ca received 65,500 visitors and 600,000 views.

Using 360° cameras and virtual reality technology, FarmFood360° gives Canadians the chance to tour real, working farms and food processing plants, all without stepping outside of their homes or classrooms.

The apple orchard tour, filmed at Lingwood Farms in Norfolk County through the 2018 harvest and 2019 spring seasons, was created with support from CropLife Canada and expertise from the Ontario Apple Growers and follows apples from the orchard to market. Several traditional videos accompany each 360° video and dive deeper into specific topics, such as the impact of "Mother Nature" on apple production. Now-retired farmer Murray Porteous discussed how he grows, cares for and harvests apples with the help of his family and seasonal agricultural workers.

The Seasonal Agricultural Worker Program (SAWP) is fundamental in addressing the labour shortages in Canada's horticulture sector; however, the program is often the subject of debate and concern amongst consumers. Many Canadians may not understand how the SAWP benefits apple farmers, as well as the workers travelling to Canada to work on these farms.

Two videos focus on the perspectives of both seasonal agriculture worker, Livian Thompson, and Murray Porteous as his employer. Thompson has been travelling to Canada from Jamaica annually to work on his farm for 20 years. On video, he identified the opportunities the program has provided for his family, such as a college education for his wife and children. Porteous outlines what he hopes the workers can gain by being involved in the program, such as management skills to one day start their own business in their home countries. Other videos cover the importance of integrated pest management, family life on the farm and the process of apple packing and storage at Norfolk Fruit Growers.

In a time when a growing number of Canadians may never have the opportunity to visit a farm in person, FarmFood360° is a window into the world of food production and an introduction to the people who work hard to produce it.

Jessica Sills is Farm & Food Care Ontario communication coordinator.

Guelph Organic Conference and Trade Show

The annual Guelph Organic Conference will have more than 40 workshops at its January 23-26, 2020 event. It is staged at the Guelph University Centre, Guelph, Ontario. Topics to watch for:

- Soil health – from sustainable to regenerative by Sarah Hargreaves
- How farmers can profitably work with chefs by David Cohlmeyer
- 10 essentials of organic orchard management by Pat Johnson

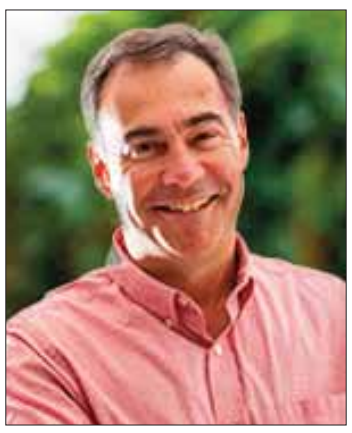
For a printable schedule, go here: https://bit.ly/34seEVR

COMING EVENTS 2020

Jan 14-15	National Potato Council Potato Expo, Las Vegas, NV
Jan 14-15	Canadian Fertilizer Products Forum, Ottawa, ON
Jan 19-22	North America Strawberry Growers' Association Annual General Meeting and Conference, Holiday Inn San Antonio Riverwalk, San Antonio, TX
Jan 23	Les Producteurs de pommes du Québec Annual General Meeting, (Quebec Apple Growers) Plaza Rive-Sud, La Prairie, QC
Jan 23-26	Guelph Organic Conference & Trade Show, Guelph University Centre, Guelph, ON
Jan 28	BCAC Agriculture Gala, Abbotsford, BC
Jan 28-29	Nova Scotia Fruit Growers' Association Annual General Meeting, Old Orchard Inn, Greenwich, NS
Jan 28-30	Manitoba Potato Production Days, Keystone Centre, Brandon, MB
Jan 28-30	Mid-Atlantic Fruit & Vegetable Convention, Hershey, PA
Jan 29	United Potato Growers of Canada, PEI Conference, Red Shores, Charlottetown, PE
Jan 29-30	Ontario Processing Vegetable Industry Conference, Four Points by Sheraton, London, ON
Jan 30-Feb 1	Pacific Agriculture Show, Tradex, Abbotsford, BC
Feb 5-7	Fruit Logistica, Berlin, Germany
Feb 6	New Brunswick Potato Conference & Trade Show, Ayr Motor Centre, Woodstock, NB
Feb 9-12	International Fruit Tree Association Annual Conference and Tour, Amway Grand Plaza, Grand Rapids, MI
Feb 11-12	British Columbia Fruit Growers' Association Annual General Meeting, Coast Capri Hotel, Kelowna, BC
Feb 18	Ontario Fruit and Vegetable Growers' Association Annual General Meeting, Hilton Fallsview Hotel, Niagara Falls, ON
Feb 19-20	Ontario Fruit and Vegetable Convention, Scotiabank Conference Centre, Niagara Falls, ON
Feb 21-22	International Potato Technology Expo, Eastlink Centre, Charlottetown, PE
Feb 22	Ontario Hop Growers Association Annual General Durham College, Whitby, ON
Feb 24	Fresh Grape Growers of Ontario Annual General Meeting, Board Office, 7 pm St. Catharines, ON

RETAIL NAVIGATOR

Would you pay 15 cents more a week for quality local food?



PETER CHAPMAN

We've all seen the signs in our local produce departments proclaiming support for local growers. Consumers say they want their food produced locally, wholesalers say they want to distribute it and retailers say they want to sell local produce. Are these just sentiments to make us feel good that we're doing the right thing?

Producing and supplying food is a complicated challenge. We have climate change, trade agreements, politics, supply chain networks, retailer consolidation, consumer demand and so much more impacting where and how our food gets into our homes. It's so disappointing when we continue to import items we can produce locally and some local, seemingly smaller items just don't get the support they deserve.

