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HOMEGROWN

Wanted: Canadian-grown berries for all seasons



The window of opportunity is opening for more strawberries, raspberries, blueberries and blackberries in Canada, as demand increases for domestically grown fruits throughout the year. Here, a contract worker trims runners in a 25-acre greenhouse retrofitted by BC Hothouse in Delta, British Columbia. Photo by Todd Duncan.

KAREN DAVIDSON

Trimming strawberry runners in a newly renovated BC Hothouse facility in Delta, British Columbia, a worker appears at ease, safely cocooned from the daily horror playing out at the cliff's edge of the democratic free world.

There can be no doubt that Russia's invasion of Ukraine on February 24, 2022 is having a reverberating, and likely long-lasting, effect on global food supplies and distribution. One such outcome - incentivizing investment in domestic food production - is a bet that's already in play in Canada, fueled by sustainability initiatives and COVID's 'buy local' sensibility.

BC Hothouse, a subsidiary of The Star Group, made the move to strawberries pre-pandemic, pre-war. Betting "all in", the company has just named Colin Chapdelaine as president of its newly formed Berry Division, headquartered in Surrey, British Columbia. Chapdelaine is a 23-year veteran of the parent company and is no stranger to working with greenhouse vegetable growers.

"Strawberries, without a doubt, are a very, very complex crop," says Chapdelaine. "Getting the right plants to start with is key and to ensure that happens, we're doing our own propagation. To move from five acres in 2020 to 25 acres in 2022 is not the usual crawl-walk-run scenario."

Demand for locally-grown berries is driving the push for BC Hothouse to produce its "Just Picked" brand with retail prices that range from \$4.99 to \$6.99 for a 12-ounce top-sealed clamshell.

"Greenhouse berries are expensive to produce when compared with the field berries," says Chapdelaine, "but we've been successful in shipping berries throughout British Columbia, Alberta and Saskatchewan as well as the Pacific Northwest."

The cost of freight is one factor leading BC greenhouse growers to think they can be more competitive and more sustainable vis-a-vis California field-grown strawberries.

It's a balancing act though as growers still need to source inputs and talent from Europe.

"The geopolitical arena is a big black box," says Chapdelaine. "We used to order coco from the Netherlands with a shipping container cost of 2,500 euros and since last year, the cost of that same container is now up to 12,000 euros. And the supply chain is such that we sometimes have to wait up to six months for delivery of some items."

Even worse, the pandemic put pressure on the ease of essential travel for European technicians to come to Canada to service high-tech greenhouses and other specialized equipment. In the face of such challenges, The Star Group continues to push on with its research into new strawberry varieties, as well as blackberries and future game-changers such as robotic picking.

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AT PRESS TIME...

Canada's farmland values climbed 8.3% on average in 2021

Canada's farmland values climbed in spite of impacts from pandemic supply chain disruptions and adverse weather that affected parts of the country, as Farm Credit Canada's (FCC) Farmland Values Report showed an 8.3-per-cent national average increase in 2021.

The report, which describes changes in Canada's farmland values from Jan.1 to Dec. 31, 2021, covers an entire year of disruptions caused by the pandemic, as well as drought that reduced yields across much of the prairies.

FCC reported a 5.4-per-cent national average increase in 2020. In Ontario, average farmland values increased by 22.2 per cent in 2021, following gains of 4.7 per cent in 2020 and 6.7 per cent in 2019.

"The low interest rate environment and favourable commodity prices seem to have offset some of the many challenges that could have been expected to restrain the demand for farmland and the price producers are willing to pay for land," said J.P. Gervais, FCC's chief economist. "It's a testament to the resilience and business confidence of farm operators who are largely driving this strong Canadian farmland market."

The largest increases were recorded in Ontario and British Columbia (22.2 and 18.1%, respectively), followed by Prince

Provincial comparison of farmland values Annual % change in farmland values January 1 to December 31, 2021



*There was an insufficient number of publicly reported transactions in 2021 to accurately assess farmland values in Newfoundland and Labrador.

Edward Island (15.2%), Nova Scotia (12.3&) and Quebec (10%).

Other provinces showed more moderate average increases, ranging from Alberta's 3.6% to Manitoba at 9.9%.. Saskatchewan recorded an average increase of 7.4%, while New Brunswick showed a 5.2% average increase.

Increases in farmland values reported across the country are as wide and varied as the factors that may have influenced them. Average farmland values have increased every year since 1993, however, increases were more pronounced from 2011 to 2015 in many different regions. Since then, Canada has seen more

moderate single-digit increases in average farmland values.

Gervais reminds producers to have and maintain a risk management plan that factors in possible economic changes, ensuring their budgets have room to flex if commodity prices, yields or interest rates shift. They also need to exercise caution, especially in regions where the growth rate of farmland values exceeded that of farm income in recent years.

For the detailed report, link here: https://bit.ly/3tkolpe

Source: Farm Credit Canada March 14, 2022 news release

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NEWSMAKERS

The Canadian Horticultural Council (CHC) held its 100th annual general meeting virtually and pivoted with virtual technology to announce a name change to Fruit and Vegetable Growers of Canada/Producteurs de fruits et legumes du Canada. The board of directors continues to be led by president Jan VanderHout, (Ontario) and vice-president Marcus Janzen, (BC). They are joined by



Jason Smith (BC); Beth Connery (Prairies); Mike Chromczak (Ontario) and Charles Stevens (Ontario); Jocelyn Gibouleau (Québec) and Pascal Forest (Québec); Gerald Dykerman (Atlantic) and Russell Weir (Atlantic). Rebecca Lee is executive director.

