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LEADERSHIP Great expectations motivate Gen Z



The Grape Growers of Ontario is nurturing a young growers' group that has its own communications and government relations committees. It's a shadow cabinet, if you will, for a sector that has an annual farmgate value of \$112 million. The Next Generation Committee is chaired by Jessica Solanki (L) at Niagara-on-the-Lake. She is joined by fellow growers Connor Watson and Mark Lepp. Photo by Marcella DiLonardo.

KAREN DAVIDSON

Leaders rarely lobby to replace themselves. A democratic process is required to limit terms, to ensure new perspectives, to train up the executive suite.

navigate their way through dynamic personalities and politics at municipal, provincial and federal levels while driving toward strategic goals. The Grape Growers of Ontario (GGO) is no stranger to this terrain. Born in 1947, the Association represents 500 growers and a \$112 million industry that's intertwined with agri-tourism areas across the province: Niagara, Lake Erie North Shore, Prince Edward County and Georgian Bay. Despite its many achievements to date, the Association still faces the need to reinvent itself in a competitive world. Again, from the Harvard Business Review, "traditioned innovators use the past to help direct success while creating a forward-focussed culture that allows for innovating, failure, learning and growth." For the GGO, it was important to reimagine the future after COVID. Part of that strategic plan was launching the Next-Generation Committee in spring 2023. Under the leadership of Debbie Zimmerman, GGO CEO, the

association secured provincial funding for skills development including a transition planning workshop, leadership training, a public speaking and social media workshop, and media training. As opportunities present, members of the Next-Generation committee are invited to conferences and events, and when possible, help to staff the GGO booth. "Several Next Gen committee members have participated in government meetings to represent the future of the industry in the context of the modernization of alcohol retailing in Ontario," says Zimmerman, a political veteran herself, having served two terms as the regional chair of the Region of Niagara. "Their perspectives were well received."

The Harvard Business Review, in a January 2022 article "Reinventing your leadership team," states what's expected of leaders today.

"We used to expect, for instance, that leaders could be either great visionaries or great operators. No longer. Companies now need their top people to perform both roles-to be strategic executors, in other words. They're also expected to be tech-savvy humanists, high-integrity politicians, humble heroes, globally minded localists, and traditioned innovators."

Associations are not corporations primed for profit. Nonetheless, they're complex legal entities that must

Continued on page 3



AT PRESS TIME...

Mitigating risks of spreading potato wart

The Canadian Food Inspection Agency (CFIA) is seeking to replace the existing Potato Wart Domestic Long-Term Management Plan. Consultations are now open until January 31, 2024.

Specifically, the agency is seeking comments on several guidance documents and recommendations related to potato wart, including:

• revisions to the categorization of potato wart primary contact and other contact fields

• options for mitigating the risk of potato wart spread

• seed potato production in fields associated with potato wart On its website, the CFIA welcomes comments from:

- potato producers and packers
- industry associations
- · seed potato industry
- producer groups
- commodity/value chain associations
- consumers and interested public parties

• other government departments/agencies, including provincial/territorial and municipal

- trading partners
- other special interest groups
- other government organizations

Background information can be found at

- https://shorturl.at/djsBV:
- Questions and answers: Risk
- management documents
- Potato wart or potato canker –



Synchytrium endobioticum • Potato wart in Prince Edward Island

• Prince Edward Island potato wart index fields

• Information on the Potato Wart Domestic Long Term Management Plan

• Potato wart fact sheet To get copies of the documents and share ideas or comments, send an email to cfia.potatosection-sectiondespommesdeterre.acia@ inspection.gc.ca.

Source: Canadian Food Inspection Agency December 4, 2023 posting

Ontario to allow beer, wine and cider in corner stores

The Ontario government has announced that no later than January 1, 2026, the province's consumers will have access to beer, wine, cider and ready-todrink spirits in convenience, grocery, and big box grocery stores.

This news has garnered a positive response from industry. On December 14, a letter was signed by Peter Bethlenfalvy, minister of finance, Mathias Oppenlaender, chair, Grape Growers of Ontario (GGO) and Debbie Zimmerman, CEO, GGO and shared with members. A suite of economic supports will be offered to the sector's 500 growers that will help level the playing field, promote local products and support local jobs.

These measures include: • Intending to introduce legislation that will, if passed, eliminate the 6.1 per cent wine basic tax at on-site winery retail stores;

• Extending and enhancing the VQA Wine support program beginning in 2024-25 for up to five years;

Continuing to work with the LCBO to provide more programs, promotions and strategies to support local economic development;
Extending the Wine Marketing

Extending the while warkeninFund for up to five years;Supporting a viticulture plan;

• Setting up a wine and grape industry sector table as a future engagement forum to discuss opportunities afforded by the new alcohol marketplace; and • Maintaining a number of existing marketplace guardrails and extending them to new retail stores, including the wine minimum pricing (\$10.95 in grocery and convenience stores), shelf space requirements and prohibition on trade spend. The government has also committed to undertaking a targeted review of alcohol support programs, taxes, fees and mark-ups.



NEWSMAKERS





Alison Robertson, Deanna VanderZaag and Ben Murray, OFVGA

Joe Da Silva

The Ontario Produce Marketing Association honoured the industry's brightest and best at its annual gala event on November 24, 2023. The Fresh Award was won by **Leah Hardy**, Wonderful Sales. The Cory Clack-Streef Produce Person of the Year was won by **Michael Catalano**, Wonderful Sales. The Outstanding Achievement Award was won by the **Ontario Fruit & Vegetable Growers' Association** for its More Than a Migrant Worker program. The Lifetime Achievement Award was won by **Joe Da Silva**, Ippolito Produce.

2023 also marked the inauguration of the Women's Produce Network Award, recognizing the outstanding achievements of women in the produce industry. The three winners were: **Jennie Coleman**, Equifruit; **Nadia Kobylka**, Vineland Grower's Cooperative, **Zanelle Hough**, Nature Fresh Farms.

The Ontario Federation of Agriculture has elected dairy/beef farmer and cash cropper **Drew Spoelstra** as the next president. The Spoelstra's farm near Binbrook, the southeast corner of the City of Hamilton. He's been a director for the last decade and on the executive committee for the past seven years. The organization represents 38,000 farm members.

The Agricultural Adaptation Board has elected its 2024 roster. **Tracy Gubbels**, representing Ontario processing vegetable growers, joins **Mark Wales**, garlic and vegetable grower, in representing horticulture on the 16-member board.

The Prince Edward Island Potato Board recognized the extraordinary contributions of four individuals at its annual banquet. **Brenda Simmons** retired in July 2023 after being assistant general manager of the PEI Potato Board for 25 years. She worked with 16 different board chairs over the years.

Ray Keenan was presented with an award for his commitment to the PEI Potato Industry. Ray, with his brother **Alvin**, operate Rollo Bay Holdings in Rollo Bay, PEI.

Andy Walker was also acknowledged for his exceptional contributions to both the PEI Potato Industry and the broader, local agriculture sector. Andy is well known for his role as the former editor of the *Island Farmer*, which he began in 2000 and continued until retirement earlier in 2023.

Another recently retired Potato Board staff member, **Mary Kay Sonier**, was also recognized for her role as seed coordinator, responsibility for the Elite Seed Farm in Fox Island, PEI and was the editor and publisher of the industry's magazine, *PEI Potato News*.

At the Dec 19 board meeting of Potato





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Organic & Small-Scale Farms Katherine Jouvet, Agr. katherine.jouvet@norseco.com \$ 514 386-0277 Growers of Alberta, **Alison Davie**, North Paddock Farms Ltd., was elected chair. **Tony Kirkland**, Sandhills Seed Potatoes Ltd., was elected vice-chair. They are joined by new director-atlarge **Ryan Jensen**, Klearidge Farms Ltd and the following directors: **Matt Visser**, Norbest Farms Ltd., **JP Claassen**, Prairie Spud Farms, **Delbert Vossebelt**, D.V Farms Ltd., **Lloyd Ypma**, Quattro Farms.

Alison Davie

The Grape Growers of Ontario (GGO) has announced the passing of **Paul Bosc Senior**, 88. As a fifth-generation grape grower with more than 50 years of experience in growing grapes and making world-class wine, his extensive knowledge and viticulture research have made a significant impact on Ontario's grape and wine industry. In 2017, Paul Sr. was presented with the GGO's Award of Merit in recognition of the innovative contributions he had made to the grape and wine industry throughout his lifetime.

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COVER STORY

Great expectations motivate Gen Z



<image>

Ontario premier Doug Ford (L) visited Niagara vineyards to see the damage caused by a freak cold snap in January 2022. Jessica Solanki was on hand to explain how climate change is affecting her generation's future in the vineyards.

"My agriculture career is cool because I get to work with innovative equipment like this.

~ JESSICA SOLANKI

Continued from page 1

At press time, the Ontario government announced that beer, wine and cider sales will be allowed at convenience stores and other outlets no later than 2026. Zimmerman, now a seasoned CEO for 20 years, has astutely invited these young growers to key meetings for more than good optics. Their authentic stories have helped to sell politicians that there is long-term viability for the sector.

This announcement comes at an important juncture for Jessica Solanki, chair of the Next-Generation Committee. She's accustomed to a faster pace of technology adoption, analyzing progress in weeks and months, not years. Still, the legislative farm, Huebel Grape Estates, which owns 230 acres of vineyards near Niagara-on-the-Lake and custom operates another 770 acres. She graduated from Brock University's Oenology and Viticulture program in 2021. She then did a stint in winemaking at Stratus Vineyards, Niagara-onthe-Lake. And now makes wine for the family virtual winery, Liebling Wines.

"I loved the lab and technology advances," she recalls, but came to recognise that her passion was back on the home farm. With leadership in her genes -- her father Matthias Oppenlaender is the current GGO chair – she's now a vineyard manager at the farm.

As part of the Gen Z cohort, she grew up in the digital age. Her background spotlights both a technical bent and commitment to change, with an enthusiasm that ranges far afield. generational land," she says.

This last sentiment reveals her sense that the 20 people on the Next-Gen Committee want to reach beyond their usual circle to become more inclusive. To such end, she and other Committee members participate in schoolroom talks as well as Brock University and Niagara College. She's keen to communicate her passion regarding the multitude of careers available in the grape and wine industry.

Connor Watson, another Next-Gen member, holds the same view. He's completed the second harvest since his return to Watson Vineyards, Niagara-onthe-Lake. He graduated with a Bachelor of Commerce degree majoring in food and agriculture

at the University of Guelph. "I see lots of opportunities for "The demographics of current farmers opens the door for vineyard management roles."

Regarding his Next-Gen Committee membership: "It's a good tool to expand the phone book and reach out to other growers."

Fellow committee member Mark Lepp, agrees: "It's important to know your own village." He's keen to find out the stories of other growers and what's happening in the community.

Looking beyond the Niagara area, he says. "Politically, we're the next generation the

government will be dealing with." 2023 has been a pivotal year

for GGO. These next-gen, mobile-first leaders are in a hurry, equipped with not only agronomic skills but the The Grower is "Digging Deeper" with Jessica Solanki, chair of the Next Generation **Committee, Grape Growers of** Ontario. As a vineyard manager at the Huebels Estates Vineyards, Niagara-on-the-Lake, she has stacked scientific education on top of her formative years at the farm. Now she's bringing her leadership smarts to a new level with a group of under-40 growers. This podcast is sponsored by Cohort Wholesale.



timetable set out by the Ontario government is welcome encouragement.

Solanki wasn't always on the path of returning to the family

"Most of all, I want to attract people who do not have individuals who do not come from a farming background, whether it's in winemaking, marketing, research or lab technician work," he says. 0

emotional energy to advocate industry change far beyond their own farmgate.



CROSS COUNTRY DIGEST

BRITISH COLUMBIA How work permits are processed in British Columbia

Recently, the Mexican government informed the Western Agriculture Labour Initiative (WALI) that timelines are increasing from six to eight weeks to process documents for seasonal workers.

WALI general manager Reg Ens took the opportunity to explain to British Columbia farm employers each step of the process. (see chart)

He points out that growers should be aware that timelines may be slightly different across Canada. Each of the support organizations -- FARMS (Ontario, Maritimes) FERMES (Québec) WALI (British Columbia) -processes files in a slightly different way, so growers should defer to their respective organization for final instructions.

"We drafted the image to help us understand and explain the processing timeline and answer the common question, 'why does it take so long to get my workers?" said Ens. "We wanted growers to know that they must have their approved Labour Market Impact Assessment (LMIA) from Service Canada to us at least nine weeks before they want workers. WALI currently does not assist growers with submitting LMIA applications to Service Canada.

Now to the diagram. Once an approved SAWP Mexico LMIA is received by WALI, growers need to confirm the details on the LMIA before it's submitted to Mexico. Mexico has requested a minimum eight weeks



Courtesy of Western Agriculture Labour Initiative

between the time when they receive the request until the worker is scheduled to arrive in B.C. The eight weeks is needed for the Ministry of Labour to enter the request into its system, for the worker to complete the application, for Canada (CVAC) to review and issue the work permit, and for travel arrangements to be finalized.