Garlic is one of those items. We're able to produce garlic in Canada so there's supply and as Canadians consume approximately 21,000 tonnes a year, there's demand. However, we continue to import more than 90 per cent of that garlic and we're not talking about California or Mexico. Why?

The simple answers are in established supply networks and money. China now produces more than 80 per cent of the world's garlic. Chinese exporters always have it in any format such as whole or minced any time Canadian wholesalers need it. China's yield per acre is 11 times greater than Canadian farmers; China pays considerably less for labour. Their food safety requirements are significantly less costly. All of this adds up to a price discrepancy at the shelf – which for true cooks -- is a relatively minor one.

In a recent price check at our local store, I found Canadian garlic selling for the equivalent of $14.00 per kg and Chinese garlic selling for $2.39 per kg. We know many consumers will just opt for the cheaper product. How can we blame them?

But if consumers knew the whole story, the purchase decision might change. The average Canadian household consumes 1.3 kg of garlic per year, which means the premium for Canadian garlic would only be $15.09 per year or .29 cents per week per household. It's likely half of that consumption is at restaurants and institutions, so the average household grocery bill would only be $7.55 higher per year – at 15 cents per week.

One pioneer in this country's garlic industry is Jackie Rowe from The Garlic Box in Hensall, Ontario. Jackie and her husband Jim have been committed to building a Canadian garlic industry for more than 20 years.

"We know China will dump inferior product that can be up to a year old so there will always be a price difference," she said. "Finding partners throughout the value chain who are willing to help educate consumers is proven to work. We're dedicated to get there but it has been an uphill battle."

The solution is more complicated than just convincing consumers. We need local garlic on the shelf and available for sale. In other words, we need change throughout the value chain.

We need wholesalers and retailers to make the commitment to growers that they'll support them as they learn how to grow and store garlic. At the shelf, retailers need to commit to selling Canadian garlic exclusively and stop forcing Canadian growers to add more costs with packaging to differentiate it from the cheap imported product.

Farmers need to increase production and find opportunities to reduce costs per kilogram as volume grows. This includes finding the right varieties and adding mechanization where it will work.

We all need to do a better job telling the story. Consumers certainly need more information about marketplace dumping such as the Canadian International Trade Tribunal case that determined a review was not warranted. Consumers also need to know that Chinese garlic is bleached, lacks organic standards and leaves a large carbon footprint in shipment.

One of the great things about the food industry is the power consumers have every week when they buy their groceries. We've seen examples such as French's Ketchup where consumer opinion affected moving product off the shelves – and we need it in garlic.

Politics, Chinese bans on Canadian products such as canola, pork and meat, questionable agricultural practices – and bleach aside – why would we want to depend on another continent for something we can produce here in Canada for only 15 cents more per household per week?

A viable, safe, sustainable Canadian food industry will only be there to feed us when we support it.

Jackie and Jim Rowe, Hensall, Ontario.

Peter Chapman is the author of á la carte: A Supplier's Guide to Retailers' Priorities and the president of SKUFood.

Peter Chapman is a retail consultant, professional speaker and the author of A la Cart-A suppliers' guide to retailer's priorities. Peter is based in Halifax N.S. where he is the principal at GPS Business Solutions and a partner in SKUfood.com, an on line resource for food producers. Peter works with producers and processors to help them navigate through the retail environment with the ultimate goal to get more of their items in the shopping cart.

FLOWER QUIZ

Know these flowers?

KAREN DAVIDSON

While it's frosty outside, take an amble down memory's lane to last spring and summer. These flowers remind us of the diversity of horticulture.
Answers on page 26.

FOCUS: GRAPES, VINEYARDS AND BERRIES

International Cool Climate Wine Symposium comes to Canada

Photo by Glenn Lowson

A Fizz Club tasting of Canadian-made sparkling wines.

> **“The climate is changing and changing rapidly. ICCWS 2020 is a chance for cool climate winemakers, like myself, to get on top of the science and experiences from around the world to ensure they are relevant in this fast changing, and highly competitive environment.”**
>
> **~ BRIAN SCHMIDT**

With more than 50 confirmed international speakers, the International Cool Climate Wine Symposium (ICCWS) is coming to Canada for the first time this summer.

From July 12 to 16, 2020, leading researchers, educators, winemakers and grape growers from around the world will gather at Brock University in St. Catharines, Ontario for the 10th instalment of the symposium.

Brock’s Cool Climate Oenology and Viticulture Institute (CCOVI) is planning the event, alongside its research and industry partners across the country.

The federal government is supporting ICCWS with $250,000 in funding through the Federal Economic Development Agency for Southern Ontario. The funding, secured by the Grape Growers of Ontario, is part of a new federal tourism strategy.

The symposium, which takes place every four years, will focus on how climate change is driving innovation in the grape and wine industry.

“This is an issue that impacts all cool climate wine regions,” said CCOVI director Debbie Inglis. “The ICCWS will give the foremost experts in viticulture, oenology, wine business, sustainability and science communications the chance to share their cutting-edge research findings and discuss innovative practices that can help ensure the vitality of cool climate grape growing and winemaking.”

Nobel prize-winning physicist Brian Schmidt has been named as the opening keynote speaker. Schmidt is an expert in issues of climate change and has his own cool climate vineyard and winery. He is also the vice chancellor and president of the Australian National University.

“The International Cool Climate Wine Symposium is where the world of science and industry gets together every four years to better understand how to make outstanding wines in cool climates,” said Schmidt.