Congratulations to the winners of the 2022 Canadian Horticultural Council awards. Larry McIntosh, past president and CEO of Peak of the Market for 27 years, was honoured with the Outstanding Achievement Award. Brian Gilroy, apple grower, Meaford, Ontario and past-president, CHC, was recognized with the Doug Connery Award. Fred Webber, past president of the Dispute Resolution Corporation was given the title of Honourary Life Member. Karen Davidson, editor of The Grower, was recognized as Honourary Life Member.





Larry McIntosh

Brian Gilroy





Fred Webber

Karen Davidson

The British Columbia Fruit Growers' Association elected **Peter Simonsen** as its new president at its February 23 annual general meeting. He's a fourth-generation grower who farms with his family on 45 acres of certified organic apples, pears and peaches near Naramata. He is joined on the board by **Jeet Dukhia** (vice-president) and directors **Annelise Simonsen**, **Mani Gill**, **Avi Gill**, **Ravinder Bains** and **Sukhdeep Brar**.

The British Columbia Cherry Association has announced its 2022 board. Sukhpaul Bal, president; David Geen, vice-president; Graem Nelson, secretary, Erin Carlson, treasurer. Directors at large are: Harman Bahniwal, Ravi Dhaliwal, Dr. David Geen, Richard Isaacs, Daniel Trolttier, Neal Van der Helm.

At the Berry Growers of Ontario annual general meeting, **Tom Heeman** was re-elected as chair. **Nick Vranckx** joins him, representing blueberries. **Dave Klyn-Hesselink** joins the board, representing raspberries.

The Nova Scotia Fruit Growers' Association has hired **Emily Lutz** as the new executive director. She grew up on the Lutz Family Farm at Berwick. After getting degrees from both St. Thomas University and Acadia, she had several positions before becoming a municipal councillor. She has extensive experience in governance, advocacy, and leadership.

In the retail world, **Oleen Smethurst** has moved to a new role with Loblaw Companies as vice-president, procurement for produce, floral and garden. She had been with Costco Wholesale Canada for 30 years, 14 of which were in produce.

The Ontario Fresh Grape Growers Marketing Board met in early March, confirming the same roster of directors. **David Hipple** is chair, supported by **Torrie Warner**, vice-chair. Directors are: **Jourdan Tregunno**, **Dan Lambert**, **Howard Colcuc**, **Robin Reimer** and **Adolf Reddecopp**.

Very best wishes to **Claude Laniel** who has retired as general manager, Syndicat des producteurs en serre du Québec (Greenhouse Growers of Québec). He's been in the role since January 2016, a long-time contributor to the industry, and past recipient of the Doug Connery Award. At the recent meeting of Fruit & Vegetable Growers of Canada, he reported that the Québec greenhouse vegetable sector earned nearly \$190 million in 2021 with the majority of production in tomatoes, followed by cucumbers and lettuce. He noted an increase in the price of natural gas, but that electricity costs of 6 cents/kilowatt helped to support growth and modernization by greenhouse growers.

Wanted: Canadian-grown berries for all seasons



Continued from page 1

"We will continue to disrupt the berry category with our goal being to produce the best-tasting strawberries in Canada," says Chapdelaine.

In Ontario, Vineland Growers' Cooperative has completed its first year of distributing and marketing ever-bearing and Junebearing strawberries for the Norfolk Fruit Growers' Association for the 2021 season. Although the Cooperative is mainly known for its prowess in handling large volumes of the tender fruit in the Niagara Peninsula, it handled some Ontario-grown strawberries a few years back. This time, the Cooperative's return to a field-grown strawberry program incorporates new production practices and signals a renewed commitment.

"We already handle a lot of the packaging needs for strawberry growers," says Matt Ecker, vice-president of sales and marketing for the Cooperative. "So it was a logical move. We are striving to be the one-stop shop for locallygrown fruit in Ontario."

Growing practices have changed in recent years, with table-top troughs being used by several growers. Hydroponically-grown using a nutrient-balanced solution and outdoors under plastic tunnels, strawberry plants now yield fruit from May to October. The method also means that table-top strawberries dodge soil-borne diseases often associated with field production while still allowing for natural pollination, just like field systems.

"Sustainability is very important to our retail customers," says Ecker. "We can now supply locally-grown strawberries almost six months of the year. Berries are picked in the morning, cooled in the afternoon, shipped in the evening and ideally on store shelves the next morning."

Ecker says the Cooperative has its sights set on raspberries next. If growers can finetune their growing practices — primarily in chilling the canes and bringing them out of dormancy at the right time — then higher yields and better shelf life are anticipated.

Another homegrown company, ecoation, plans to extend its current robotic and AI ag-tech knowledge to both greenhouse and field berry growers who are



Colin Chapdelaine, president of the newly created Berry Division, BC Hothouse, studies strawberries in the Solstice greenhouse near Delta, British Columbia



The Vineland Growers' Cooperative completed its first pilot in 2021, distributing and marketing strawberries from the Norfolk Fruit Growers' Association. The Cooperative has a major role in developing the sustainable packaging.