"If everything goes perfectly, workers can receive their work permits more quickly, but experience says that planning on eight weeks will provide more confidence that

workers will arrive when needed," says Ens. "Growers are still able to adjust (defer) arrival times if they request a change with enough notice."

Approximately 600 farm employers are in the WALI system, although not all may be active. In 2023, we had approximately 5,900 workers from Mexico and 1,500 workers from Jamaica through the Seasonal Agricultural Worker Program. It's not known how many came through the AgStream program.

ALBERTA Spore trapping has led to large reductions in potato spraying

REBECCA WIELER

The Alberta Potato Industry Spore Trapping and Insect Monitoring program is a story of better agronomics, reduced costs to producers and environmental sustainability. The program is led by Promax Agronomy with the University of Lethbridge, working to analyze samples. As well, a large group of volunteers around the province collect the samples.

This program began in the province 10 years ago. Economically, it has reduced expenses by about \$15 million annually to growers. Environmentally, fungicides have been reduced by about 135 tonnes/year and insecticides by about 45,000 L per year. Late blight fungicide applications have dropped from every 10-14 days to spraying when necessary.

Overall, fungicide applications have been reduced by approximately three applications per year. This program gives Alberta potato producers the confidence to spray only when necessary.

The program was developed in 2013 through a research initiative led by Dr. Larry Kawchuk from Agriculture and Agri-Food Canada (AAFC). Dr. Kawchuk determined the methods of sampling, time of day, duration and developed risk models. There are several Burkhardt Spore Samplers strategically placed throughout the growing regions in Alberta. These traps monitor the occurrence of airborne spores of major potato pathogens such as the late blight pathogen Phytophthora infestans, the early blight pathogen Alternaria solani and Fusarium species. The triangulation of the source of

spores can be easily located to quickly eradicate the problem. The insect cards monitor the presence of potato psyllids, green peach aphids and pest predators. These samples are collected by volunteers and analyzed by the University of Lethbridge weekly.

From 2019 - 2022, 3,766 insect cards have been collected and analyzed. As well 5,196 spore vials have been collected and analyzed. This program runs annually from mid-May to early September.

Promax Agronomy leads the program to deploy and maintain the traps. The University of Lethbridge lab is led by Dmytro Yevtushenko and supported by several summer students who assist with the sample analysis. Along with the university analysis team, Promax Agronomy sends out the results of spore and insect samples via a cloud-based spreadsheet, which is updated in real time and summarized in a weekly report.

Over the past decade, the



success would not have been possible without the volunteer network across the province. The program has benefited the industry greatly.

By reducing the number of applications of fungicides and insecticides, the Alberta potato industry shows a positive impact on environmental sustainability. Throughout the life of this project, growers have reduced



input costs through increased confidence in the program. This information provides real time, usable data for producers to make informed decisions regarding best management practices on-farm. This program will continue in the future.

Rebecca Wieler is ag relations coordinator, Potato Growers of Alberta.

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MANITOBA New living lab announced in Manitoba

Federal agriculture minister Lawrence MacAulay has announced a new living lab in Manitoba. This living lab project represents an investment of up to \$9.2 million over five years under the Agricultural Climate Solutions (ACS) - Living Labs program. It will be led by the Manitoba Association of Watersheds which comprises 14 districts.

This living lab aims to accelerate the sector's response to climate change by bringing together producers, scientists and other sector partners, to co-develop, test and evaluate on-farm beneficial management practices (BMPs) on multiple sites across the province. These BMPs, which support nutrient management, water retention, crop and livestock integration, soil health and more, will help store carbon and reduce greenhouse gas emissions,

while providing environmental co-benefits.

In collaboration with partner organizations within the living lab, the Manitoba Association of Watersheds will also encourage knowledge transfer and exchange between local producers, federal and provincial researchers, Indigenous communities, and other partners.

This new project adds to the four living labs launched earlier this year and the nine living labs announced in 2022. With a total of 14 living labs under the ACS - Living Labs program, there is now at least one living lab in every province.

Source: Agriculture and Agri-Food Canada November 15, 2023 news release

CROSS COUNTRY DIGEST

PRINCE EDWARD ISLAND Nurturing the land: A spotlight on Canadian agricultural stewardship

When it comes to aligning agriculture with sustainability, few voices are as insightful as Andrea McKenna, the executive director of the East Prince Agri-Environment Association (EPAA). Formed in 2014, EPAA is a grassroots organization comprised of proactive producers united in a quest for informed farm management. Amidst challenges such as climate change, public perception, and spiraling production costs, EPAA has become a hub for collaborative, evidence-based solutions aimed at environmental sustainability.

McKenna is not just an advocate but also lives the agricultural life. She and her husband, a fourth-generation potato farmer, recently acquired a turnip and carrot farm, involving their children in every aspect—from naming the farm to understanding its operations.

"We wanted it to be a family affair," says McKenna. "We discussed with our kids about owning a carrot and turnip farm, and they were on board."

The children helped come up with the name – Bunny Burrow Vegetable Co. – and have been a part of the entire journey. She



underscores how this engagement provides her children with the vocabulary and the enthusiasm to talk about farming with their peers, creating a cascading effect of education and awareness.

But McKenna's impact on agriculture goes far beyond her family farm. As executive director of EPAA, she has been instrumental in making the Living Labs initiative a nationwide program. In partnership with Agriculture and Agri-Food Canada (AAFC), the East Prince Agri-Environment Association led the first Living Labs and made it come to life as a real-time, onfarm research model.

"We were the first to get this off the ground in Canada," she recalls. The Living Labs bring together farmers, scientists, and policymakers in a coordinated effort to develop and test sustainable farming methods in real-time conditions.

"We don't just conduct

experiments in isolated conditions. These are real farms, facing real challenges. That's what makes the Living Labs model so impactful. It takes the theories off the paper and puts them to test in the fields," she adds. This ground-level approach has been so successful that it has been replicated across every province in Canada.

According to McKenna, Canadian growers are committed to sustainability, continuously exploring and implementing better management practices based on data and research.

"We're not just blindly following old methods; we're rigorously testing new approaches to find what really works," she notes.

Despite this commitment, McKenna mentions that there are challenges, notably financial, that growers face in fully adopting sustainable practices.

"The initial costs are often a barrier for small farms," she says. This is where she stresses the role of government. "Incentive programs, grants, and subsidies can go a long way in helping farmers transition to more sustainable methods," she insists.

"Sustainability is a collective endeavour. It's not just about individual farmers or associations, but rather a concerted effort involving multiple stakeholders," she says, emphasizing that the next big leap in Canadian agriculture will come through collaborative efforts involving growers, researchers, the government, and the community at large.

Source: Fruit and Vegetable Growers of Canada



GREENHOUSE GROWER

Boost your competitive advantage with ergonomics

"Think of the human." That is the advice Nathan Birtch has for greenhouse owners and operators who want to maintain a healthy, sustainable workforce. Birtch is a health and safety consultant with Workplace Safety and Prevention Services, specializing in ergonomics.

Musculoskeletal disorders (MSDS)—injuries that affect muscles, bones, and jointsaccount for the most lost-time injuries in the agriculture and greenhouse industry, according to the Workplace Safety and Insurance Board. When you look at all injuries from agriculture, rather than only those that resulted in time away from work, MSDs make up 33 to 44 per cent.

"That's a lot of pain and suffering among workers because of poor ergonomic conditions," says Birtch.

MSDs are generally caused by three main ergonomic hazards: high-force activities, awkward postures, and repetitive movements. "Greenhouse work can involve all three," he says. "Pushing heavy carts filled with harvested crops, reaching or bending for prolonged periods to pick crops and handle young plants, repeating quick movements to maintain and harvest high-volume crops all contribute to MSDs. And the fatigue that comes with working long shifts during peak seasons, often in warmer temperatures, can make the situation worse."



Given the nature of greenhouse work, the probability of developing an MSD is quite high if there are no controls in place to prevent it. When a worker becomes injured, the business incurs the obvious injury costs and premium increases. Then, there is lost productivity while the worker is away and the time it takes to find and train someone new to do the job. These costs can certainly hurt the business, but it's the human side of an injury that can really damage it.

"When a worker is in pain because of an MSD, it impacts their quality of life, their family, their ability to do the things they enjoy. Eventually, it can impact their livelihood if they are no longer able to do their job," says Birtch. "If this happens to one of your workers, or to a few of your

workers, you may start finding it difficult to keep your employees because they will look elsewhere for safer work."

When a worker becomes injured, it sends a message that the health, safety, and well-being of workers is not valued. Employee morale goes down and the organizational culture is negatively impacted. You may see more absences and higher turn-over, which will affect productivity.

There are several things employers can do right away to make work safer for greenhouse workers. "Rotate tasks so that workers are not doing the same thing all day long, break up heavy loads into smaller more manageable loads, and encourage your workers to incorporate "microbreaks" (short 30 sec - 2

min postural breaks) into their routines. Workers need rest periods throughout the shift for proper recovery to prevent muscle fatigue."

Birtch also mentions the importance of educating workers on the risks, so that they understand why it's important to stretch and rest. If you remove the need to reach up high or bend down low, you can significantly reduce the risk of developing an MSD.

"Ideally, people are working between knee and shoulder heights," says Birtch. "Work platforms and scissor lift carts can assist with bringing workers up to an optimal height. Getting items off the floor or removing the lower levels on shelving systems can ensure no one has to reach down low. Use mechanical

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mobile devices to move carts around rather than having workers push heavy loads."

While these are all steps in the right direction to improve the ergonomics in your workplace and protect workers from MSDs, the most impactful action you can take is to consider your operation as a whole.

"Think about the workflow for each worker and design out the hazards," says Birtch. When working with a company, he advises to view the operation as a system and design the system in such a way that puts the least amount of strain on employees.

"People are your greatest resource. And creating a healthy workplace culture can be your greatest advantage," he says. "Productivity, quality, and ergonomics all work together. Pain-free employees are happy employees, and happy employees are productive employees. It's all one system."

Join Nathan Birtch at the Greenhouse Health and Safety Symposium in Learnington on January 30, 2024 to learn about the economics of ergonomics and how to leverage ergonomic design and work practices to create a more sustainable workplace.

To register, link here: About Us | Greenhouse Health and Safety Symposium 2024 | WSPS (eventsair.com)

Source: Workplace Safety and **Prevention Services**

Québec's greenhouse sector is expanding

Agriculture and Agri-Food Canada reports that total sales from the greenhouse, nursery, field cut flowers and sod industries increased 7.5% to \$4.7 billion in 2021. Ontario accounted for the largest share of total sales (55.2%), followed by British Columbia (21.4%) and Québec (13.2%).

On February 23, 2023, researchers, agricultural advisors, university students, greenhouse growers and other stakeholders in

the greenhouse vegetable sector met for a day to discuss greenhouse production research. The event was organized in collaboration with the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec

(MAPAQ).

The aim was to encourage participants to contribute to the sector's development by advancing research and devising solutions to challenges in greenhouse vegetable production. It

also provided an opportunity to learn more about the objectives of the Québec government's Greenhouse Growth Strategy.

Participants were able to attend more than 20 conferences on the greenhouse production research taking place at the Saint-Jean-sur-Richelieu Research and Development Centre and within other organizations that were present. The projects put forward focused on energy, engineering, artificial







time for a deep clean to prepare for a fresh crop.

We start by clearing out old plants and giving the entire structure a thorough scrub. Currently, we're in the first stage, meticulously removing old plant debris, and growing media, and supplies - no small feat with hundreds of plants.

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intelligence and plant health.

"To my knowledge, this is the first time an event was held bringing together research stakeholders in the Québec greenhouse sector. There has been a huge need from the industry for such an event. More than 80 people attended the networking day and connections were made between researchers, farmers and industry professionals. There was even initial talk on the need to make it a regular event!"

Source: Philippe-Antoine Taillon, agronomist, consultant on Greenhouse Vegetable and Fruit Crops, MAPAQ, Direction régionale de la Capitale-Nationale et de la Chaudière-Appalaches.

GREENHOUSE GROWER

Greenhouse-grown radishes, a first in Canada

KAREN DAVIDSON

Eagle Export Inc. has partnered with Les Serres Bertrand in Mirabel, Québec to produce greenhouse-grown radishes, a first in Canada. In Europe, radishes are common in the mix of product offerings year-long.

"The reason we think they will be a big success is mostly because, in winter, radishes are harder to source," says Daniel Gauthier, senior sales executive, Eagle Export Inc. headquartered in St-Remi, Québec. "They come from longer distances, and the quality is hit-and-miss especially regarding the leaves. Buyers from wholesalers and retailers are often gambling on getting good quality product and additionally they need to speculate on the larger volumes than they need as they are never sure when the next order will come in."