“The climate is changing and changing rapidly. ICCWS 2020 is a chance for cool climate winemakers, like myself, to get on top of the science and experiences from around the world to ensure they are relevant in this fast changing, and highly competitive environment.”

Conference registration is now open and until February 15 2020 delegates can take advantage of early bird pricing at $800. This is a saving of $350 off the total conference fee. This includes access to research seminars, masterclasses, wine tastings and workshops. There are a number of sponsorship and tradeshow opportunities throughout the conference.

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.

For more information, a full list of speakers and to register visit iccws2020.ca.

FOCUS: GRAPES, VINEYARDS AND BERRIES

Sour rot in grapes

WENDY McFADDEN-SMITH

Sour rot was a challenge in some Ontario vineyards in fall 2019. It is critical to manage not just the causal organisms but also the flies (Spotted Wing Drosophila as well as Drosophila melanogaster, the common "fruit fly) that can carry them.

Optimizing drying conditions and minimizing fruit injury are critical. Research in Ontario and New York has shown that applications of antimicrobials such as potassium meta bisulphate (KMS at 5 kg/1,000 L) or peroxide (Oxidate) in combination with insecticides were the most effective way to manage the disease.

Information on insecticides registered for SWD control is available at: http://www.omafra.gov.on.ca/english/crops/facts/swd-registrations.htm. The Delegate label was recently expanded to include SWD in grape. The following is an excerpt from the new recommendations for SWD (and other Drosophila species) in grapevines:

Spotted wing drosophila has not been confirmed to be a major pest of grapes in Ontario. However, all Drosophila species can vector the organisms that cause sour rot so controlling this insect may help reduce sour rot. Apply products with sufficient water to ensure complete coverage.

Crop	Product	Rate/ha	REI	PHI	Comments
1	Malathion 85 E	880 mL/1,000 L	12 hours[1]/4 days[2]	3 days	Suppression only.
	Delegate	350 g/ha	12 hours	7 days	No product specific comments.
5	Entrust 80 *	364 mL/ha	12 hours[1]/4 days[2]	7 days	
	Success	182 mL/ha	12 hours[1]/4 days[c]	7 days	
28	Harvanta 50 SL	1.2–1.6 L/ha	12 hours	7 days	

[1] General re-entry. [2] Hand labour (e.g., training, thinning, leaf pulling, hand harvest)

Yellow jackets can damage berries and allow sour rot pathogens to enter. Mako is the only product registered for yellow jacket control. It is registered for SWD in other crops so would have activity in grapes if applied for yellow jackets.

Crop	Product	Rate/ha	REI	PHI	Comments
3	Mako	150 mL/ha	12 hours[1]/6 days[2]	2 days/6 days[3]	Do not use on table grapes.

[1] General re-entry. [2] Hand labour (e.g., training, thinning, leaf pulling, hand harvest).
[3] Machine/hand harvest PHI

Confirm with your winery regarding product acceptability and pre-harvest intervals.
Queen's Printer for Ontario, 2019. Reproduced with permission.

Using Nova Scotia's unique terroir to produce high-quality wines

KAREN DAVIDSON

Chilean viticulturist and winemaker Francisco Diez has taken a personal interest in Canadian terroir, specifically in Nova Scotia. He's left several world renowned wine regions – California's Napa Valley, Frances' Margaux and Spain's Madrid – to work with the vineyard owners and wine makers on the thousand acres under vine in the province.

Since late 2016, Diez has been employed by Perennia Food and Agriculture Inc. as part of its agriculture extension team, with a focus on viticulture. That same year the province of Nova Scotia initiated a four-year Vineyard Development and Expansion Program that supported site assessments for new vineyards, and funded such projects as Diez's Terroir Study of Nova Scotia Wine Regions.

"The focus of the program and the terroir project is really on quality," says Diez. "Quality wines start in the vineyard. Our hope is that the results of this project will be a guide for growers and vinters, based on the unique characteristics of each grape-growing pocket in the province, to grow the best varieties to produce the highest quality internationally recognized wine styles."

After three years Diez says soil analysis and site preparation are considered some of the most important factors. Because Nova Scotia receives a lot of rainfall, tile drainage is fundamental for the establishment of root systems. After that, nutrient management systems must follow.

To date, his terroir initiative has taken a painstaking analysis of 14 different sites including their soils, climate and the phenological stages. Local grape varieties such as L'Acadie Blanc, Leon Millot and Marechal Foch are under study as are Chardonnay, Riesling, Sauvignon Blanc and Pinot Noir. Perhaps most interesting is the analysis for measuring water stress. The calculation of carbon 13 from the must at the end of the season is an indicator if there was water stress during the growing season. A European laboratory in France is conducting the analysis.

The soils analyzed in the study have high quantities of sand whereas one might expect higher amounts of clay. In areas of compaction, there is excessive water in the soil profile.

"If we have compaction, the root system will not develop vertically but rather horizontally," explains Diez.

Continued on next page

FOCUS: GRAPES, VINEYARDS AND BERRIES

Using Nova Scotia's unique terroir to produce high-quality wines

Continued from last page

"The more difficulty it has in releasing water, the less oxygen is available to the vine."

By tracking how the grapes ripen over several years – measuring "green aromas" for instance-- Diez is able to correlate his findings with vineyard practices that can influence the final product.

Nutritional boosts can help. In a cold spring, for example, the uptake of nutrients such as nitrogen may be slow. A foliar application of nitrogen at the rate of one kilogram per hectare has shown to be beneficial in some vineyards while an application of iron can help in the synthesis of chorophyll. Deficiencies such as potassium must also be addressed as it helps regulate acidity and increase the accumulation of sugar in the maturing grapes.