Diane Cooper, Strawberry Tyme, inspects table-top strawberries at the Simcoe, Ontario farm. Photo by Glenn Lowson.

growing on waist-high tables. Led by Dr. Saber Miresmailli, ecoation has partnered with JEM Farms to build a North American Horticultural Technology Center & Academy (HORTECA) on two acres in Ruthven, Ontario, located in the heart of Canadian greenhouse businesses.

The discovery center is equipped with the latest commercial growing technologies such as AI-controlled climate computers, air management technology, precision lighting and IPM crop assessment tools. Historically, ecoation made its name providing IPM solutions that address time-consuming manual labour tasks, quality management and residue-free production. But that's in the process of expanding, says Mary Haurilak, ecoation marketing manager.

"Building on our current OKO platform, in the future we will be able to provide yield assessments," she says. "This is now in progress for tomatoes, but doing this for berries is on our list. We're already working with a blueberry grower in Mexico, and several strawberry farms in Ontario. Peppers are next."

With so much stress on supply chains, Ontario greenhouse growers such as Mucci Farms understand the advantage of being able to forecast fruit yield, size and ripeness with accuracy. The ability to schedule picking, packing, and shipping for retail customers 10 to 14 days before harvest would represent a big win.

According to Haurilak, ecoation's researchers have also reconfigured its current web platform in use at tomato farms so that strawberry farms can

capture crop data such as pest issues, crop work, and in the future, fruit count, all by cell phone. Once the data is collected, it is stored in the Cloud for analysis. As the app becomes more developed, this would surely be a transformative milestone for field strawberry growers.

The spring equinox has signalled more change than usual in 2022. The world community is uniting to support Ukraine and its fight for self-determination. Can Canadian businesses and governments likewise find common purpose for self-reliance in domestic food production? Perhaps. This past month, the Weston Family Foundation signalled its intent with \$33 million in its Homegrown Innovation Challenge earmarked exclusively for Canadian berry production.

The Grower is "Digging Deeper" with Colin Chapdelaine, president of the Berry Division, BC Hothouse based in Surrey, British Columbia. He's forging a new path for more homegrown strawberries for all seasons in Canada. This podcast is sponsored by UPL.



CROSS COUNTRY DIGEST

BRITISH COLUMBIA

Export markets still crucial as BC cherry growers turn to domestic sales

MYRNA STARK LEADER

With cherry acreage continuing to expand, BC Cherry Association (BCCA) president Sukhpaul Bal had hoped to announce the South Korea market open for Canadian cherries during the online annual meeting February 23 and 24, 2022. However, with the final international agreement still pending, growers are optimistic that a small 2022 pilot will pave the way for full market access in

The heat dome's record-setting temperatures of 2021 resulted in smaller fruit size. That meant specifications couldn't be met in premium overseas markets so more fruit was sold in the U.S. and Canada. Export sales totalled \$72.3 million in 2021, down from a high of \$90.6 million in 2018.

Bal emphasized the ongoing need for producers' resiliency. He also cautioned growers about painting a bleak outlook regarding their individual crops, particularly to media, saying comments can negatively impact the entire cherry market, nationally and even internationally.

"We need to sell cherries for our growers to be successful," Bal said. "I have yet to see a strategy that says, 'We have a lousy crop but please pay us a high price, international buyers."

In April, BCCA representatives will head to Montreal to promote BC cherries domestically at the Canadian Produce Marketing Association trade

In 2021, the association ran a \$20,000 advertising campaign in the Greater Toronto Area to increase consumer awareness and demand for Canadian cherries, a tactic BCCA plans to repeat in

Canadians consume about one kilogram of cherries per capita annually, which would translate into more cherries than Canada can produce said Graem Nelson in his domestic market report, adding that U.S. sales to Canada are about \$180 million annually.

"Exporting cherries isn't as secure as it used to be," said Nelson. "Maybe we could make Canada a predictable market if we ship good fruit here. We have good market penetration in western Canada, and even some loyalty from retailers, but when buyers are tempted by lower-cost U.S. cherries, they can be swayed."

Nelson said the U.S. sells cheaper, lower-quality cherries into Canada rather than in the U.S. to protect their own market price. But to promote more sales of BC cherries in the domestic market, he sees the need for higher-quality BC cherries to be more consistently available.

While there is certainly room

to grow in Canada, international markets remain important. Specifically, BC's cherry sector shipped to 23 countries in 2021. In the Market Access Committee report, Richard Isaacs said the next international market focus is Mexico. Australia was considered but their need for fumigation puts it on hold.

In India, BCCA continues to press for a systems-based approach, such as the one currently carried out for exports to China, Japan, the European Union and the UK. The track record of exports to these countries provides an example to the Government of India that there are no hitchhiking pests with careful monitoring and control of pests and pathogens.

The Canadian cherry industry won a victory in 2021 with the Canadian Food Inspection Agency (CFIA) allowing wording on phytosanitary certificates to allow fumigation by importers once shipments reach India. The Japanese market, open for three years, is going well but growers must meet strict packaging requirements or risk shipment rejection.