It's impossible to buy just one or two skids of radishes from Mexico.

"We deliver our product, so we take away the whole logistics and delivery problem from the buyers," adds Gauthier. "We also can deliver small quantities at a time because of our extensive network of existing clients. And finally, our quality is guaranteed because of the controlled



Bertrand radishes are grown in a proprietary mix of nutrients derived from various natural products with sand as a major component.

growing environment and short transit time."

The radishes are grown in a proprietary mix of nutrients derived from various natural products with sand as a major component. This growing environment brings the fresh taste and quality of fieldgrown produce, says grower Steve Bertrand. Greenhouse radishes are much



Grower Steve Bertrand says that greenhouse-grown radishes are much sweeter than field-grown varieties. They are trimmed and washed as needed.

sweeter than the field-grown varieties.

"We can control, perfect, and reproduce the ideal nutrients and environment 52 weeks of the year," he says.

He recognized the problem buyers were having with procuring radishes in winter. Having seen the growing system in Europe, he saw an opportunity. Originally, he grew tomatoes, then transitioned to



Top-sealed cello radishes are ideal for displaying in a retail setting.

marijuana when it was legalized. The falling market value of marijuana persuaded Bertrand to transition again to radishes.

Greenhouse-grown radishes are distributed in Québec, Ontario, and in the northeastern United States.

Some 'good' bacteria protect plants from disease

"Identifying microbiota community patterns important for plant protection using synthetic communities and machine learning" (www.nature.com/articles/ s41467-023-43793-z) – This study by Emmenegger et al. (2023) presents an experimental and analytical approach to explore microbiota properties relevant to plant protection using synthetic communities and machine learning algorithms.

In a study focusing on plant health, researchers found that the specific types of bacteria in the soil around plants play a crucial role in protecting plants from diseases. They created small groups of different bacteria (called synthetic communities or SynComs) and observed how well these groups could protect plants from pathogens. The fundamental discovery was that the protection depends on which specific bacteria are present rather than having a diverse mix. Some bacteria were particularly good at fighting off diseases, and certain combinations of bacteria worked better together. This research can help greenhouse growers understand that choosing suitable types of bacteria for their soil can significantly boost plant health and disease resistance. Image right: Pictures of plants at harvest (14 days after infection). This batch shows Arabidopsis thaliana, which is entirely free from organisms (axenic) and serves as a control. See the other plants with the different groups of SynComs added to them at https://zenodo.org/records/8399345. Image by Emmenegger et al. (2023).

Source: Healthy Hydroponics blog









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THE GROWER

LABOUR

El Salvador pilot program prepares for lift-off



The El Salvador delegation met with the Ontario Greenhouse Vegetable Growers in Leamington, Ontario on December 1. Front row: L-R: El Salvador Labour Minister Roland Castro; Parliamentary Assistant Trevor Jones, MPP for Chatham-Kent-Leamington; María Elena Solórzano. Back row: Yanira Baños; Richard Lee, executive director, Ontario Greenhouse Vegetable Growers; Stefan Larrass, senior policy advisor, labour, OFVGA and Jorge Bolanos.



The El Salvador delegation met with several board members of the Ontario Fruit and Vegetable Growers' Association in Guelph, Ontario on November 29, 2023. L-R: Brian Rideout; Bill George, chair OFVGA labour section; Roland Castro, El Salvador Minister of Labour; Shawn Brenn, chair, OFVGA; Mike Chromczak, OFVGA director.



Schuyler Farms hosted an employer information session near Simcoe, Ontario, where the El Salvador delegation met with local growers. El Salvador Minister of Labour Roland Castro, assisted by staff member María Elena Solórzano, presented to about 25 growers and HR personnel from surrounding farms.



The El Salvador team presented at the Ontario Greenhouse Vegetable Growers in Leamington, Ontario.



Our conversations are about more than economic needs but also human needs.

~ STEFAN LARRASS

Farming operations are experiencing a generational shift where international workers are growing older while demand for the workforce is expanding across many sectors. OGVG has recognized that we must have a higher level of preparedness to ensure we have additional source countries willing to support agriculture in Ontario through a recruitment process that supports ethical recruitment practices and public trust."

KAREN DAVIDSON

El Salvador's minister of labour has visited two Ontario locations – Simcoe and Leamington – to meet directly with growers and their respective associations about the potential of his country's workers to fill labour needs and in return, to provide meaningful income for his citizens.

With the groundwork underway in fall of 2023, Minister Roland Castro is committed to the reciprocal arrangement as early as the 2024 growing season. A couple of farms have already initiated discussions with his ministry's labour program which is accessible through the Agricultural (Ag) Stream of Canada's Temporary Foreign Worker (TFW) program.

Bill George, chair of the labour section,

Association (OFVGA), is enthusiastic about progress so far on the member-directed initiative to explore countries beyond the Caribbean and Mexico for seasonal labour. A webinar was held in August 2023 to lay the foundation of what farm employers could expect. And then the El Salvador government committed to a high-level delegation that was hosted by Schuyler Farms, Simcoe Ontario and the Ontario Greenhouse Vegetable Growers (OGVG) in Leamington in November 2023.

"We are delighted to see new source countries looking to support the Ag Stream of Canada's Temporary Foreign Worker (TFW) program," says Richard Lee, executive director, OGVG. "We are experiencing a change in the worker demographics that historically supported agriculture on our greenhouse farms. This spirit of collaboration is continued by OFVGA.

"Our conversations are about more than economic needs but also human needs," explains Stefan Larrass, senior policy advisor, labour, OFVGA. "We've emphasized the significance of returning workers who are valued for coming back to farms and building important skills over the years. We want to encourage longlasting relationships." Ontario farms will be supported by the El Salvador consulate in Toronto. There needs to be a sounding board and support mechanism for any issues that come up that should be handled by culturally sensitive personnel.

The pilot project, inspired by the positive experience of FERME Québec, comes at an important juncture of national dialogue on labour, housing and immigration. As Larrass points out, countries such as El Salvador have the potential to play a role in helping growers meet their labour needs through the TFW program's Ag Stream which complements other streams (e.g. the Seasonal Agricultural Worker Program or low wage/high wage) in filling critical labour needs for Ontario farms and greenhouse operations.

INFLATION SUBSIDES

Food price increases will be lower than in previous years

Canada's Food Price Report 2024 forecasts that overall food prices will increase by 2.5 per cent to 4.5 per cent. The average family of four is expected to spend \$16,297.20 on food in 2024, an increase of up to \$701.79 from last year. The most significant increases range from five to seven per cent in the categories of bakery, meat, and vegetables.

This marks the 14th edition of Canada's Food Price Report, an annual collaboration between research partners Dalhousie University, the University of Guelph, the University of Saskatchewan, and the University of British Columbia. This cross-country research team uses historical data sources, machine learning algorithms, and predictive analytics tools to make predictions about Canadian food prices. Within this interdisciplinary approach, scholars from the participating universities contribute insights and expertise from diverse fields.

2023 was a tumultuous year politically, environmentally, and economically. There were unprecedented wildfires and flooding across Canada. The conflict in Europe and unrest in the Middle East continue to affect



energy costs and commodity prices. Canadians face many financial pressures, such as higher rental rates and utilities, and rising personal debt. "The year 2023 posed significant financial challenges for Canadian families, one of the toughest in recent memory," said Dr. Sylvain Charlebois, project lead, professor, and director of the Agri-Food Analytics Lab at Dalhousie University. Food Bank Canada's 2023 Hunger Count revealed there were nearly 2 million food bank visits in Canada in 2023, which is the highest level on record, and a 78.5 per cent increase since

March 2019.

Despite inflation, Canadians are spending less on food this year. Food retail sales data indicates a decline in monthly spend per capita between August 2022 and August 2023 (from \$261.24 to \$252.89). Estimated annual spending for a family of four in the past year was \$693 lower than originally projected. However, this decrease is a concern to researchers. Reduced expenditures in the face of elevated food prices indicates Canadians are decreasing the quantity and quality of food they are buying.

Customers are losing trust in

Table 1: 2024 Food Inflation Forecasts

Food Categories	Anticipated Changes %
Bakery	5% to 7%
Dairy	1% to 3%
Fruit	1% to 3%
Meat	5% to 7%
Other	2% to 4%
Restaurants	3% to 5%
Seafood	3% to 5%
Vegetables	5% to 7%
Total Increase in Food Prices	2.5% to 4.5%

food sector corporations. There is a prevailing sentiment that grocers profit excessively and exploit inflationary trends. Profiteering and price gouging were common media stories. Canada Bread Company pled guilty to four counts of price-fixing under the Competition Act. In 2023, industry employees felt empowered to seek improved wages and working conditions, with strikes occurring at Sobeys, Metro Inc., British Columbia ports, the St. Lawrence Seaway, Rogers Sugar Refinery, and Windsor Salt. These disputes

resulted in product shortages and shipping delays.

In general, researchers insist that this report predicts better prospects for consumers in 2024. Andrea Rankin, research associate at the Agri-Food Analytics Lab at Dalhousie University, says the report "offers some good news" and provides "some relief...Canadians can anticipate possibly calmer food prices through the coming year."

Source: Agri-Food Analytics Lab December 7, 2023 news release

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CHAIR'S PERSPECTIVE

Taking our message to decision-makers



SHAWN BRENN

At its core, the Ontario Fruit and Vegetable Growers' Association (OFVGA) has always been a lobby organization. Our job is to work on behalf of growers on issues that are common to most if not all of the commodity sectors that we represent - issues such as labour, safety nets, crop protection, environment and more.

Fall is always a particularly busy time of year for advocacy as both the provincial and federal governments return for their fall sittings, and this year was no different. As we have for the last few years, OFVGA board members and senior staff spent a day at Queen's Park in late November for our annual advocacy day.

It was the third advocacy day I've participated in with OFVGA, and I find it to be an invaluable opportunity to build relationships and help bring the challenges and opportunities of our sector to life for the people we meet with. Nothing helps put a policy into context better than hearing from a grower sharing a real-life example of the impact it has on their farm.

We held 15 meetings throughout the day with elected officials and political staff from various parties. Topics discussed with MPPs were tailored based on

their role in government, but a key one we focused on was how government can support the sector in strengthening Ontario's fruit and vegetable supply and making Ontario the destination of choice for agricultural temporary foreign workers (TFWs).

Our end-of-day reception was extremely well attended, including many MPPs, Ministers, and political staff. Minister of Agriculture, Food and Rural Affairs Lisa Thompson, Agriculture critic John Vanthof and Green Party Leader and Guelph MPP Mike Schreiner all addressed the room, and it was refreshing to see members from all parties speak in support of our sector in a non-partisan way.

And although our one-on-one meetings are important, it's this chance to interact in a more informal way that is just as valuable in helping build relationships and get to know people.

OFVGA is also active at the federal level through our involvement with Fruit and Vegetable Growers of Canada (FVGC). Also in November, a number of OFVGA representatives took part in the annual Fall Harvest advocacy event in Ottawa led by FVGC in partnership with the Canadian Produce Marketing Association.

During meetings with elected officials, political staff and bureaucrats, topics addressed included regulatory modernization and competitiveness, the Bill C-280 financial protection act for growers now before the Senate, and federal regulations related to plastics. We also participated in a number of events designed to encourage speedy passage of Bill C-234, which would exempt grain drying and heating farm buildings and greenhouses from federal carbon tax, in the Senate.

Government advocacy isn't just a seasonal activity for

OFVGA though. We are in regular contact with Minister Thompson's office, for example, on a wide range of topics, and we actively engage with other ministries on issues that affect fruit and vegetable growers, whether by correspondence, phone, or virtual and in-person meetings.

Some of our outreach is also proactive in nature. Since late last spring, for example, OFVGA has been meeting with federal and provincial politicians, their staff and bureaucrats to introduce the More than a Migrant Worker initiative. Labour is a hot topic for many ministries, and we want decision-makers to be aware of this positive outreach effort by our industry that tells the other side of the temporary foreign worker file.

Shawn Brenn is chair, Ontario Fruit & Vegetable Growers' Association.

WEATHER VANE



Grape grower Sue-Ann Staff is well-known for her love of Bernese mountain dogs which have plenty of room to roam at the estate winery near Jordan, Ontario. The original farm dog, Brix, was cast as vineyard ambassador and "director of barketing" for 11 years. Since his passing, there's a new generation: Brix Bravo. He's all set for a new season of Brix-approved wine. What a great way to greet 2024! Photo by Marcella DiLonardo.

STAFF

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OPINION EDITORIAL

Short-sighted plastics ban would cause food shortages and increase prices



RON LEMAIRE

Canadian consumers are already besieged by high food prices. Now the government is pushing to implement a plastics ban without considering the consequences, including increased prices and reduced access to affordable, healthy food.