"Everything has a solution," says Diez. "But different strategies can be taken from soil amendments to foliar applications. The bottom line of this project is to give growers the management practices we know will work well to grow healthy grapes they can turn into world-class wines based on the specific characteristics of Nova Scotia's growing environment."

Not everything has been smooth sailing. In 2018, the second year of the terroir initiative, a recorded early June frost impacted all vineyards. In 2019, the spring was cold and wet. After a late start, vineyards weren't harvested up until the first weeks of November.

"This is what growers deal with," says Diez. "It can be challenging for sure, and very disheartening, but that is a key part of my job – helping growers overcome challenges as best they can, and better prepare for future weather events."

Weather events and the impacts of climate change were shared at a conference in Montreal in mid-November. "Tasting Climate Change" was the apt descriptor. Every two years, international experts share knowledge and good practices on climate change effects. For the panel on cool climate wines, Diez was joined by Quebecer, Jean-Benoit Deslauriers, head winemaker of Benjamin Bridge.

Photos top right: Francisco Diez, Perennia Food and Agriculture Inc.

FOCUS: GRAPES, VINEYARDS AND BERRIES

State-of-the-art harvester promises cleanest grapes ever

Brothers Dan (L) and Tim Wiens compared notes on the first run of the Gregoire GX8 harvester in their Niagara-on-the-Lake, Ontario vineyard. An older model was also on hand on September 27, 2019.

The EASYclean on-board sorting system is responsible for 99.8 per cent clean grapes without stems and petioles.

The spacious cab is equipped with a 12-inch touch screen and a multifunction joystick.

The bin capacity can hold up to 4000 liters of grapes with a tipping point of three meters.

Ernie Wiens phones the winery with the brix test.

This is what's left of the grape cluster post-harvester. Photos by Glenn Lowson.

KAREN DAVIDSON

Leave no grape behind. That's a marketer's tag line but it's true for this new Gregoire GX8 harvester which is setting higher quality standards for the Ontario grape industry. It made its first pass the last week of September 2019.

The EASYclean on-board de-stemming system is capable of 99.8 per cent clean grapes. Material other than grapes (MOG) is left in the vineyard as organic matter.

For grape grower Ernie Wiens, the difference between three per cent MOG and zero MOG is significant in terms of delivering premium grapes to Niagara-area wineries.

"It's particularly important in red varieties that the grapes not come in contact with stems that can have negative characteristics on the wine. Even two to six hours of contact can be harmful."

This newest version of a Gregoire harvester was a learning curve during the 2019 harvest. With assistance from Lakeview Vineyard Equipment technicians, sons Dan and Tim Wiens learned how to finetune the machine for optimal results.

For instance, the harvester is adjusted for each vineyard and varietal to take into account pruning methods, fruiting zones and maturity stages. In its first season over 100 acres were harvested, with the easy clean system.

Older versions of French-made Gregoire harvesters were used on other acreages. The Gregoire machine has become a well-known brand in France where mechanization of vineyards started about 30 years ago.

"I've been farming for 44 years," says Wiens. "It was a wonderful year for yields. The quality of fruit in white varietals was above expectation. The reds were also very good."

FOCUS: GRAPES, VINEYARDS AND BERRIES

Strawberry picking cart wins thumbs-up for worker comfort

A strawberry picking cart eliminates the stress of bending over to pick fruit from plasticulture-grown berries. Photo by Glenn Lowson.

KAREN DAVIDSON

Designed for day-neutral strawberries, this homemade strawberry picking cart looks deceivingly simple. It's actually prototype two, season two.

"The original prototype was such that it straddled the plastic and it was tricky to balance," says berry grower Kevin Howe, Alymer, Ontario. "I listened to the feedback of my workers."

So for about $150 for three bicycle tires, some angle iron and a seat, Howe adapted the cart so that it's easy for workers to navigate the 28-inch wide rows without getting caught up in plastic. No steering device is needed. The 30-pound cart is picked up and re-oriented in the next row.

"No one is touching the wheels for food safety reasons," explains Howe. "The workers use their feet to propel the cart forward."

An angled tray – something like a music stand -- holds a reusable plastic container for depositing consumer-worthy berries. Hands are free to pick ripe berries as well as those berries which may appear to be diseased. The bucket of the cart is handy for collecting this plant refuse.

"Sanitation to prevent fruit flies is very important in berries," says Howe. "Soft berries may be an indication that spotted wing drosophila is present. Or anthracnose in berries shows up as black spots. By picking and disposing of these berries as we go, we are reducing disease pressure."

The original idea for a picking cart came from friends in Australia where high labour costs and strict quality standards have pushed the industry to innovate.

"In my correspondence with them, the picking cart wasn't so much about costs as it was about worker comfort," explains Howe. "For us, this cart works very well for three acres of day-neutral berries."

As berry growers will attest, workers could pick a flat of June-bearing strawberries every five feet. But with day-neutral strawberries that yield from spring to fall, the yield is lighter but lasts longer. That's why the picking cart is suitable for this crop.

The picking cart concept passed its test in 2019 with eight carts in use.

Misty the Garden Pixie comes to life through augmented reality

KAREN DAVIDSON

The idea of a brand mascot is not new. Remember the Jolly Green Giant?

Starting in 1928, the man holding a giant pea pod in his arms, became the trusted icon for frozen peas. As the advertising agency story goes, the original idea came from Grimms' Fairy Tales.

Almost a century later, Florida-based Wish Farms is using modern technology to bring its mascot to life. She's Misty the Garden Pixie. She's been featured in a kids' book, but now she's literally flying off the page through augmented reality.