"In 2021, it was difficult to find people in South Korea interested in blueberries but there was definite interest in Canadian cherries," said Sebastian Bubrick, of BC Ministry of Jobs, Economic Recovery and Innovation. He suggested



The British Columbia Cherry Association's president Sukhpaul Bal (3rd from L) hosted a cherry pruning demonstration in an older Sentennial cherry block in Kelowna. Expert pruner Glen Wood (2nd from L) and David Geen (L) of Jealous Fruits provided expertise on pruning for vigour and higher-quality fruit. Photo by Myrna Stark Leader.

Canadian cherries would benefit with distinctive branding, such as "Glacier Cherries." It would help differentiate them in the Korean market from American and Chilean cherries which all become "North American cherries."

The EU export program went smoothly in 2021 and Canada was able to once again access France after authorities agreed to follow the EU MRL for dimethoate. Taiwan still doesn't have an MRL for Exirel (cyantraniliprole) and at least one Canadian cherry shipment was refused there last year due to detected residues.

A Canadian grower and packer list still awaits approval in China.

Canada lost access to the Philippines in 2021, and to get it back, Canada would need to conduct a lengthy pest risk analysis, which Isaacs says isn't a current priority.

BCCA members represent more than 90 per cent of sweet cherry acreage in the province. That acreage has increased from 3,757 acres in 2015 to 4,795 in

Bal said extension will be key to help newer growers produce the high-quality cherries that markets demand. The association is reaching out to determine the tools most helpful to growers such as videos, printed materials and tailgate meetings.

















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BRITISH COLUMBIA

Minimum wage to increase to \$15.65 per hour June 1



British Columbia's government has announced that the minimum wage rate will increase from \$15.20 to \$15.65 per hour on June 1, 2022. This is the highest rate in Canada.

An increase of 2.8 per cent will also apply to minimum piece rates for hand harvesting of 15 specific crops in the agricultural sector as of January 1, 2023. That includes peaches, apricots, Brussels sprouts, daffodils, mushrooms, apples, beans, blueberries, cherries, grapes, pears, peas, prune plums, raspberries and strawberries.

Source: Government of British Columbia March 14, 2022 news release

CROSS COUNTRY DIGEST

MANITOBA

Manitoba vegetable growers welcome more marketing freedom

The Manitoba government is introducing legislation that will help expand the provincial table potato and root crop industry. The move is in response to concerns among producers and marketing agency Peak of the Market that red tape has prevented growth of the sector, says agriculture minister Derek Johnson.

"Our province's farmers provide nutritious, local food to Manitobans, though for years they have not had the freedom to grow and sell their table potatoes and root crops in the province," said Johnson. "At the same time, regulations have prevented Peak of the Market from modernizing its business model to promote,

sell and distribute Manitoba's table potatoes and root crops to the world. This legislation would allow producers to grow as many table potatoes and root crops as they wish and to sell to any buyer, while paving the way for a modernized business model for Peak of the Market and strengthening our provincial economy."

This is welcome news for Peak of the Market. CEO Pamela Kolochuk says, "We are hoping that the legislation will be proclaimed prior to April 30 to enable a clean start to the crop year and planting."

Provincial regulations and production quotas have been aimed at maintaining stable

pricing in the domestic market, though Johnson noted many producers have found the quotas too restrictive, preventing them from growing and selling their table potatoes and root crops to Manitoba consumers who want to purchase them.

Bill 12, the Peak of the Market reorganization act, would remove red tape for table potato and root crop producers across Manitoba and allow Peak of the Market to transition from a regulated agency to an independent operation under the Corporations Act, with opportunities to expand by acquiring assets or other entities.

"We are looking forward to being able to look at different



opportunities and actually take action on those that will benefit us most," says Kolochuk.

"This is an important development for Manitoba's vegetable growers by contributing to the modernization of the industry," said Peter Loewen, chair, Peak of the Market. "It will provide significant economic

benefit to our community."

Peak of the Market in its current form was established in the early 1970s by the Manitoba Vegetable Producers Marketing Plan regulation.

Source: Manitoba Government March 3, 2022 news release

MANITOBA

Donation supports Ag in the Classroom

In more Peak of the Market news, the Winnipeg-based company has announced a \$50,000 partnership with Agriculture in the Classroom – Manitoba (AITC-M).

"Peak of the Market believes in the significance of agriculture education and looks forward to sharing the benefits of the industry and the importance of eating both potatoes and vegetables with Manitoba students," said Pamela Kolochuk, CEO, Peak of the Market. "We are very pleased to support a well-established organization such as AITC-M that connects with more than 56,000 student and more than a thousand teachers in balanced and meaningful ways."

As part of the partnership, Peak of the Market will be the presenting sponsor of the Foundations of Manitoba Agriculture Virtual Resource - a hub on the AITC-M website where all major crop and livestock commodities in Manitoba will be highlighted specifically for educators and students across the grade K-12 audience. In addition, potato and vegetable farming will be highlighted by AITC-M through other digital and in-classroom materials including the new Amazing Veggies Race.



CANADIAN PRODUCE MARKETING ASSOCIATION

Learning Lounges offer a close-up with industry leaders

Big issues continue to confront Canada's fresh produce industry. A slate of top-notch speakers share their experience and vision for the future. Locate these learning lounges on the trade show floor.

Future growth – changing production in produce

Wednesday, April 6, 2022 2:00 pm to 2:30 pm

Climate change, pesticide management, improving yields and growing in non-traditional areas are just some of the factors that are influencing how produce is grown. As the industry focuses on feeding the world in changing circumstances, increasingly companies are expanding the items produced in greenhouses, focusing on vertical farming, and even bringing growing right into the store. What changes have occurred? What has been the business impact and what does the future hold? Join our panel to learn more about the rapidly evolving landscape of production.