Environment and Climate Change Canada (ECCC) is advocating for a near-elimination approach for plastic packaging that would require 75% of all produce sold in grocery stores to be sold in bulk or in non-plastic packaging by 2026; this number will increase to 95% by 2028. Fresh fruits and vegetables represent only 2.9% of all plastic packaging in Canada, yet the near-total elimination of these essential packaging tools could cause dramatic food security and food affordability issues for Canadians.

While the industry, consumers, and government recognize that we all need to reduce plastic waste – the challenge is in the practical delivery. Banning the produce industry from using plastic materials at this time would create catastrophic financial and health consequences for Canadians.

Canadians benefit from a year-

Washing up the last of the equipment 💦 🥔



DAVE PUGLIA

round supply of fresh fruit and vegetables despite a short domestic growing season. Imports represent the vast majority of produce sold to meet Canadian consumer demand and the majority of the products come from the United States. Western Growers' farmers provide 2/3rds of the American fruits and vegetables available year-round to Canadians, and they know firsthand how difficult it is to get fresh nutritious foods from the fields of California to the dinner plates of urban and rural Canadians safely and in good condition. At this time, without plastics, it would be impossible.

Why is that? Currently, there are no commercially available non-plastic packaging solutions for many types of produce. Innovations in plastic alternatives using fiber are years away from real-world usage - if they can be created at all. If the ECCC's proposal goes into effect as written, beginning in 2026 there would be no bagged salads in Canadian grocery stores, a convenient and healthy staple for working families; no baby carrots for kids' lunches, because the plastic bags used to transport baby carrots are made of a breathable plastic film that

extends shelf life; no year-round berries, which cannot withstand the rigors of being shipped across the continent without being encased in plastic clamshells; and no bananas, a dietary staple for many Canadians on restricted income, because they are sent to Canada in a plastic bag which controls ripening during shipment. Overall, as supply dwindles, the diversity of produce options will diminish dramatically, and prices will inevitably rise.

The impacts in rural and remote communities will be even greater. Already these communities have issues with logistics and high levels of food waste due to conveyance. Packaging is vital to ensure produce can make the journey to all communities within Canada.

Canada's food guide advises Canadians to fill half their plate with fruit and vegetables to maintain good health. In August of this year, we saw consumption decline to 2.9 servings a day due to food inflation. A plastic ban will exacerbate the decline due to shortages in the produce aisle and increased produce costs, making it even more difficult for families to afford nutritious choices.

and health consequences for Canadians.

While the industry, consumers, and government recognize that

plastic materials at this time would create catastrophic financial

we all need to reduce plastic waste – the challenge is in the practical delivery. Banning the produce industry from using

> Rather than the nearelimination of plastics, we have asked the ECCC and Prime Minister Justin Trudeau to take a collaborative approach with industry. This approach would focus on increasing recycled content and improving recycling systems to address the need for circularity while balancing the universal desire to reduce plastic pollution with the realities of the market. The fresh produce industry is a leader in reducing problematic plastics, introducing more post-consumer recycled content, lightweighting, and increasing the volume of recyclable packaging. The Canadian Produce Marketing Association offers its members a sustainable packaging guide and Western Growers and its farmer members have long responded to consumer demand for more sustainable packaging in their goods. This proactive approach to sustainable packaging has resulted in significant reductions in

plastics over the last three years.

The affordability of fresh produce is by far the No. 1 concern of Canadians and the current policy proposed by the government would hurt Canadians in the pocketbook. Canadian consumers should not be victimized by poorly researched public policy that will have unintended negative consequences on the supply and cost of fresh produce. To eliminate plastics in the produce department would do just that, and to maintain the health of the Canadian people we need to do better. The government must shift away from expensive and unattainable goals toward effective policy that can both help the environment while ensuring Canadians maintain access to healthy nutritious food at affordable prices.

Ron Lemaire is president, Canadian Produce Marketing Association and Dave Puglia, is president and CEO, Western Growers.



SCENE ON X



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OUTREACH

Fresh from the Farm Healthy School fundraising



L-R: Steve Martin (Martin's Family Fruit Farm); Nathan Streef (Streef Produce); Jason Verkaik (Carron Farms); Ontario agriculture minister Lisa Thompson and MPP Scarborough Centre David Smith.

DAN TUKENDORF

In late November 2023, the Ontario Fruit and Vegetable Growers' Association completed the tenth year of offering the Fresh from the Farm Healthy School Fundraising program (FFF) to schools across Ontario. The program allows schools to fundraise by selling fresh fruits and vegetables while supporting Ontario farmers.

Over the past 10 years, more than 2,600 schools and child care centres across Ontario have sold more than 4.6 million pounds of Ontario-grown fruits and vegetables while raising more than \$2 million for their schools. The FFF program has created an alternate market for Ontario farmers while increasing food literacy in Ontario schools. More than \$3.2 million have been returned to Ontario farmers and distributors.

The 2023 campaign had more than 350 schools and child care centres across Ontario participate. Together they sold 340,000 pounds of Ontario-grown root vegetables and Ambrosia apples while raising \$260,000 for their schools. The top-selling school from Timmins was École secondaire catholique Theriault that sold more than 6,000 pounds and raised more than \$4,600 for their effort.

Since 2013, the Ontario government through the Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and the Ministry of Education (MOE) have supported the FFF program with funding and assistance in promoting the program to Ontario school boards and schools.

In November, the Minister of OMAFRA Lisa Thompson held an event at Our Lady Of Wisdom school in Scarborough to show her support for the FFF program and to thank the school, parent council and Ontario farmers who play an important role in the



program's success. Ajax MPP and MOE Parliamentary Assistant Patrice Barnes and Scarborough Centre MPP David Smith were also in attendance adding remarks in support of the FFF program.

The OFVGA is working on plans for the eleventh season of

the program. The 2024 campaign is slated to kick off in May when program registration for schools will open for the fall campaign.

Dan Tukendorf is program manager, Ontario Fruit and Vegetable Growers' Association.

COMING EVENTS 2024 Jan 10-11 Potato Expo. Austin, Texas Manitoba Potato Production Days, Keystone Jan 23-25 Centre, Brandon, MB Jan 24-25 Nova Scotia Fruit Growers' Association Annual Convention, Old Orchard Inn, Wolfville Ridge, NS Jan 24-27 Guelph Organic Conference, Guelph, ON Producteurs de pommes du Québec, Annual Jan 25 General Meeting and 50th anniversary, l'Hôtel Mortagne de Boucherville, QC Jan 25-27 Pacific Agriculture Show and Growers' Short Course, Tradex, Abbotsford, BC North American Strawberry Growers' Association Jan 28-31 Meeting & Conference, Hershey, PA Greenhouse Health & Safety Symposium, Best Jan 30 Western Learnington Hotel and Conference Centre, Leamington, ON Jan 31-Feb 1 CAPI: Canadian Agri-Food in a Sustainable World, Ottawa, ON Feb 5-7 Alberta Irrigation Districts Conference, Lethbridge, AB Feb 5-9 Global Minor Use Summit IV, Madrid, Spain Feb 7-9 Fruit Logistica, Berlin Feb 11-14 International Fruit Tree Association Annual Convention, Yakima, WA Feb 13 Canada's Agriculture Day Feb 16 BC Cherry Association Annual General Meeting, 2 pm, Penticton Trade and Convention Center, Penticton, BC Feb 16-17 Southern Interior Horticultural Show, Penticton Trade & Convention Centre, Penticton, BC

Feb 20 Ontario Fruit & Vegetable Growers' Association Annual General Meeting, Niagara Falls, ON

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- Feb 20 Berry Growers of Ontario Annual General Meeting, Niagara Falls, ON
- Feb 21 British Columbia Fruit Growers' Association Annual General Meeting, Ramada Inn, Kelowna, BC
- Feb 21-22 Ontario Fruit & Vegetable Convention, Niagara Falls Convention Centre, Niagara Falls, ON
- Feb 22-23 International Potato Technology Expo, Eastlink Centre, Charlottetown, PE
- Feb 29 Ontario Potato Conference & Trade Show, Delta Hotel, Guelph, ON
- March 5-7 Fruit & Vegetable Growers of Canada Annual General Meeting, Westin Hotel, Ottawa

RETAIL NAVIGATOR

10 pointers for local programs



PETER CHAPMAN

Did you hear the news? Recently, Loblaw announced changes to its local produce programs and payment would be within seven days.

The truth is that local programs are a challenge for retailers. Their systems, processes and supply chain are designed to strive towards the most efficient methods of food distribution and retailing. We are talking moving full pallets, plan o grams for consistency and driving category sales. Small volumes of products in a select group of stores are not really in line with these objectives. That being said, consumers are looking for local and retailers must meet these expectations.

Some retailers, such as Sobeys, are better than others. Sobeys have dedicated people in each region to work with local suppliers and help them navigate the Sobeys formats. Loblaw has operated a local program, which was managed by people who were not Loblaw employees. These contractors were also responsible for distribution.

Recently, Loblaw announced a rethink of its program - a win for small business!

But preliminary research indicates there might be a catch. The fast payment may be a reduced payment to accommodate the quick turn-around. Every retailer is different and you should check out the programs offered in your region.

Local programs are a great opportunity

Getting on the shelf is a major

deliver results.

If you do get on the shelf, use this as a tremendous opportunity to understand how your products perform in this environment. Do not assume because you are on the shelf that the sales will just happen. Think of this as a retail lab and experiment with as many tactics as you can. Figure out what works and what does not work to grow brand awareness and drive sales.

10 things to do if you are considering the local program

1) Do your homework to understand the food safety and other requirements this particular retailer might have. It is their store and they will control what goes in there. Each retailer will have its own definition of a local program. Do not assume the expectations of one will match another.

2) Develop a distribution plan for your products. How will you get them to the store and how often will you do this? It is expensive and it will be your responsibility to replenish inventory. It is very rare the store will call you. If you project to sell six units per store per week and the shelf holds 12 you need to be there more often than every two weeks. It is not good to leave the shelf empty. They have provided this space and want to generate sales from it. Holes on the shelf (where there is no product) do not generate sales, they just frustrate customers and consumers.

3) Establish the sales estimates for your products. You should use your own history, experience in other stores and any other information you have access to that will help you create a sales estimate. Talk to the retailers about this number. Good retailers will have input into this estimate. Ultimately this will be how your products are judged.

4) Create a 12-month sales and marketing plan for your products. It is your job to ensure your products sell, not the retailer's. They are providing shelf space. It is your job to get consumers to pick it up and put it in the shopping cart.

at the retailer. With people at store level, work to get the best placement of your products, talk to them about sales and ask for feedback. They are in the store every week and have a lot to contribute. The local program manager or key point of contact is very important as well. You need to be able to communicate with them. When you have a good relationship, they will share valuable information and could be the decision maker to help your business grow.

7) Tell as many people as possible you are in the local program and where to find your products. Do not depend on them just finding it in the store. Use every tactic you can such as social media, mass media and public relations to get the word out. You have to do your part to generate sales. On social media tag your customer and reinforce you are doing your part to generate sales.

8) Try as many tactics as you can. This is the chance to understand how consumers react to cents off, multi buys, loyalty programs, local product ads and whatever else you can manage. Work with stores to add a second display for busy weeks. Now is the time, while you are in a smaller number of stores to make mistakes. They are much less costly in eight stores than 28.

9) The key to understanding what is happening is to measure the results. It is also easier to measure results in a smaller



number of stores. Most suppliers in the local program are doing their own distribution. You should know what your sales are on 'regular' weeks and then you can measure sales when you make investments.

10) Visit stores as often as you can. It is one thing to deliver product, it is another to stand back and assess what is happening and how your product is performing in the category. Set up a schedule to visit stores, if you are on the shelf in retail. It is now part of your job.

Bonus

11) Your experience and sales performance in the local program should help you figure out the right next step for your business. If sales exceed expectations, you and your customer might want to take your product to a regional listing. This could include being in the warehouse and listed in the plan o gram. You would also 'graduate' to working with the category manager as opposed to the local program person.

If sales are not meeting expectations, there might be something wrong with your value proposition or how consumers perceive your product in the category. Now is the time to resolve the issue. Very rarely do more stores fix these problems. They just end up spreading your resources thinner and costing you more money. Local product programs are here

to stay.

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 SKUFood. Peter works with producers and processors to help them get their products on the shelf and into the shopping cart.



36 cm rounded dark

orange ridged pumpkin.

Huge thick dark green

handles are well attached

accomplishment and one that should be celebrated. A lot of work, dollars and hours need to be invested to get a product to market. The local programs with retailers are a great chance to allow small- to medium-sized processors to take the next step. Large, national and multinational companies pay a lot of money to get on the shelf.

Most retailers are very flexible with these programs and allow suppliers to put their product in a select number of stores. This really is a win to enable you to determine the right move into retail for your business. It is always better to start small and do a great job than to spread yourself too thin and struggle to

5) Create a quality presentation to pitch your products to the retailer. A great product is definitely part of the equation but not everything you need. Explain why your product deserves to be on the shelf, how it will support their position in the market and what you will be doing to ensure the sales materialize. Once you get the approval, make sure you understand the timelines and get your products on the shelf.