Augmented reality (AR) is an interactive experience showing a real-world environment where objects are enhanced by computer-generated perceptual information, sometimes across multiple sensory modalities. This could include visual, auditory, haptic, somatosensory and olfactory senses.

"I wanted us to be the first in our industry to utilize this technology," said owner Gary Wishnatzki, Wish Farms, Plant City, Florida. "Misty is such an asset to our brand. Bringing her to life in this fun way is just another chance for us to connect and get more people excited about being a Wish Farms berry lover."

Wish Farms is launching a new branded smartphone application. Once the Wish Farms app is downloaded and opened on a smartphone or tablet, the viewer can hover the camera over the Wish Farms label. A video will appear overlaid onto the label through the display.

Marketing director Amber Maloney said: "This first video is a great introduction to Misty. In the future, we can see opportunities to do tailored videos for holidays, recipes, contests, and much more."

The application will be available to the public in January 2020, and compatible with any Wish Farms label across all four berries: strawberries, blueberries, blackberries and raspberries, In addition to the AR video, the app will also feature grower profiles, recipes, tips and a consumer feedback dashboard. For each download, Wish Farms will donate a meal to those in the community that need it most.

Source: Wish Farms October 11, 2019 news release

Agricultural Information Contact Centre: 1-877-424-1300
ontario.ca/crops

Ontario Berry Grower

Ministry of Agriculture, Food and Rural Affairs

Ontario

Strawberry anthracnose fruit rot model adoption

ERICA PATE

Anthracnose fruit rot has been a serious strawberry disease in Ontario since the early 2000s, particularly for day-neutral strawberry producers. In 2016-2017 Mike Celetti, OMAFRA's now-retired horticulture pathologist, led a Growing Forward 2 project 'Integrated Management of Anthracnose in Ontario Strawberries,',where he evaluated a strawberry anthracnose fruit rot model, and determined if there was any resistance to the fungicides currently controlling anthracnose.

This project found that there was resistance to pyraclostrobin, a group 11 fungicide, in anthracnose fruit rot populations in Ontario. Anthracnose management became more challenging as these important fungicides that growers previously relied upon were less effective. However, this project also included work on new management tools to reduce pesticide use; the strawberry anthracnose fruit rot model.

The strawberry anthracnose fruit rot model was developed by MacKenzie and Peres for growers in Florida. However, here in Ontario we have different climatic conditions, so this model needed to be validated here before growers began using it. Plots were established in Simcoe and Cedar Springs, and were treated with four treatments including the standard seven-day schedule many growers currently use, and applications when the model indicated a 'medium' and 'high' risk. Results showed that by using this model when a medium and high risk was triggered, fungicide applications were reduced by 7%- 33% compared to a seven-day schedule, without compromising disease control, yield, or berry quality. Reducing fungicide use will, in turn, reduce the risk of resistance developing in the future.

Moving forward from this project in 2016-2017, berry growers had more information on anthracnose management: a) resistance to group 11 fungicides was present in Ontario strawberries; b) there are limited fungicide options for strawberry anthracnose management; and c) the strawberry anthracnose fruit rot model has the potential to reduce fungicide applications for Ontario berry growers. With limited fungicide options and the risk of resistance being present, any tool to help growers reduce fungicide use and make management decisions is valuable.

In 2018 the Berry Growers of Ontario received funding from the Canadian Agricultural Partnership to further Ontario's experience with this model and assisted five Ontario strawberry growers to adopt the strawberry anthracnose fruit rot model in 2019. Each grower had a weather station that monitored precipitation, temperature, and leaf wetness installed in their day-neutral strawberry fields. The growers could access a website where the model was available. The model would let growers know if there was a 'high', 'medium', or 'low' risk of an anthracnose infection based on the conditions. The participating growers sprayed according to the model and provided feedback on their experience using the model.

The five participating growers have different operations and had different experiences with the model. Most participants found the weather data helpful and interesting. One grower commented that having this information available and learning about the different conditions that lead to an anthracnose infection was helpful. Another grower said that this was a 'great tool.' However, although this model works, it may not be a good fit in all operations. One concern is managing other pests; this model may recommend spraying every 10 days, versus the standard seven days. While this reduces anthracnose fungicide application, there are other pests that need to be managed regularly, such as spotted wing drosophila. Another factor is the cost; will the reduction in the number of fungicides cover the cost of the weather station?

There are many factors to consider when deciding whether using this model is a practical choice for your operation. Join us at the Berry Growers of Ontario annual meeting on February 18, 2020, in Niagara Falls to learn more about this project and to hear from the participating growers on their experiences with the model. Contact Kevin Schooley at kevinschooley@bell.net to register for the event.

Thank you to the participating growers for using this model on their farms this season and providing feedback!

This project was funded in part through the Canadian Agricultural Partnership, a federal-provincial-territorial initiative.

Erica Pate is an OMAFRA fruit specialist.

Berry anthracnose monitoring

Berry anthracnose

Collecting anthracnose data from an Ontario strawberry field in 2019.

ONTARIO BERRY NEWS

Berry Growers of Ontario and Ontario Fruit and Vegetable Convention Program

The Berry Growers of Ontario annual meeting and the Ontario Fruit and Vegetable Convention are quickly approaching. The annual meeting is Tuesday, February 18, followed by a full-day Berry session Wednesday, February 19, at the convention. We have speakers from the around the world (New Zealand, California, South Carolina) and experts and growers from Ontario joining us for these two days- don't miss out!