Innovation – everything is on the table

Wednesday, April 6, 2022 2:45 pm to 3:15 pm

The fresh produce industry is facing a cascade of challenging issues. Some, like labour, supply chains, and consumer preferences have been constant, while others, such as climate change, sustainability, big data, and COVID-19, have begun to permeate the conversation regarding the future of the industry. The one constant across these themes is the need to innovate continually. Adaptation of existing processes, a willingness to embrace the future, and an openness to new ideas are all keys to future success. CPMA members are leaders in the world of innovation. Be part of this session and hear what they are doing, thinking, and prognosticating about for the future.

Sustainability in packaging – the art of the possible

Wednesday, April 6, 2022 3:30 pm to 4 pm

Sustainability is at the core of the fresh produce industry and is increasingly considered in all aspects of business to ensure the long-term viability of individual companies, sectors, and the industry in its entirety. Juggling advancements that improve sustainability is a long game, but in the short-term sustainable packaging has become a focus for the global industry. CPMA and its members have been leading

efforts in Canada while considering implications of both multi-stakeholder and multi-sectoral initiatives and the developing regulatory environment at home and abroad. Learn more about packaging sustainability and what the future holds

Growing in produce

Thursday, April 7, 2022 12:30 pm to 1 pm

Every company has become focused on recruitment and talent development while emerging leaders in the industry are looking at ways to ensure a meaningful career in produce. Join this panel of young industry leaders to learn more about their entry and growth in the industry, including what attracted them to their company, what keeps them excited to remain in the industry (and with their company) and what they feel is necessary to keep engaged.

Women in produce – their produce story

Thursday, April 7, 2022 1:15 pm to 1:45 pm

Each year, CPMA and Grocery Business Magazine honour women who have led and influenced the industry. Their stories are diverse and yet



representative of all leaders who contribute to success within their organization and within the produce industry. Their experience and insights inspire others to strive for their own successes. Learn more about these exceptional women in produce and how they support and guide those around them while constantly growing within their respective organizations. Moderator: Michelle MacMillan Speakers: Jennie Coleman, Martine Papineau (Metro), Julie Trepanier (Wonderful)

Supply chain disruptions – a buyer's perspective

Thursday, April 7, 2022 2:00 pm to 2:30 pm Who could have predicted that in a global pandemic and that the disruptions in the supply chain would still be a constant stress on the produce industry? The supply chain has shown remarkable resilience in the face of multiple challenges and buying organizations have needed to be nimble to keep fresh produce available for Canadian consumers. The pressures continue and those influence expectations today and decision-making for the near future. Join some of Canada's buyers to learn more about how they've had to adjust, including what that's meant for their suppliers, and how their expectations have shifted for today and into the future.

2022 we'd still be in the midst of

Keynote speaker is leading strategy and management expert

An internationally recognized intellectual-capital expert, Dr. Nick Bontis, helps individuals and organizations navigate the

new world of digital technology, industry disruption, and information bombardment. His dynamic and engaging presentations empower audiences to maximize performance and secure a sustainable competitive advantage in today's fast-paced



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LOOKING FOR DEALERS

* RGS is the reversible guide system



and ever-changing business world

An award-winning tenured professor of strategic management at McMaster University, Bontis has won more than 12 major teaching awards and has been recognized as "faculty researcher of the year", "one of the school's most popular professors" by Maclean's magazine, and "one of the top 10 lecturers in Ontario" by TVO. He is also a 3M National Teaching Fellow, an exclusive honour for top university professors in Canada and considered the "Nobel Prize" of teaching.

As the director of the Institute for Intellectual Capital Research, a leading strategic-management consulting firm, Bontis' services have been sought after by leading organizations, including the United Nations, Microsoft, Health Canada, Royal Bank, Telus, and IBM.

Bontis is also the author of Information Bombardment: Rising Above the Digital Onslaught, an associate editor of the Journal of Intellectual Capital, president of Soccer Canada, and a frequent contributor on popular TV and radio shows.

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TRADE

CFIA confirms third case of potato wart

The Canadian Food Inspection Agency (CFIA) has announced its third detection of potato wart as part of extensive testing of 3,500+ soil samples in its Charlottetown laboratory. It is from a field near the two October 2021 detections, on a farm that does not produce table stock potatoes and does not export to Puerto Rico. No seed potatoes produced in 2021 left this grower's facility.

The CFIA announcement on March 8, 2022 of a potato wart detection in a soil sample taken as part of the 2021 investigation comes as no surprise to those who study and manage potato wart according to a PEI Potato Board statement.

"This detection shows that the Long Term Potato Wart Management Plan is correctly identifying fields at risk and implementing the appropriate surveillance and testing measures," the statement read.

"While any finding of potato wart of unfortunate, our confidence in our management plan is reaffirmed. We are reassured that the management plan ensures PEI potatoes bound for markets anywhere in the world are healthy and safe," the statement concluded.

For its part, CFIA says it is working diligently to complete testing of all soil samples collected in its ongoing PEI potato wart investigations and has plans for further sample collection when the grounds thaw in the spring. This will include investigating the latest detection of potato wart.