6) Build relationships with people at store level and the key contacts

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DARIEN TEMPRILE

CGCN-RCCV CAP Cluster Project Summaries

CGCN-RCCV administered the national Canadian Agricultural Partnership (CAP) grape and wine science cluster in collaboration with Agriculture and Agri-Food Canada (AAFC) for five years, starting in 2018. This five-year research program ended on March 31st, 2023. Year five final project summaries have been posted to CGCN-RCCV's website. For all other yearly cluster project summaries, please visit www.cgcn-rccv.ca/site/ cluster-updates-and-events.

SCAP Cluster & AgriAssurance applications

Grape & Wine Science Cluster 2023-2028

CGCN-RCCV applied to the Sustainable Canadian Agricultural Partnership (SCAP) Cluster component in the first quarter of 2023. Now, at the end of 2023, we are still anxiously awaiting a funding decision. If approved, CGCN-RCCV will be managing more than 25 research activities across Canada's four grape growing provinces – BC, Ontario, Québec, and Nova Scotia.

Priority research topics include but are not limited to: climate change (including cold resilience and heat-stress mitigation), impacts of virus and disease on grape and wine quality, and sustainable viticulture strategies. When CGCN-RCCV is informed of a funding decision, project leads and partner associations will be informed as soon as possible, with an official public announcement made shortly after.

AgriAssurance 2023-2028

CGCN-RCCV applied to the SCAP AgriAssurance National Industry Association Component during the summer of 2023. A funding decision is expected by early 2024. If approved, this project will provide our official partner nurseries within the Canadian grape and wine industry with subsidized virus-testing costs of up to 50 per cent. CGCN-RCCV is always accepting applications to Verification and/or Certification programming. The Verification program is open to both nurseries for general propagation and growers and/or wineries for custom propagation. Please contact CGCN-RCCV project manager, Ethan Churchill via email at ethan@cgcn-rccv.ca if you would like to get involved or want more information.

Improving CGCN-RCCV programming

CGCN-RCCV Verification Program

CGCN-RCCV has recently amended the interim Verification Program that was initially established in 2019. This program was developed as a short-term solution to aid nurseries in producing saleable grapevines with a low risk of infection of three to four viruses of concern. This is done through testing of the existing propagative blocks and removal of infected plants and associated plants with high risk of infection. The



Dr. Harrison Wright holds a grapevine in tissue culture at the Agriculture and Agri-Food Canada Kentville Research and Development Centre. Dr. Wright lead research activity #7 titled "Grapevine evaluation and cold hardiness program" under CGCN-RCCV's CAP Cluster.

improved program has been uploaded to our website HERE.

Some highlights of these changes include:

• Mandatory testing for three viruses of concern: Grapevine Red Blotch Virus (GRBV) and Grapevine Leafroll associated viruses 1 & 3 (GLRaV-1, -3). Additionally, nurseries will be provided with the option to test for Tomato Ringspot Virus (ToRSV).

• Additional requirements for nurseries regarding descriptive phrasing for paperwork (invoicing and documentation accompanying shipment of plants).

• Guidelines to promote CGCN-RCCV Material.

• New appendix added -Appendix 4: Frequency of retesting.

The CGCN-RCCV Board of Directors reviews the Verification Program on a yearly basis to ensure it continues to address the immediate needs of the Canadian grape and wine industry. Please note, the program will be phased out by 2028, and efforts will be made to transition any Verification Program participants to CGCN-RCCV Certification programming.

CGCN-RCCV Certification Programming

The CGCN-RCCV Board of Directors is currently amending

effort to align protocols with current technology and industry needs. When these amendments are finalized, the improved programs will be uploaded to CGCN-RCCV's website, and an announcement will be made via e-newsletter and social media. To stay informed of CGCN-RCCV programming updates, please subscribe to the e-mailing list, and follow social pages X (formerly Twitter) and Facebook.

Expanding Availability of CGCN-RCCV Verified Vines

CGCN-RCCV welcomes another nursery to the interim Verification program! VITIS IMPORT, located in Waterloo, Québec, will soon have CGCN-RCCV Verified vines available for purchase. These vines will be verified free of infection from Grapevine Red Blotch virus (GRBV) and Grapevine Leafroll associated viruses 1 and 3 (GLRaV-1, -3). Please contact Tina Wall at sales@ vitis-import.ca to inquire about vine availability and to place orders. For all other information inquiries, please contact info@vitis-import.ca.

Darien Temprile is executive director, Canadian Grapevine Certification Network.

Editors note: for full article visit



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FOCUS: GRAPES, VINEYARDS & BERRIES

Grapevine trunk diseases are dragging down productivity

KAREN DAVIDSON

Foliar and fruit diseases are easily spotted in the vineyard, but grapevine trunk diseases are the sleeping giant. Not much research had been done in Canada until José Ramón Úrbez-Torres initiated laboratory and vineyard studies about 10 years ago in British Columbia (BC). Funded by grants from the BC Wine Grape Council and Agriculture and Agri-Food Canada, he has been working on the epidemiology of these diseases. Grapevine trunk diseases are a complex caused by more than a 100 fungal pathogens causing different diseases in mature and young vineyards.

Urbez-Torres has unearthed some surprising data. About 40 species of fungal pathogens related to grapevine trunk diseases have been identified in the province. In a peer-reviewed scientific paper published in April 2014, he reported that in BC, 95 per cent of the 118 vineyards included in the study had grapevine trunk diseases in infected vines. But incidence varied among vineyards. In total, it was estimated that about 10 per cent of the vines in BC are infected with grapevine trunk diseases.

"It's a difficult and timeconsuming process to collect samples and then pioneer the methods to identify these fungi as they reside inside the wood of the plant," explains Urbez-Torres. "Some of these are also soil-borne diseases that can infect young plantings."

The nursery stock may be infected, but there's no way for the grower to know until symptoms such as trunk cankers appear two or three years into the vine's life cycle. Pruning wounds offer a favourable entry point for diseases that sporulate in spring to early summer. There are no systemic products available to treat grapevines once they are infected. Accordingly, protecting pruning wounds is the most effective management approach. Urbez-Torres has discovered that shifting the timing of pruning to December/January from March/April can reduce infections of pruning wounds by 80 per cent in B.C. Admittedly, the risk of early pruning is that it could result in earlier-than-usual bud break and thus higher risk of damage from spring frosts under BC conditions. He credits MSc student Jinxz Pollard-Flamand and Dr. Miranda Hart, Biology Department UBC Okanagan, for their respective roles in discovering biological controls against these diseases. The team has found and identified several local species of Trichoderma with high biocontrol activity against

grapevine trunk disease fungi. Several *Trichoderma* fungi are well known biological control agents and three of the species found in BC have been shown to protect pruning wounds for up to 60 days under BC conditions.

To date, all three species are great candidates for consideration in becoming registered biological controls.

Spray timing is one aspect to be explored further. Future work must also test for the tolerance of these effective isolates in the practical context of multiple fungicides to control other grapevine diseases.

"Grapevine trunk diseases are so complex that there's no way to eradicate them, only to manage them," Urbez-Torres concludes.



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FOCUS: GRAPES, VINEYARDS & BERRIES

Strategies and tactics to cope with climate change



Deleafing grapes in August opens up the canopy to more sunshine.

KAREN DAVIDSON

Two Canadian grape growers, lauded for their long experience in the vineyard, share their stories of how they managed the 2023 growing season and their strategies for the future. Climate change has been acknowledged in the last decade. To combat weather extremes, various tactics have been employed. Bud hardiness surveys and deleafing are two that immediately come to mind.

But what's the strategy to combat extremes of drought and too much rainfall, all in a season? Growers are realizing that the best approach is bolstering vines to be the most resilient they can be. Expect genetic and agronomic tactics to be used in this challenging time.

Erwin Wiens, Niagara-on-the-Lake, Ontario

Who would be better to ask about climate change than Erwin Wiens, the 2023 Grape King? He won the Grape Growers of Ontario accolade for his knowledge of cultivars, diseases, insects, weed control, soil management, canopy management, overall quality of his vineyard and outreach activities. He manages 120 acres of vinifera grapes such as Chardonnay, Pinot Gris and

Weather stations are crucial to record on-farm weather events such as hail and wind storms.

Riesling.

Besides his busy farm life, he's chair of the local irrigation committee which is currently in long-term negotiations with several governments on a region-wide, closed-loop irrigation system. The long-term vision is to provide Lake Ontariosourced water to a broader area of Niagara on a more consistent basis.

"We had lots of rain in 2023," says Wiens. "But growers need to pivot for weather extremes. In 2022, for example, we had 20 days with +30°C temperatures. The vines shut down at that point."

These growing conditions are challenging growers who are



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Erwin Wiens, 2023 Grape King for Ontario.

trying to live up to the tourism industry's promise of world-class, cool-climate wines. In 2022, a sudden freeze event destroyed thousands of vines to the extent that only half a crop was harvested. In 2023, growers rebounded by harvesting 78,000 tonnes for the province.

That "pivot" that Wiens talks about is thanks to not only growers but the research collaborators amongst Brock University, Niagara College and Vineland Research and Innovation Centre. This cluster of experts is helping to finetune vineyard techniques. Mechanized deleafing, for example, is used to open the grape clusters to more sunshine. Best timing of sprays are constantly refined, with new biological products coming to market that can be staged with chemical products. Monitoring for new invasive species such as spotted lanternfly is very active.

For the 2024 season, the Grape Growers of Ontario has Ryan Brewster Consulting to sample vines and bud hardiness in the Niagara and Lake Erie North Shore regions. The data will be made available on the e-Grape.ca database so that growers can make decisions for their own sub-appellations combined with on-farm weather stations.

"Our own vineyard is in great shape for 2024," says Wiens. "We have retrunked 100,000 vines from the graft – a monumental effort."

With a nod to the phenomenal 2023 autumn weather that helped ripen the grapes, he is optimistic about the future. "We broke even after two years," he says wryly. "Margins are super tight."

Wiens points out how helpful the AgriRecovery program of \$5 million has been for replanting vines. To date, governments have listened to the needs of the sector that fuels exponential jobs in agriculture and tourism.

"We can't grow grapes cheaper," says Wiens. "We have to be in a race to the top."

Continued on the next page



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FOCUS: GRAPES, VINEYARDS & BERRIES

Strategies and tactics to cope with climate change

Continued from page 16

STEVE ELLS

2023 was a challenging year here in Nova Scotia like much of the country. Weather, government and market all seem to be providing us with headaches.

Our terroir

A large percentage of the Nova Scotia grape sector is located in the Annapolis Valley. Our soils are made from glacial deposits so we have an incredible variety to work with. Here in our vineyard at Sheffield Mills, we are mostly clay loam soils but have some sandy areas and sandy loam areas.

2023 season

This past year started off with the warmest January on record and then on February 3-4, we experienced a polar vortex when the temperatures plummeted to -26°C along with high winds. The vines were not acclimated to the cold from the warm January and we lost most of the buds on our vinifera varieties. Some of the hybrids did better and had almost full crops but it varied by variety.

Spring was cool and very dry which along with having many secondaries as the only viable buds meant that bud break was delayed. Summer brought all the rain we had missed and the year turned out to be a record breaker on total precipitation.

Disease control for downy mildew was extremely challenging and we saw lots of other fungal disease pressure as well. This, in a year we were trying to reduce costs in the vineyard to offset crop loss in our vinifera. We did get a nice four-week window at harvest time which was nice but bittersweet after the struggles all season long.

This has been by far the toughest year out of the last few. Not just from the polar vortex event, but from an overall growing conditions standpoint as well. 2019 was very wet and cold here and a real hard one to get clean grapes as ripened as we wanted but not as much vine damage and crop loss as this past season.

Worries

Invasive species, insects and weeds are all on our radar here. Definitely a worry but we see them coming on the horizon instead of dealing with too many right now. The tendency for weather to be more extreme is our biggest worry right now.

Climate change

For the last few seasons there has been a trend of more precipitation so a focus on water management is increasing. Making sure tile drainage is working or installing more if able to. Also building ditches and berms to direct water away from vineyards is more popular. Healthy, balanced vines are something we all talk about but is more important now than ever before. We don't know for sure what the next weather challenge will be or how to mitigate it, so having our vines as resilient as possible is one strategy to be prepared for climate change. Fine tuning our fertility programs to achieve that best balance of yield -- and also allowing the vine to shut down and be as ready for winter as possible -- are very important to us.

Conditions

Overall I would describe our vineyard as recovering. Most of



our hybrid varieties had a modest but okay crop and did have time to recover and achieve a nice lignification after harvest. Most of our vinifera varieties grew a good canopy this year and look like they will be back into a light crop next year. The younger vinifera vines seemed to do better from the cold event in February 2023 and in older blocks there will be a significant amount of replanting throughout the province.