One of the important discussions this year is the re-evaluations and phase-outs of pesticides that will affect berry growers in the next couple years. Chris Duyvelshoff, OFVGA, is joining the program to discuss multiple re-evaluations that will affect growers, including captan. Captan has recently undergone a re-evaluation and subsequently label changes will be made, which will see the restricted entry interval (REI) for hand harvest in berries increase to 5 or 6 days- see the table below for all the label changes. This will change current disease management practices. Dr. Guido Schnabel from Clemson University will join the Berry program to speak on managing strawberry diseases with reduced usage of captan products. Matt Peters, N.M. Bartlett, and Matt Tigchelaar, Tigchelaar Berry Farm, will also be speaking on their experience using alternatives to captan for disease management in Ontario. Don't miss these discussions on how to handle the coming changes.

REQUIRED LABEL CHANGES TO CAPTAN LABEL

Crop	REI	Maximum Applications	Notes
Strawberry	9 days (hand set irrigation), 6 days (hand harvesting), 12 hours (all other activities)	6 applications, 7 day re-treatment interval	Apply maximum 2.8 kg active ingredient/ha = **3.5 kg/ha product** based on products with 80% a.i.
Raspberry	7 days (hand set irrigation), 6 days (hand harvesting), 12 hours (all other activities)	6 applications, 7 day re-treatment interval	Apply maximum 2 kg active ingredient/ha= **2.5 kg/ha product** based on products with 80% a.i.
Blueberry	6 days (hand set irrigation), 5 days (hand harvesting), 12 hours (all other activities)	6 applications, 7 day re-treatment interval	Apply maximum 1.8 kg active ingredient/ ha = **2.25 kg/ha product** based on products with 80% a.i.

REI = Restricted-Entry Interval. REIs longer than 12 hours apply to hand labour tasks. If the REI for hand harvesting and the pre-harvest interval (PHI) are different, follow the longer of the two intervals. Mechanical harvesting could occur after the PHI provided there is no worker contact with treated foliage. If the REI is 12 hours and a PHI is not specified, entry is not permitted until after 12 hour

TUESDAY, FEBRUARY 18, 2020 – EMBASSY SUITES, NIAGARA FALLS

9:00 am	Introduction and Welcome	
9:10 am	Grower SWD Monitoring Update	Hannah Fraser & Erica Pate, OMAFRA
9:25 am	Grower Profile, Proulx Farms	Nicolas Simard, Proulx Farm
10:10 am	Growing in Substrates	Shawn Mallen, AMA Hort
10:40 am	MyIPM & Understanding Diseases with Art and Technology	Guido Schnabel, Clemson University
11:10-11:40	Leaf Reflectance Responses by Strawberry Plants to Fertilizer Regimes and Arthropod Stressors	Christian Nansen, UC Davis
11:40-12:10	Digitizing Your Operation - It's Easier Than You Think!	John Cooper, Strawberry Tyme, Jeff Chemeres, Croptracker, Inc.
12:10	Lunch BGO Annual Meeting	
	Marketing Track-	**Production Track –**
2:00 pm	**How to Develop a Brand Persona?** What is a brand and how to maintain your brand voice?	**Using a Strawberry Anthracnose Model in Ontario** - Erica Pate, OMAFRA
2:30 pm	Nicole Marenick, Maren Marcoux Marketing	**Spray Volume and Travel Speed- panel**, Strawberry Tyme, James Herrle, Herrle's Country Farm Market, David Manktelow, Applied Research and Technologies Ltd. & Jason Deveau, OMAFRA
3:00 pm	**Responding to Negative Media Reactions**, speaker TBC	**Project Update- Novel Approaches to SWD Monitoring**, Wendy McFadden-Smith, OMAFRA
3:15		**Project Update – 'Waiting Bed' Production**, Erica Pate, OMAFRA
3:30 pm	Round tables	
	1. Using New SWD Traps on Your Farm	Erica Pate, OMAFRA
	2. Managing media	TBC
	3. Using Different Spray Adjuvants and Managing Coverage	David Manktelow, Applied Research and Technologies Ltd. Jason Deveau, OMAFRA
5:00 pm	Adjourn	

ONTARIO BERRY NEWS

Berry Growers of Ontario and Ontario Fruit and Vegetable Convention program

WEDNESDAY, FEBRUARY 19, 2020 –
SCOTIABANK CONVENTION CENTRE, NIAGARA FALLS

9:25 am	**Introduction and Welcome**	
9:30 am	Re-evaluations- What Are the Impacts for Berry Growers?	Chris Duyvelshoff, OFVGA
10:00 am	Optimization of Drone-Based Releases of Predatory Mites to Control Spider Mites in Strawberry Fields – Cutting-Edge Research	Christian Nansen, UC Davis
10:30 am	Managing Berry Diseases with Reduced Captan Use	Guido Schnabel, Clemson University
11:00 am	SWD Insecticides: Impact on Natural Enemies	Philip Fanning, Michigan State University
11:40-2:00 pm	Lunch and Visit the Trade Show	
2:00 pm	New Potential Management Options for Cyclamen Mite and Spotted Wing Drosophila in Berry Crops	Justin Renkema, AAFC
2:30 pm	What's New in SWD Management	Philip Fanning, Michigan State University
3:00 pm	Purespray Green in a Captan Replacement Program	Matt Peters, NM Bartlett, Matt Tigchelaar, Tigchelaar Berry Farm
3:30 pm	New and Upcoming Berry Varieties	Charles Keddy, Keddy Nursery Inc, Frederick LaForge, Production Lareault

RISK MANAGEMENT

Tweaks recommended to business risk management programs

Federal, provincial, and territorial (FPT) Ministers of Agriculture met face-to-face on December 17, the second time this year to initiate action on a number of key proposals to improve support to Canadian producers. This meeting follows what has been a difficult year for many producers, mainly related to bad weather, the CN work stoppage and market access issues.