Source: Canadian Food Inspection Agency March 8, 2022 news release/PEI Potato Board statement



To date, more than 300 million pounds of PEI potatoes have been destroyed due to findings of potato wart and the Canadian government's ban on exports to the U.S.

INTERNATIONAL

Ukrainian farmers short of fuel



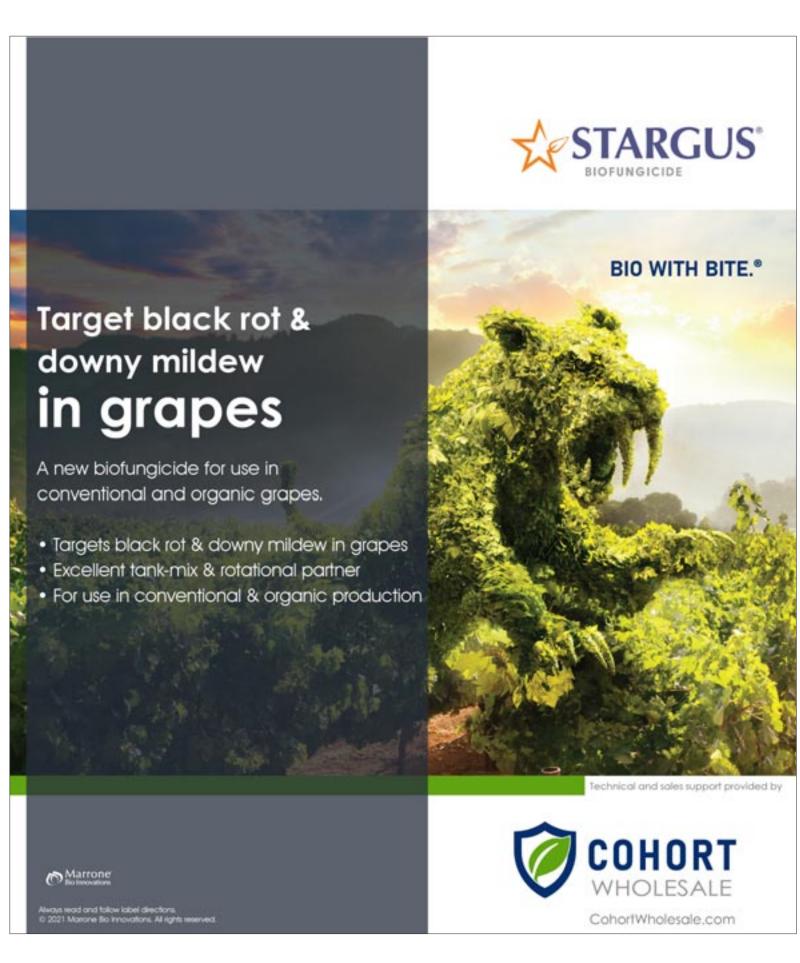
Prospects for spring planting in Ukraine are dimming as farmers complain of fuel shortages. Furthermore, they estimate the loss of 10 per cent of land, especially in the southern and eastern regions of the country due to the effects of Russian bombing. The report originated with Dzoba Taras, Ukraine's deputy agriculture

Taras indicated that farmers need financing, fuel, fertilizer and other crop inputs amid the Russian invasion.

In a survey of 2,500 Ukrainian farmers who operate 3.2 million hectares, the growers reported they had just 20 per cent of the fuel and between 40-65 per cent of the crop inputs required for spring planting.

Ukrainian ports are shut down. Potential damage to port facilities, railroads and storage silos could further impact estimates over the longer term.

Iurii Mykhailov, a Ukrainian journalist working for U.S.-based *Successful Farming*, said that Russian bombs have targeted agricultural machinery near a number of key cities.



FRUIT & VEGETABLE GROWERS OF CANADA

Economic policy needs to change: respect the food chain as critical and essential

KAREN DAVIDSON

Quaint though they may be, the audio tape recorders of the 1970s got one thing right: the button that said 'Fast Forward.'

With the first quarter of 2022 in the rear mirror, hopes for a 'new normal' are fading. There's only fast forward to meet the challenges which arise by the day, the week and the month.

As little as four months ago, prospects changed for Prince Edward Island potato farmers whose borders to the United States suddenly closed to exports on ministerial orders dated November 21, 2022. The impetus? Government inspectors' findings of potato wart in two fields already under long-term surveillance. Since then, the ramifications have bled across eastern Canada, dampening prices and undermining confidence in the Canadian Food Inspection Agency (CFIA). To date, 300 million pounds of potatoes have been disposed on frozen fields. And as the spring equinox has passed, PEI potato farmers have no hard assurances on what to plant, let alone how much.

Such is the damage that a resolution before the Canadian Horticultural Council's 100th anniversary annual general meeting called for improved

collaboration between CFIA and industry. The gist of the conversation is that CFIA is respected for its regulatory independence from all external stakeholders. However, the fruit and vegetable sector is experiencing a number of systemic challenges where the CFIA has failed to thoroughly consult prior to making regulatory changes, to acknowledge and mitigate unintended consequences of these changes and to demonstrate flexibility to work with those who have sectorspecific knowledge.