State of industry

Challenging . . . it might be a word that is over used, but I don't believe a more negative term is appropriate and I don't want to gloss over that things have been tough. Cost of production, climate change, fallout from trade disputes, labour, economic downturn and other factors have been tough on our sector. I think there is lots of promise here for the future as the wines are getting better and we are gaining experience and knowledge every year . . . but it will be a challenge.

Steve Ells is president, Nova Scotia Grape Growers' Association. He is an eighth-generation farmer, now growing grapes at Sheffield Mills.



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FOCUS: GRAPES, VINEYARDS & BERRIES

Fungicide resistance: we can't ignore the elephant in the vineyard any longer

WENDY McFADDEN-SMITH & KATIE GOLDENHAR

Background

Fungicide resistance is not caused by exposure to fungicides. Rather, mutations that can allow a pathogen to overcome a particular mode of action occur naturally in pathogen populations at very low rates. Repeated use of a particular mode of action selects for individuals with a resistance mutation, allowing resistant individuals to increase as the sensitive pathogen population is controlled by the fungicide. Fungicides within each Fungicide Resistance Action Committee (FRAC) code group are typically cross-resistant to each other, meaning if a pathogen population is resistant to one fungicide in e.g. Group 11, it's resistant to all Group 11 fungicides.

The biology of the pathogen itself plays a role in the fungicide resistance risk. While the resistance risk may be high for diseases caused by pathogens with multiple generations per growing season, such as Botrytis bunch rot and downy mildew, the risk for that same fungicide is generally low for pathogens such as the black rot and Phomopsis cane and leaf spot fungi, which have only one generation per year. Typically, the more generations a pathogen has, the higher the risk.

Fungicides themselves are also classified for their risk potential, and the basic risk of fungicide resistance is a component of the pathogen and the fungicide risk (Figure 1).

The nature of resistance depends on the type of mutation. Resistance to FRAC Group 11 (Quinone outside inhibitors -QoI, strobilurins) fungicides develops because of point mutations. If the mutation is present in an individual, the fungicide will not work. Resistance has been documented to group 11 fungicides in many pathogens including Botrytis cinerea, Plasmopara viticola and Erysiphe necator. Resistance to Group 40 (Carboxylic Acid Amide - CAA) fungicides is also caused by a point mutation. In populations of the grape downy mildew pathogen, in some regions all isolates are resistant to CAA fungicides. Resistance to CAA fungicides is inherited in a recessive manner, meaning it is not necessarily passed on to the fungus' offspring in sexual reproduction.

Resistance to FRAC Group 3 (demethylation inhibiting - DMI) fungicides is controlled by the accumulation of several independent mutations. Each individual mutation typically causes only a small reduction in sensitivity, and it is not until multiple mutations accumulate in an individual that a large enough reduction in sensitivity is observed to impact efficacy under field conditions. In any given field population, the sensitivity to a DMI fungicide may range from extremely high (highly sensitive and will be controlled by fungicide) to moderate (partially

 11 Sovran, Flint, Intuity, ½ Pristine, ½ Merivon, 7 Cantus, Sercadis, Kenja, Aprovia, ½ Pristine, ½ Merivon, ½ Luna Tranquility, ½ Miravis Prime, 	High 3	3	6	9
 Scala, Impala, ½ Luna Tranquility, ½ Button/ Switch, ½ Inspire Super Nova, Mettle, Fullback, ½ Inspire Super, Cevya, ½ Aprovia Top Elevate Torrent Revus, Forum, ½ Zampro ½ Zampro Property, Vivando Priwen 	Medium 2	2	4	6
 12 ½ Switch, ½ Button, ½ Miravis Prime 29 Allegro P Phostrol, Rampart, Confine, Aliette, LifeGard, Regalia Max M captan, folpet, mancozeb, copper, sulphur, MilStop, oils, Timorex Gold BM Double Nickel, Serifel, Serenade, ProBLAD, Stargus 	Low 0.5	0.5	1	1.5
Fungicide Risk - Number of sites of activity - Quality of activity - Reprodu - Dispersa	n Risk ctive rate	1 Phomopsis	2 Guignardia Elsinoe	3 Botrytis Plasmopara Erysiphe

Figure 1. FRAC groups (in bold) and their corresponding products registered in Canada. This diagram is a risk matrix of the inherent risk of fungicides and grape pathogens. Each risk category is estimated, and the combined scores are relative. This does not account for the agronomic practices, which can reduce the resistance risk. Always consult pesticide labels before use.

FRAC group 7 (Succinate

¹Adapted from www.frac.info/

sensitive to the fungicide) or low (mostly resistant to fungicide). Resistance has been documented to group 3 fungicides in many fungal pathogens including Botrytis cinerea and Erysiphe necator. This type of resistance usually develops gradually and is rate dependent. Under high disease pressure, a rate of product that used to control the disease no longer works as well.



dehydrogenase inhibitors -SDHIs) fungicide resistance occurs through multiple mutations to the sdh gene depending on fungal species. Cross resistance is not always a given for group 7 fungicides depending on the mutation(s) present, therefore resistance to one fungicide in this group may not mean resistance to all. Resistance has been documented to group 7 fungicides in pathogens including Botrytis cinerea. Resistance to FRAC group 9 (Anilino-pyrimidines, AP) has been documented in a few pathogens, including Botrytis cinerea. Cross resistance is known to occur between group 9 fungicides. FRAC group 12 resistance is rare and the mechanism of resistance is not fully known.

Fungicide resistance monitoring has multiple objectives: to detect early shifts in pathogen populations in order to adapt fungicide programs and reduce control failures, to determine the baseline sensitivity of pathogens to fungicides and to develop sitespecific management plans to reduce potential unnecessary fungicide application while achieving adequate disease control. Fungicide resistance can be detected in two ways - genetic testing for known mutations that confer resistance and plate dilution assays where the pathogen is placed onto artificial media impregnated with a range of dose(s) of fungicide.

Ontario vineyard resistance testing

Powdery mildew

Powdery mildew was sampled once from five sites in 2021 and throughout the season at 16 sites in 2022. Samples were sent to Dr. Walt Mahaffee's lab at Oregon State University and tested for the G143A mutation (Group 11 resistance) and CYP51 mutation (Group 3 resistance).

97-100% of the powdery mildew samples collected in 2021 and 2022, respectively, were resistant to Group 11. Interestingly, this level of resistance was observed throughout the growing season at the sites that were sampled multiple times. These results suggest that Group 11 fungicides alone should not be relied on to control powdery mildew.

A very low percentage of isolates (4-7 %) were fully

of the tree and the heartwood is the dense inner core.

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susceptible to Group 3 fungicides; 17-25% expressed full resistance, while 63-79% expressed partial resistance (mixed). As indicated in the introduction, resistance to Group 3s is more complicated to interpret using molecular testing of one mutation. What can best be said is that older Group 3 fungicides, such as Nova, are likely not effective against powdery mildew anymore. Next generation Group 3s have more intrinsic activity (more activity per mg than older fungicides) so may still be effective. Both Group 3 and Group 11 are likely still effective against other diseases such as black rot, phomopsis and anthracnose.

Continued on page 19

FOCUS: GRAPES, VINEYARDS & BERRIES

Fungicide resistance: we can't ignore the elephant in the vineyard any longer

Continued from page 18

Downy mildew

Downy mildew was sampled at six vineyard sites in 2021 and 14 in 2022. Samples were sent to Dr. Tim Miles' lab at Michigan State University where they were tested for mutations for Group 11 and 40.

The results showed that 94-97% of the downy mildew lesions sampled population had the gene for resistance to Group 11 fungicides. This means that none of the Group 11 fungicides should be relied upon to control downy mildew. In the vineyards sampled in 2021,100% of the samples were sensitive to Group 40 fungicides; however, in 2022, 8% of the isolates were fully resistant. These resistant isolates were located in an isolated production region. While this group still provides good control of downy mildew in most regions of Ontario, the risk of resistance is a reality.

Botrytis bunch rot



In September 2022, 105 Botrytis bunch rot samples were taken from 13 vineyards and assessed for resistance via artificial media impregnated with increasing doses of fungicides at the University of Guelph Agri-Food Lab. Selected fungicides, pyraclostrobin (FRAC 11), fludioxonil (FRAC 12), pyrimethanil (FRAC 9) and fluopyram (FRAC 7), were screened at 0, 0.01, 0.1, 1 and 10 ppm. Isolates with relative growth above 50% on 0.01ppm fludioxonil and 1 ppm on pyrimethanil, fluopyram and pyraclostrobin are considered resistant based on a previous study (Alzohairy et al., 2021). 99% of the Botrytis cinerea isolates tested were inhibited by at least 50% compared to the non-fungicide control at 0.1ppm of fludioxonil. This means Ontario isolates are still highly sensitive to fludioxonil (one of the active ingredients in Switch and Button). 97% of these isolates were not effectively controlled by 50% at the dose of 1ppm of fluopyram and pyrimethanil. This pyrimethanil may no longer be effective at these locations for controlling Botrytis bunch rot. Additionally, there is known cross resistance between FRAC group 9 fungicides so cyprodinil may be at risk of lost efficacy. 94% of isolates were not effectively controlled by 50% at a dose of 1ppm of pyraclostrobin. This indicates that there is resistance to FRAC group 11 products in Botrytis cinerea individuals sampled.

indicates fluopyram and

Fungicide resistance is often

site-specific and the proportion of resistance to sensitive individuals can vary throughout the season. If you suspect fungicide resistance (inadequate control after use, history of repeated FRAC groups, decreased level of control compared to previous years, etc.) follow up with your pesticide company representative. It can be challenging to detect fungicide resistance in diseases that are managed with multiple fungicide applications, so keep these results in mind for selecting your fungicides this year.

Remember, a good IPM program assesses management tools after use. Follow fungicide resistance management practices to maintain fungicides as a disease management tool in an IPM program. These include: do not use resistance-prone fungicides back-to-back, rotate among FRAC groups, incorporate Group M and BM products in your program, use full rates of products and ensure excellent spray coverage by allowing air movement with good canopy management.

Alzohairy, S. A., Gillett, J., Saito, S., Naegele, R. N., Xiao, C. L., & Miles, T. D. (2021). Fungicide Resistance Profiles of Botrytis cinerea Isolates From Michigan Vineyards and Development of a TaqMan Assay for Detection of Fenhexamid Resistance. Plant Disease, 105(2), 285–294. https://doi.org/10.1094/PDIS-05-20-1087-RE

Wendy McFadden-Smith is tender fruit and grape IPM specialist, OMAFRA. Katie Goldenhar is pathologist-horticulture, OMAFRA.

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FOCUS: GRAPES, VINEYARDS & BERRIES

Nourse Farms offers sneak peek into upcoming tissue culture lab



NF Viscon TC planter: Nourse Farms' new facility will be equipped with the latest automation technology, including the groundbreaking Tissue Culture Planter (pictured), which Viscon has developed and manufactured in close collaboration with ISO Group.



NF New Lab: Pictured is a rendering of the state-of-the-art Plant Tissue Culture Lab that Nourse Farms has partnered with Viscon to build to support the rapidly increasing interest and demand for berry plants.

Nourse Farms, one of the world's premier growers of berry plants, has taken the next step as a frontrunner in the soft fruit propagation industry. The company has partnered with Viscon to build a state-of-the-art Plant Tissue Culture Lab to support the rapidly increasing interest and demand for berry plants.

Viscon is contributing to this

innovative company by developing and supplying a highly automated Plant Tissue Culture Lab. This turnkey facility will feature state-of-the-art technologies in labour-saving

Tissue culture has been the corner stone of what we do for decades, so strategic investments in technology and advancements in this part of our operation are not only ideal but necessary.



automation and multi-layer propagation rooms.

"Nourse Farms is focused on delivering the highest-quality plants and our partnership with Viscon promises to support us as we grow-both plants and our operation," said John Place, Nourse Farms CEO. "Tissue culture has been the cornerstone of what we do for decades, so strategic investments in technology and advancements in this part of our operation are not only ideal but necessary. We are delighted to work with Viscon to bring state-of-the-art technologies to our new tissue culture lab. We

~ JOHN PLACE

now be automated. It's a game-changer for plant uniformity and contamination reduction, ensuring Nourse Farms produces the highest quality berry plants.

Daan Mansveld, sales manager of Viscon Plant Technology: "At Viscon, we are committed to pushing the boundaries of innovation in agriculture, and this project with Nourse Farms is a testament to our dedication. We've meticulously designed this state-of-the-art facility and are currently in the process of manufacturing the latest equipment and technology to bring our vision to life. Nourse Farms, renowned for its commitment to excellence in berry plant cultivation, shares our vision for innovation and sustainability. We're honoured to embark on this journey together and support their mission of providing top-quality berry plants to customers worldwide." The new laboratory, set to be established in Whately, Massachusetts, U.S., is currently in the planning and equipment manufacturing phase, with a projected opening in 2024.