Ministers recognized that the risks facing producers have changed, particularly with respect to climate and international trade, and that current programs may need to evolve to meet their needs. To start to address these changing risks, Ministers made targeted improvements to the AgriStability program.

Ministers asked officials to change the treatment of private insurance for the 2020 program year. In addition, understanding that administrative burden is an issue for many, in particular for smaller producers, Ministers agreed to launch a pilot in select jurisdictions to make applying for support easier, by using tax return information to simplify the application process.

Ministers' engagement on key business risk management programs signaled a direct response to the changing risks faced by producers. The business risk management programs aim to provide producers with tools to ensure the viability of their operations and to manage risks largely beyond their control.

Officials are to report back to Ministers in April 2020 on an assessment of the business risk management programs to ensure they are aligned with their intended objectives. In addition, officials are to develop options to make the programs more effective, agile, timely, and equitable for producers. In particular, officials are to evaluate the impact of changes to the reference margin limit and changes to eligible expenses under AgriStability.

According to Mark Wales, chair safety nets for Ontario Fruit and Vegetable Growers' Association, "This announcement today means nothing for horticulture or any other non-supply managed commodity." Two minor tweaks are proposed to the Business Risk Management program. The first proposal is not to include private insurance payments as eligible income. The second measure is a pilot that would allow farmers to file AgriStability on a cash basis instead of accrual accounting. The next annual conference will be held in Guelph, Ontario in July 2020.

Provincial ministers of agriculture met with federal minister Hon. Marie-Claude Bibeau

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CROP PROTECTION

Crop protection wishes for the next decade

CHRIS DUYVELSHOFF
CROP PROTECTION ADVISOR, OFVGA

Photo by Glenn Lowson

As you read this, the calendar will have turned over to January and we'll have begun another year – the first of the 2020s! Looking back on the past decade, crop protection has had some dramatic changes since 2010. We've had restrictions placed on most of the old standby materials, seen big growth in the availability and use of biological controls, have far greater awareness of maximum residue limits (MRLs), and begun to develop electronic records of crop protection applications on cell phones. Looking forward to 2030, what would the wish list look like for the next 10 years?

Global registrations

In 2007, a substantial step was taken towards streamlining access to crop protection products globally. The world's first relatively "global" registration for a new active ingredient was submitted by the former DuPont. The compound chlorantraniliprole, the first diamide insecticide marketed in Canada, was submitted for registration in the United States, Canada, Ireland, United Kingdom, Italy, Australia, and New Zealand simultaneously. Within less than a year and half, the product was registered for use across the majority of three continents. By sharing review work, the registration was completed faster than average compared to independent reviews by these countries. It also established comparable use patterns and MRLs across the globe, balancing the competitive advantage and facilitating trade.

Now a dozen plus years later, global registrations have continued to play a role in several new active ingredients. Unfortunately, however, there are also many where they do not. Selective registrations, however strategic for the registrant, create competitive imbalances and trade challenges resulting from MRL discrepancies. If the majority of new registrations by the end of the next decade were to come from global submissions – indeed a lofty goal – that would go a long way in alleviating problems associated with unequal product access and within commodity trade.

Global re-evaluations

Despite progress in global registration, there has yet to be any real movement on a global re-evaluation strategy. For example, the United States, European Union, and Canada are completely out of sync when it comes down to dealing with reviewing products that are already on the market. This is beginning to cause as much, if not more disruption to agriculture competitiveness and trade markets than the initial registration issue. Interestingly, as the re-evaluation reviews in the United States and Canada operate on 15-year cycles, that first global registration of chlorantraniliprole will soon be up for re-evaluation review. The original analysis that led to its registration was an aligned and coordinated effort between multiple countries. Will that simply be abandoned, and will everyone go their separate ways now just because it has entered the re-evaluation phase?

There is some potential improvement on this front, well at least some discussion, as the recent North American Free Trade Agreement (NAFTA) Trilateral Working Group on Pesticides raised this issue with regulators from the three countries in September 2019. In their newest workplan, the NAFTA partners, notably the Pest Management Regulatory Agency (PMRA) and the Environmental Protection Agency (EPA) have indicated a desire to identify opportunities for shared review work in the context of re-evaluation reviews.

The level of cooperation required to bring this equal with the global registration process is a long way off. However, if at least Canada and the United States could make some progress on aligning the scheduling of re-evaluation reviews and collaborate on major science policy, that would be a big step forward in the next decade.

New technology

The pace of new introductions of traditional conventional or even biological crop protection materials continues to slow. In PMRA's annual reports, the number of new active ingredients of either conventional or biological origin registered each year is reported. The agency registered 14 new active ingredients in 2014-2015, 18 in 2015-2016, 10 in 2016-2017, and just seven in 2017-2018. This is all despite research and development budgets at major crop protection companies being as high as they've ever been. New highly effective compounds that meet the increasingly stringent human health and environmental safety requirements of global governments are getting harder to discover.

Fortunately, we will see many commercial introductions of new crop protection technologies in the coming decade. Ribonucleic acid interference (RNAi) has huge potential for providing alternative crop protection solutions across the board (see The Grower for January 2019). On the plant genetics side, clustered regularly interspaced short palindromic repeats (CRISPR) offers genome editing technology with simplicity and accuracy that was only dreamed of a short time ago to enhance crop resilience. Producers must be willing to adopt and try alternate approaches for crop protection. The status quo is becoming less and less an option.