The resolution is that the Canadian Horticultural Council work with the Canadian Produce Marketing Association, the Canadian Federation of Agriculture and other interested stakeholders to establish a joint industry-government-CFIA task force which would include Agriculture and Agri-Food Canada, Health Canada and relevant federal trade and health representatives. The mandate would be to seek changes in the business processes at CFIA that lead to early consultation and to avoid unintended consequences of its regulations and policies. The hope would be to maintain this task force for the long term.

The PEI situation is a stark warning to other growers of export-facing commodities. It's



Jan Vanderhout, president, Fruit & Vegetable Growers of Canada, near Dundas, Ontario. Photo by Glenn Lowson.

"

We believe the Canadian fruit and vegetable sector is a key player to drive the economic recovery. . . We can achieve this if the Government of Canada identifies food production as a top priority.

~ JAN VANDERHOUT

•

enough to worry about managing the safe entry of temporary

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foreign workers, combating plant viruses and securing input supplies. But the relationships with municipal, provincial and federal governments continue to be at the crux for the daily functioning of business.

No better example exists than the resolution for CHC to continue working with the federal government on better delivery of the Temporary Foreign Worker (TFW) Program including coordination between multiple levels of governments. Whether it's housing, transportation or transfers of TFWs, all depend on the good will and deeds of multiple agencies.

At the heart of this issue is the need for agriculture, its farmers and food supply chains to be regarded as an essential service to the country. Through the pandemic and as recently as the blockade of the Ambassador Bridge in February 2022, farmers have not felt that governments placed a high value on the sanctity of food. If the blockade had not been dispersed as quickly as it was, the situation was within days of catastrophe. Jan VanderHout, president, CHC, crystallized these issues with his nod to the current war in Ukraine and the global impacts that the Russian invasion will have on food supplies.

"We believe the Canadian fruit

and vegetable sector is a key player to drive the economic recovery (in Canada)," VanderHout said. "Ensuring efficient and timely access to foreign labour and access to appropriate crop protection tools as well as strong risk management programs are a part of that. We can achieve this if the Government of Canada identifies food production as a top priority. This would allow for policy to be built out that deems our sector critical and essential, and will provide the framework to engage affirmatively with industry for meaningful change."

Many horticultural leaders will be working towards this fundamental change under various committees. They are: business risk management (Stefan Larrass); industry standards and food safety (Jody Mott); trade and marketing (Quinton Woods); crop protection (Jason Smith); labour (Beth Connery); and energy, environment and climate change (Aaron Coristine).

Be it resolved that the 2023 Annual General Meeting be in person. That's the plan as the Canadian Horticultural Council, renamed the Fruit & Vegetable Growers of Canada, looks to celebrate at its next meeting in Vancouver.

FRUIT & VEGETABLE GROWERS OF CANADA

The powerhouse greenhouse sector plans to recharge in 2022

KAREN DAVIDSON

2021 was a perilous year for greenhouse growers from coast to coast. From managing an unprecedented heat dome and floods in British Columbia to keeping temporary foreign workers safe under COVID-related health regulations in Ontario, the sector managed crises throughout the year.

Despite these challenges, greenhouse growers continued to supply nutritious tomatoes, cucumbers and peppers to millions of consumers, reports Linda Delli Santi, chair of the Greenhouse Working Committee, now under the umbrella of Fruit and Vegetable Growers of Canada. As the chart demonstrates, the sector has a farmgate value of \$1,755 billion.

In British Columbia, Andre Solymosi reports 810 acres in production with an increase of 27 acres in peppers. Expansion is due to consumer demand along the Pacific northwest coast, along the American Interstate 5 corridor.

In Alberta, Albert Cramer reports an expansion in lit acreage, with an increase of 15 acres in peppers. The sector is concentrated in the Medicine Hat area.

In Ontario, Joe Sbrocchi, reports 3,550 acres in production with forecasts of five to eight per cent annual growth. He notes delays in receipt of building materials, a fact that's hindering completion of new builds. Growers have increased cucumber acreage by 14 per cent, partly to avoid the risks of tomato brown rugose fruit virus. More lit acreage and automation are key trends.

"The stress of this pandemic has worn down growers," says Sbrocchi. "I see it in their faces and hear it in their voices. Farmers' mental and financial health will require greater focus in the future."