"The Freilauber Pre-Pruner drastically cuts down our follow up pruning time, saving us money and man hours. The cuttings are also removed from the wire helping to reduce worker fatigue."

-Will George, George II Farms

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905.563.8261 | 1.800.263.1287 | info@provideag.ca | www.provideag.ca Beamsville, ON, Canada expect that we will see a significant increase in our production and efficiency."

Groundbreaking Tissue Culture Planter

The new facility will be equipped with the latest automation technology. The true star of the show is the groundbreaking Tissue Culture Planter, which Viscon has developed and manufactured in close collaboration with ISO Group. This planter operates in a sterile environment, automatically placing explants into fresh media jars with unparalleled precision. This is usually a highly labour-intensive process that can

Source Nourse Farms December 8, 2023 news release

FOCUS: GRAPES, VINEYARDS & BERRIES Vineland defines fresh berry profile

Vineland Research and Innovation Centre (Vineland) has published a case study that looks at a descriptive lexicon for fresh strawberries. The sensory descriptors are for aroma, flavour, taste and texture. Researchers from Vineland's Consumer, Sensory and Market Insights program note that other berries – blueberries, blackberries and raspberries – could be evaluated using this approach as well.

Vineland's trained sensory panel developed the lexicon and evaluated strawberries in June and July of 2023, coinciding with Ontario's fresh field strawberry season. The sensory panel is made up of 20 people who have been specially recruited and selected for their sensory and descriptive abilities. They meet once a week all year long in a specialized tasting laboratory to evaluate horticultural products, such as strawberries, using their senses.

In the first phase of this exploratory study, the sensory panelists generated and refined a list of descriptors that could be used to describe and differentiate flavour profiles of fresh strawberries. This training phase included creating training tools such as aroma and taste references to ensure a common understanding of the perceptions and consensus by panel members on their perceived intensity ratings.

The strawberry descriptive lexicon included:

• Aroma/flavour attributes: overall aroma



Aroma references along with strawberry samples used in training.

and taste, citrus, floral, grassy, fermented, honey

- Taste and mouthfeel attributes: sweet, acidic, bitter, astringent
- Texture attributes: firm, granular flesh, seedy, juicy, rate of melt

During the second phase of the study, the sensory panelists evaluated strawberries using the descriptive lexicon. The four products they evaluated included Ontario field-grown, Ontario greenhouse-grown and imported American berries. Products were tasted blind, under red lighting and identified with a three-digit code to avoid bias. All varieties were purchased commercially to represent the diversity of strawberries available to Ontario consumers.

The results showed that the fresh strawberries were differentiated based on aroma/flavour, taste and texture attributes.

In this preliminary evaluation, there was a trend of higher overall aroma and taste for the Ontario field-grown strawberries, including a more intense citrus aroma for one of the products. The greenhouse-grown strawberries were distinct with a higher acidity and lower overall aroma intensity, suggesting a tart taste profile. The U.S.-imported strawberries were higher in fermented aroma and sweetness but had lower acidity. Texture profiling also showed differences (data not shown) for the attribute firmness, which was higher in the imported and greenhouse-grown Ontario strawberries compared to the field-grown Ontario strawberries.

Full descriptive sensory profiles, similar to the ones generated in this pilot study, are key to understanding the sensory diversity in a product set. This could be extended to understand the impact of production practices, variety and environmental conditions on the flavour profiles of fresh berries. This knowledge is useful for marketing, product positioning and variety selection in production and variety development. Results can also be correlated with consumer acceptance to identify the sensory drivers that impact consumer liking of fresh strawberries.

For more information, contact: Amy Bowen, PhD, director, consumer, sensory and market insights, Vineland Research and Innovation Centre at: amy.bowen@vinelandresearch.com, 905-562-0320 x805

Source: Vineland Research and Innovation Centre November 16, 2023 news release







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Detecting viruses in fruit production systems through bee pollination

JONATHAN S. GRIFFITHS, KATIE GOLDENHAR, ERICA PATE & ERIC GERBRANDT

Pollination is a vital aspect of fruit production, and commercial honey bee pollination services are used to ensure fruit set and maximize fruit quality in berry production systems.

Pollination is also a route of virus transmission, which can be taken advantage of to monitor viruses on a farm. For example, we recently reported a method using bees to monitor plant viruses in blueberry production systems (Lee et al., 2023). During their foraging activities, bees effectively sample small amounts of pollen from multiple flowers and plants in a large foraging area. Viruses associated with bee or pollen can be detected, providing a representative view of the pathogens present at that site

Viruses that are vectored by insects such as blueberry scorch virus (BIScV) can also be detected with this approach. Consequently, by analyzing bee-collected samples using high throughput sequencing, a wide range of viruses can be rapidly detected from just a few samples. This approach can also be combined with pathogen-specific or more targeted approaches, which could allow for rapid and straight forward area-wide monitoring of major viruses of concern.

In our study, we examined the presence of viruses in multiple sample types (forager bees, hive bees, bee bread, and pollen) from two farms in British Columbia (BC) and one farm in Ontario. Ontario pollen samples had a wide diversity of viruses detected, indicating that this type of sample could be useful for routine monitoring.

Twenty-nine viruses were identified from the samples collected from the BC farms, including blueberry shock virus (BIShV), strawberry necrotic shock virus, blackberry chlorotic ringspot virus, blueberry mosaic associated virus, blueberry latent virus, and BIScV. BIShV was the most commonly detected virus, present in nearly 80 per cent of samples.

In Ontario, nine viruses were identified, including tomato ringspot virus (ToRSV) and tobacco ringspot virus (TRSV). These results demonstrate that it is possible to determine the subset of viruses that can be detected through this approach as well as indicate differences between farm sites to direct management priorities for specific viruses that are important based on the region or crop. These results are consistent with previous studies surveying blueberry viruses in different regions in North



Figure 1: Viruses identified in two BC farm sites, and one ON farm site. *References:*

Lee E, Vansia R, Phelan J, Lofano A, Smith A, Wang A, Bilodeau GJ, Pernal SF, Guarna MM, Rott M, and Griffiths JS. 2023. Area wide monitoring of plant and honey bee (Apis mellifera) viruses in blueberry (Vaccinium corymbosym) agroecosystems facilitated by honey bee pollination. Viruses 15: 1209.

Martin RR, Tzanetakis IE. 2018. High risk blueberry viruses by region in North America; implications for certification, nurseries, and fruit production. Viruses, 10: 342.

America, which highlight BlShV and BlScV as major issues in BC, while ToRSV and TRSV are major issues in eastern production regions (Martin and Tzanetakis,





of the Ontario Fruit and Vegetable Growers' Association will be held in person at Hilton Niagara Falls/Fallsview Suites on February 20th, 2024

Election of Directors of the Association will take place as well as dealing with resolutions and any other business that may arise.



Award of Merit is our way of recognizing the outstanding contribution made by an individual or organization to our fruit and vegetable industry. This recognition may include the strategic leadership, technical input, and/or the dedication shown by this person or organization to our fruit and vegetable sector.

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2018).

This study is one of the more recent surveys of viruses in Canadian berry crops. There are still many questions remaining, especially regarding the presence of viruses in lowbush blueberry production systems in eastern provinces. The results from this study can be used to identify genetic sequences for more targeted and cost-effective surveys of viruses on an area-wide basis.

Understanding the regional distribution of viruses and farm-specific viral diversity could help to improve ecosystem health. This approach would be particularly effective for monitoring BlShV in eastern production regions, and it could be used as an early warning signal prior to the emergence of economically important viruses in Canadian fruit production systems.

Jonathan S. Griffiths is research scientist, Agriculture & Agri-Food Canada. Katie Goldenhar is plant pathologist – horticulture, OMAFRA. Erica Pate is fruit crop specialist, OMAFRA. Eric Gerbrandt is research director, BC Blueberry Council, Raspberry Industry Development Council and BC Strawberry Growers' Association.

Ontario

Berries

ON BERRY GROWER

Berry Growers of Ontario– Annual Meeting Program

Mark your calendars for the Berry Growers of Ontario (BGO) annual general meeting and the Ontario Fruit and Vegetable Convention! To register for the BGO annual meeting contact Bernie Solymar (info@ontarioberries.com), and for more information and to register for OFVC check out ofvc.ca.

Berry Growers of Ontario- Annual Meeting Program Tuesday, February 20, 2024 – Embassy Suites, Niagara Falls

9:00 am	Introduction and Welcome	
9:15 am	OMAFRA Berry Disease Update	Katie Goldenhar & Erica Pate, OMAFRA
9:45 am	Grower Profile	Rochon Gardens
10:30 am	Cyclamen Mite: A Discussion on Chemical Control Options	Dr. Jason Deveau, OMAFRA; Gowan; Syngenta
11:15 am	Grant Writing and Funding Opportunities	Kyra Cole, KLB Consulting
11:45 am	Irrigation Scheduling and Options for Improving Water Use Efficiency in Highbush Blueberry	Dr. David Bryla, USDA
12:20	Lunch & BGO Annual Meeting	
2:00 pm	Labour Update	Stefan Larass, OFVGA
2:30 pm	Raspberry Grower Panel	Hear from Ontario berry growers on how
3:00 pm	Blueberry Grower Panel	they manage and market their crops. Topics of discussion include cultivar choice, production systems, pest management, and
3:30 pm	Strawberry Grower Panel	marketing.
4:00 pm	Adjourn	
8:00 pm	BGO Hospitality Rm. #	

Berry Growers of Ontario OFVC Berry Program Wednesday, February 21, 2024 – Niagara Falls Convention Centre

9:25 am	Introduction and Welcome	
9:30 am	Grower Profile: Stevenson Strawberry Farm	Tom Stevenson, Stevenson Strawberry Farm
10:00 am	Fertigation and Nutrient Management of Blueberries: Tips for Fruitful Production	Dr. David Bryla, USDA
10:30 am	Cornell Berry Breeding and Variety Update	Dr. Courtney Weber, Cornell University
11:00 am	Nursery Update	C O Keddy Nursery, Lareault Nursery, EZ Grow Farms, Ready-Set-Grow
11:45 - 2:00	Lunch and Visit the Trade Show	
2:00 pm	Rebuilding Blueberry IPM Programs for SWD	Steven Van Timmeren, Michigan State University
2:30	Homegrown Innovation Challenge: Solutions for Extending the Growing Season and Future-proofing Canadian Food Production	Dr. Lukasz Aleksandrowicz- Weston Foundation
3:00 pm	Weed Control in June-bearing Strawberries: Covering Windows of Time	Sonny Murray, Perennia
3:30	PYO Pundits Panel	Susan Judd, Heeman's; Matt Setzkorn, Andrews Farm Market and Winery; Tim Alexander, Robintide Farms

BITS & BITES

New will and estate pre-planning tool available for Canadian farmers

Farm Credit Canada (FCC) is announcing the release of a new Will and Estate Pre-Planning Tool for Canadian farms. It will provide producers with the starting point they need to think about how to successfully plan for the future of their operations.

The Farm Transition - Will and Estate Pre-Planning Tool for Canadian farms is based on Dr. Tom Deans' Willing Wisdom Index platform. It has been adapted to reflect the unique needs of Canadian farm owners. Producers will get their own personalized recommendations and checklist minutes after answering a series of questions. The checklist will identify what is being done well and any existing

wealth advisors in their plans.

"Many people in the agriculture industry tell us that will and estate planning is an overwhelming task and so it's common for producers to avoid it. This tool complements the FCC's Advisory Services who are already helping Canadian farmers begin these conversations," said Greg Thomarat, FCC manager, advisory services. "By using the tool, producers will gain greater insight into this important step in their transition journey, as well as come away with a list of questions to bring to their advisors in advance of those plans."

"Once families get rolling on it, they are remarkably resilient at moving through the planning process," said Deans. "Often the second generation is waiting for their parents to say 'hey we need to talk about where the farm is going', but the kids don't know how to start the conversation and the parents are afraid of the conversation and then if someone dies, it's a mess."

down and talk to the family," said Deans. "You can blame the index and say 'hey I did this, and it says we should sit down. What do you guys think?' Blame the report but

now you have something in your hand that you can point to which is very different than saying 'we need to talk'."

The will and estate pre-

planning tool is free, completely anonymous and confidential.

Source: Farm Credit Canada December 12, 2023 news release



gaps in estate planning.

"The tool is meant to give urgency to a conversation that families often find difficult to start," said Dr. Tom Deans, intergenerational wealth transfer expert, speaker and author. "There's no other industry where a business owner forges such a close emotional connection to the business. You live on the very thing you are working. It's more than a business, it's an identity and to transition it to someone else is excruciating and a deeply emotional subject."

The will and estate tool can be used to start a conversation between family members on how to bring in and use resources such as lawyers, accountants and

Deans encourages people to point to the report as a reason to start talking about will and estate planning and avoid the erosion of family relationships and wealth.