Public trust

Consumers are asking more questions than ever before about how food is being produced. The public trust of the consumer has influence on policy that will affect how producers can do their jobs. It is up to us as producers and farm organizations to communicate the message to the public about why and how we go about crop protection. There is absolutely nothing to hide. Canada has a world-class regulatory system to stand behind. Just like actual crop protection, when it comes to public trust, an ounce of prevention is worth a pound of cure. Communication alone may be the most important innovation in the coming decade.

FLOWER QUIZ

Know these flowers? Answers

1. blackberries (photo by Wish Farms)
2. sour cherries (photo by Glenn Lowson)
3. kale
4. dill (photo by Glenn Lowson)
5. asparagus
6. Caribbean pumpkin (photo by Glenn Lowson)

CROP PROTECTION

BASF launches Cevya fungicide in Canada

BASF is introducing Cevya fungicide, now registered in Canada for horticultural use in 2020.

Unlike other demethylation inhibitors (DMIs) in the market, Cevya fungicide is the first isopropanol-azole. As Anne McRae, technical services rep-horticulture, BASF explains, the molecule is structured in a way that it has more mobility. It can help bind enzymes that break down cell walls.

"Cevya fungicide is a systematic fungicide providing preventative and post-infection control of key diseases for growers challenged with resistance and seeking to maximize their yields," said Trevor Latta, brand manager for corn, soybeans and horticulture, BASF Canada. "The fungicide controls biotypes that may have developed resistance to other Group 3, 7, 9 and 11 fungicides."

The active ingredient, mesentrisluconazole, has been branded as Revysol, worldwide.

Apple and pear growers can expect control against existing DMI-resistant apple scab while providing additional control options for powdery mildew. For growers seeking confidence to control early blight in potatoes, the application of Cevya fungicide provides a higher level of control over other chemistries that are losing their efficacy on isolates of the early blight pathogen. Grape growers can use Cevya to control powdery mildew. Stone fruit growers can control brown rot, blossom blight and powdery mildew.

Cevya represents the first group 3 product in BASF's horticulture portfolio. Growers can learn more about Cevya fungicide and all other BASF Agricultural Solutions products by contacting their local BASF representative or by visiting AgSolutions.ca/horticulture.

Cevya fungicide is not for sale or use in Ontario (pending pesticide classification).

Source: BASF Canada, November 18, 2019

Photo by Glenn Lowson

Prowl herbicide label expanded

JIM CHAPUT

Prowl H2O herbicide is now registered for control of labelled weeds in garlic, dry bulb shallots in Canada and on transplanted leeks grown on muck soil in eastern Canada and British Columbia. The herbicide was already labeled for use on a number of crops in Canada for control of several weeds.

These minor use projects were submitted by Agriculture & Agri-Food Canada (AAFC-PMC) as a result of minor use priorities established by growers and extension personnel. The following is provided as an abbreviated, general outline only. Users should be making weed management decisions within a robust integrated weed management program and should consult the complete label before using Prowl H2O herbicide.

Prowl H2O herbicide is toxic to aquatic organisms and non-target terrestrial plants. Do not apply this product or allow drift to other crops or non-target areas. Do not contaminate off-target areas or aquatic habitats when spraying or when cleaning and rinsing spray equipment or containers. Do not apply Prowl H2O herbicide more than once in two consecutive years.

Follow all other precautions, restrictions and directions for use on the Prowl H2O herbicide label carefully.

For a copy of the new minor use label contact your local crop specialist, regional supply outlet or visit the PMRA label site.

Source: Jim Chaput, OMAFRA, minor use coordinator, November 21, 2019

Crop(s)	Target	Rate (L/ha)	Application Information	PHI (days)
Shallots and garlic, mineral soil, EASTERN Canada	Labeled weeds	2.2 – 3.3	Maximum of 2 applications per year for shallots. For shallots, the interval between the two applications must be at least 21 days. For shallots, apply at 2-6 true-leaf stage. Maximum 1 application per year for garlic. For garlic, apply after the crop has emerged, up to the 4 true- leaf stage.	45
Shallots and garlic, mineral soil, WESTERN Canada		2.42	One application per year for shallots and garlic. For shallots, apply at the loop to the 2 true-leaf stage. For garlic, apply after the crop has emerged, up to the 4 true-leaf stage.	45
Shallots and garlic, MUCK soil		6.6	Apply at the loop and 2-true-leaf stage of shallots. For garlic, apply after the crop has emerged, up to the 4-true-leaf stage. Maximum of two applications per year (minimum 3 weeks interval between applications).	45
Transplanted leeks on muck soil EASTERN Canada and BC		6.6	Apply one application after transplanting leeks	30

Gowan acquires active ingredients from Bayer

Gowan Crop Protection Limited has entered into agreements with Bayer to acquire rights to the active ingredients fenamidone and pencycuron. The acquisition includes product registrations and trademarks including Consento, Reason, Monceren, and Prestige, and related intellectual property and labels for both fungicides. The transactions closed December 1st, although Bayer and Gowan will work together over the next several months to facilitate an orderly hand-off and to maintain quality customer service in all geographies. The financial terms of the agreements were not disclosed.

Pencycuron is a foliar and seed treatment product for the control of diseases originating from Rhizoctania solani in various crops including cotton, rice, potatoes, turf and vegetables. It has broad presence in Japan, Brazil, India and Russia, among other countries.

Fenamidone, used in Canada, is a product for control of diseases originating from water molds or the oomycetes class of fungi, key among them being downy mildew, late blight and early blight on grapes, vegetables, potatoes and ornamentals. With sales in the U.S., Mexico, India, Russia, and Brazil, fenamidone is a critical tool for many growers around the world.

Source: Gowan Crop Protection December 4, 2019 news release

Late blight in potatoes