"A farmer will take eight to 10 minutes, go through the checklist, hit enter, get the report and see what they have to do. The recommendations will be clear and a common one will be to sit

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THE GROWER

CROP PROTECTION

Aerial drone spraying still not approved



Aerial drones have become a more common sight on farms over the past few years for surveillance activities such as mapping and scouting to applying inputs such as fertilizer and seed. One area of great interest in agriculture has been the use of these vehicles to apply crop protection products.

Long in use in Asia, the idea of using remotely piloted aircraft systems (RPAS) - the government speak for aerial drones - for spraying crop protection products is relatively new in North America. The potential application of crop protection products with RPAS first caught the eye of the Pest Management Regulatory Agency (PMRA) in 2018. At that point it was decided that application of crop protection products by RPAS represents a new technology for aerial application and existing data and models based on conventional fixed-wing or rotary aircraft may not apply.

Based on that conclusion, PMRA took the position that the use of crop protection products with RPAS technology requires specific assessments to understand aspects such as occupational exposure, crop residues, efficacy and drift potential. For RPAS to be approved, it must be indicated on the product label as an allowable application method. So where does this issue stand in December 2023?

The PMRA has stated it has not received any data to support the use of RPAS for crop protection products that require a drone-specific risk assessment. Thus the hazards/risks posed to human health and the environment, or the value of the product, associated with the use of RPAS has not yet been characterized. Until this information is received and appropriately assessed, RPAS will not be included on a product label. In short, there are no crop protection products registered as of December 2023 with RPAS on the label and drone spraying remains illegal.

There are many efforts underway however in order to move forward with getting registrations for RPAS on the label. International working groups comprised of applicator groups, regulatory agencies, drone manufacturers and academics are conducting research to fill in the data gaps to better understand if and how specific risk assessments should be conducted for RPAS.

One such effort in 2023 was conducted by the Pest Management Centre of Agriculture and Agri-Food Canada to compare the residues from applications by RPAS with conventional ground-based airblast or field sprayers. Four trials were done in broccoli, peas, grapes, and apples using crop protection products registered on the crop. Samples were collected at harvest and will be assessed to determine if RPAS application results in similar residues on a crop compared to when the product is applied by ground equipment.

It is important to note that any trials that are currently using RPAS to apply crop protection products require specific approval from PMRA in the form of a research authorization. Many such trials were permitted by PMRA this past year.

Another less mentioned aspect of RPAS application is the Transport Canada requirements. These vehicles are considered aircraft in Canada and hence RPAS operators or pilots must also follow the Canadian Aviation Regulations. For most drones of interest in agriculture, a valid drone pilot certificate is needed for operation. There are two categories of drone pilot certificates basic and advanced. The differences largely relate to operations around people and near airports. The requirements include passing an online exam and also completing a flight review for the advanced



It remains to be seen which format will ultimately be most successful for horticulture: a swarm of lightweight drones or a single high-capacity unit.

~ CHRIS DUYVELSHOFF

certificate.

Even with a drone pilot certificate, there is also currently an additional step to fly RPAS over 25 kg gross weight. To operate these larger drones, an application needs to be made to Transport Canada for a Special Flight Operations Certificate (SFOC) which includes additional requirements such as a safety and emergency response plan. However, amendments to the Canadian Aviation Requirements were proposed in June 2023 to lift the SFOC requirement on RPAS up to 150 kg in weight. That would cover the majority of the RPAS technologies currently

delivered by the provinces. In Ontario, for example, this is the role of the Ontario Pesticide Education Program (OPEP). The Grower Pesticide Safety Course delivered by OPEP is a requirement for farm users of crop protection products that needs to be renewed every five years. There are similar requirements in most provinces. It is anticipated that RPAS-specific training will be incorporated into these programs in the future.

Overall RPAS application of crop protection products is a rapidly evolving area. As with any new technology, the regulations are struggling to keep up with the pace of innovation. We have made significant progress towards better understanding how these application systems perform in the field. The technologies themselves are changing rapidly notably a trend towards larger capacity. One extreme example is the recent introduction of a commercial spraying RPAS with a liquid capacity exceeding 300 liters. It remains to be seen which format will ultimately be most successful for horticulture, a swarm of lightweight drones or a single high-capacity unit.

It is safe to say we are still some years away from having RPAS being an option for applying a wide range of crop protection products. Keep that in mind if you plan on drone shopping this winter.

being touted for crop protection applications.

Finally, there is the education and training component for RPAS application that will be Photo by Glenn Lowson

Chris Duyvelshoff is crop protection advisor, OFVGA.



CROP PROTECTION

New CeraSulfur liquid sulfur fungicide introduced

Andermatt Canada and Cohort Wholesale have reached an agreement for Cohort Wholesale to lead the commercialization of new CeraSulfur liquid sulfur fungicide across the Canadian horticultural market.

While raw and formulated dry sulfurs are commonly used in Canadian fruit and vegetable production. CeraSulfur will be the first liquid sulfur available to Canadian farmers. Like other liquid products, farmers will appreciate how quickly and easily CeraSulfur loads and mixes in their spray tanks while also providing excellent disease control.

"Farmers will benefit from the hydrophilic nature of this product and what it offers mixing in the spray tank," commented Colin Smith, Andermatt Canada sales and market manager. "At the same time, the Cohort Wholesale team will do a great job introducing CeraSulfur to the Canadian horticultural market."

"The use of the older, dry sulfur fungicides is widespread, particularly by grape growers, because they work well," observed Trevor Latta, Cohort Wholesale manager. "New CeraSulfur will allow farmers to experience all the benefits of formulated sulfur while addressing the primary complaint with those older products - the inconvenience and challenge of loading and mixing.'

CeraSulfur has been approved by the Pest Management Regulatory Agency (PMRA) for use in outdoor fruit and vegetable crops, such as grapes and greenhouse tomato and cucumbers. At the same time, Cohort Wholesale's technical sales team will be working with growers and their crop input retailers to establish CeraSulfur demonstration sites across Canada.

Source: Cohort Wholesale December 12, 2023 news release



RootShield WP biological fungicide label expanded

JOSH MOSIONDZ

The Pest Management Regulatory Agency (PMRA) recently approved a minor use label expansion registration for RootShield WP biological fungicide for suppression of root rot caused by Pythium spp., Rhizoctonia spp., and Fusarium spp. in Canada. RootShield WP biological fungicide was already labeled for disease control on a wide range of crops in Canada. This minor use proposal was submitted by the Ontario Ministry of Agriculture, Food, and Rural Affairs 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 disease management decisions within a robust integrated disease management program and should consult the complete label before using RootShield WP biological fungicide.

For a copy of the new minor use label contact your local extension herbs and spices specialist, regional supply

$\mathbf{Crop}(\mathbf{s})$	Target	Rate (g/L)	Application Information	PHI (days)
Crop Groups 25 (Herbs – Greenhouse and Field)) and 26 (Spices - Field)	Suppression of Root rot caused by Pythium spp., Rhizoctonia spp., and Fusarium spp. – Drench application	55 – 110 g / m3 OR 30 – 45 g /100L	Suspend RootShield® WP - Biological Fungicide in sufficient water (eg. $30 - 45$ g/100 L) to achieve uniform application and apply at the rate of $55 - 110$ g per cubic metre (loose) of nursery potting mix, soil or planting beds. Within the stated rate range, use higher rates when conditions favour disease development or high disease pressure is anticipated RootShield® WP - Biological Fungicide can be applied through low pressure watering nozzles such as fan nozzles or other watering systems. Agitate to maintain suspension.	0
outlet or visit the	PMRA label site w	www.hc-sc.gc.ca/	Source: Josh Masianda minor use coordinator OMAF	R 4

t, or visit the PMRA label site www.hc-sc.gc.ca cps-spc/pest/registrant-titulaire/tools-outils/labeletiq-eng.php

Source: Josh Mosiondz, minor use coordinator, OMAFRA November 14, 2023

New crop profiles released

The Pest Management Centre has published four new crop profiles:



• Apple:

https://publications.gc.ca/site/eng/9.924821/ publication.html

• Cherry: https://publications.gc.ca/site/eng/9.924813/ publication.html

• Cranberry:

https://publications.gc.ca/site/eng/9.924805/ publication.html

• Grape:

https://publications.gc.ca/site/eng/9.924800/ publication.html

You can learn more about PMC crop profiles at fvgc.ca/crop-profiles/



BITS & BITES Canadian agriculture's \$30 billion opportunity

Farm Credit Canada's (FCC) economics team says rekindling productivity growth in Canadian agriculture is a \$30 billion opportunity over 10 years according to a new report.

"If the agriculture industry can return productivity growth to where it was two decades ago, FCC estimates it would add as much as \$30 billion in net cash income over 10 years," says J.P. Gervais, FCC's chief economist. "Developing innovative solutions, adopting new technology and leveraging data and insights can boost productivity growth and pay off in a big way for Canadian farms."

Canada's agricultural productivity growth has slowed since 2011 which is consistent with global agricultural productivity trends.

Agricultural productivity evaluates how inputs such as labour, capital, land, fertilizer and feed are efficiently transformed into outputs such as crops, livestock and aquaculture products. Productivity growth happens when producers increase their output using the same or smaller quantities of inputs.

Total factor productivity measures the combined effects of new technologies, efficiency improvements and economies of scale. It is a key metric for assessing trends in agricultural productivity.

"Between 1971 and 2000 there was steady productivity growth on Canadian farms before hitting a plateau," explains Gervais. "We are now seeing declining growth with a further decline projected for the next 10 years. While that is the current projection, the entire agrifood supply chain can rally around the innovation spirit of farm input manufacturers and suppliers, farm operators, researchers and food processors to restore growth in agricultural productivity towards its peak."



Average annual total factor productivity growth in Canadian agriculture by decade

Sources: USDA database on agricultural productivity and FCC calculations

As a global leader in growing, processing and exporting safe and reliable food, Canadian producers have a long history of adopting new technology and production practices that feed the world and protect the environment.

"The world's population is expected to reach nearly 10 billion people by 2050. The Canadian agriculture industry is well positioned to be a leader in the technology and innovation that will meet that demand for food," says Justine Hendricks, FCC president and CEO. "At FCC we offer a full complement of financing services and

resources to support the industry in sustainably increasing its productivity and maximizing the resulting economic gains."

The \$30 billion opportunity that exists for the industry by restoring productivity growth to its historical peak is calculated using a framework that takes into account the relationship between total factor productivity, farm product prices and farm input prices.

Farm Credit Canada December 4, 2023 news release

OMAFRA Guide to Vegetable Production is now available

TRAVIS CRANMER

OMAFRA's new Guide to Vegetable Production in Ontario replaces the discontinued Publication 363 – Vegetable Production Recommendations. The guide includes several features:

• Updated crop production & fertility guidelines

- Illustrated crop development stages
- Pest activity calendars

• Images of selected pests, pathogens and disorders

A digital copy of the publication can downloaded here: Publication 839

Printed copies of the publication will be available for purchase at the OMAFRA booth at the Ontario Fruit and Vegetable Convention, February 21-22, 2024 at the Niagara Falls Convention Centre for a discounted price of \$35 (HST included). Payment by cash or cheque will be accepted. Only one copy per client, no bulk orders.

If you are unable to make the Ontario Fruit and Vegetable Convention, print copies will also be available to be ordered through the Publications Ontario website in the early spring after the convention. Go to Publications Ontario and search "Vegetable Production Guide".

Shipping charges and HST will apply when ordering through the Publications Ontario website.

Travis Cranmer is an OMAFRA vegetable crop specialist.



Farming for our Future Webinar to be held January 9, 2024

The fourth annual Farm Transition Appreciation Day

💎 🖿 FARM TRANSITION

(FTADay) will take place on Tuesday January 9, 2024. This tribute was created to encourage and celebrate the progress Canada's farmers are making to secure the future of farming in Canada. It is one day of the year when the farm sector can come together to share stories and advice, and to encourage farmers through a national campaign using social media, agricultural media and offering learning events across Canada. This year's theme, Farming for our Future, will showcase how today's farmers are paving the way for Canada's next generation.

The New Year is the perfect time to reflect on the positive steps farmers have taken to secure



their farming legacy and help ensure the continuity of Canada's agricultural excellence through effective planning. FTADay is a celebration, and a call to action.

To kick things off, here are five farm transition planning tips: 1. Start the conversation about farm transition at least 10 years before the transfer is set to take place to allow sufficient time for everyone to prepare and adjust 2. Hold a formal meeting involving everyone to identify and harmonize the family and business vision and goals in writing

3. Establish a clear and mutually agreed on transition timeline between the current owners and



Farming for our Future



L'agriculture au service de notre avenir

successors to reduce uncertainty about the future of the farm and everyone's role within it 4. Prepare a formal written farm transition plan that can be shared, referenced and reviewed on a regular basis

5. Hire a coach or transition planning facilitator to help keep your transition planning on track To register for the webinar, link here: https://cafanet.ca/ev_calendar_ day.asp?date=1/9/2024& eventid=229

Source: Farm Management Canada