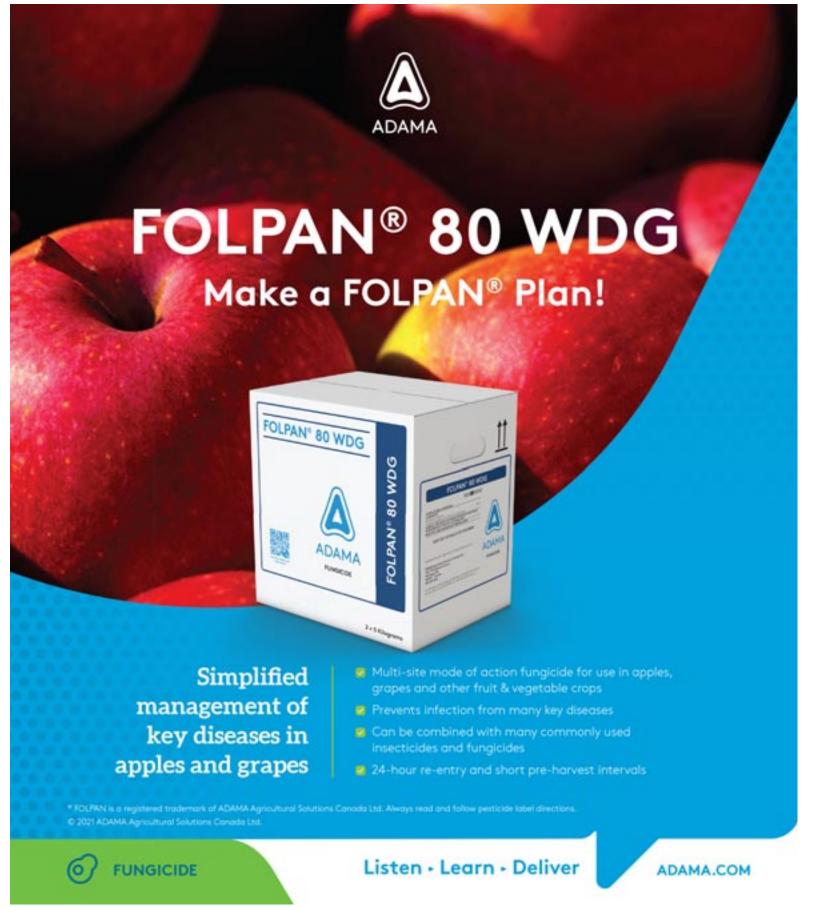
In Québec, Claude Laniel reports farmgate revenue of \$190 million from the greenhouse sector, an increase of \$30 million year to year. Tomatoes are the mainstay crop of growers.

From a policy perspective, the Greenhouse Working Committee brought forward a resolution that the Fruit & Vegetable Growers of Canada work with the federal government to amend regulations for packaging of seedless cucumbers. As it stands now, the Safe Food for Canadians Regulations (SFCR) demand a prepackaged product designation that requires burdensome labelling requirements. A change in the fine print, redefining "package" to include a transparent

protective wrapper on individual units of produce – as is now practised – would make operators compliant.

This resolution was passed at the general annual meeting. Linda Delli Santi remains chair of the Greenhouse Working Committee, supported by Joe Sbrocchi as vice-chair.





FRUIT LOGISTICA

Nominees announced for 2022 Innovation Awards

Berlin will welcome back attendees to the Fruit Logistica show from April 5-7, 2022. Here are six of the nine nominees for this year's Innovation Award 2022, the annual prize that recognizes the most interesting and innovative products, services, technology and technical systems in the global fresh produce business.

Nominees are:



Amela Tomato – Granada La Palma, S.Coop.And (Spain)

The Amela tomato is an innovative variety developed in Japan. By reducing irrigation to a minimum, sugars and acids can be concentrated. Amela is distinguished by its high Brix values and high levels of nutrients and amino acids. These provide a fine balance of flavours. Available in sizes between 50g and 140g.

www.amela-tomato.com



Flying Autonomous Robots (FARs) – Tevel Advanced Technologies Ltd (Israel)

Flying autonomous robots, with full six degrees of freedom of orientation, can harvest many different fruits, thus reducing the need for manual picking. The robots' ability to approach each fruit from an optimal position and angle is based on deep artificial intelligence and computer vision. These guarantee harvesting at an optimal stage of ripeness. www.teveh-tech.com/technology



Genap Energy Cover – Genap B.V. (Netherlands) The Genap Energy Cover is a unique combination of technologies. They not only form a floating cover for irrigation basins, offering protection against the formation of algae, but their integrated solar panels also generate energy in an environmentally friendly way.

www.genap.nl



iStem – Syngenta Seeds BV (Netherlands)

This unique variety of stem cauliflower can be perfectly portioned and eaten either raw or cooked whole. The stem grows to 13 cm and develops another smaller stem together with a number of leaves. The plant is very rich in fibre, and the stem is edible with a sweet, nutty taste. www.syngentavegetables.com



Red Crush - Gautier Semences (France)

Red Crush is the first totally red lettuce which is intensely coloured from the outside to the heart. The Red Crush concept comes in several varieties: a Little Gem with deliciously crunchy leaves, a Mini Cos with delicate, fine red foliage and a slightly sugary taste, and a Multileaf with serrated leaves.

www.gauthiersemences.com/international



Sunions – BASF Vegetable Seeds Business (Netherlands)

The Sunions variety offers consumers a new way to enjoy onions. They do not bring tears to the eyes when cut and have a mild, sweet taste. And these attributes are maintained even with prolonged storage. Available in nets from 350g to 750g

www.nunhems.com



CanadaGAP offers alternatives to GFSI-recognized certification



Table 1

Effective date	New GFSI requirement
April 1, 2021	100% compliance with audit criteria; required closeout of all Corrective Action Requests (CARs)
October 1, 2021	No advance notice for operations selected for unannounced audits
April 1, 2022	Option C individual operations and Option B group members who have both "Production and Packing" on their certificate may require more than one audit per year so that BOTH harvesting and packing activities can be seen annually

Table 2					
Option E	Option F				
Not GF	SI-recognized				
Meets Canadian Government Recognition requirements					
Annual on-site audit					
Passing score on the audit is 95%					
Corrective actions and Corrective Action Plans may be taken to achieve certification					
Those chosen for unannounced au	dits will receive 2-5 business days' notice				

Available to producers, packers and storage operators

Available to repackers, wholesalers and brokers

Those certified for "Production and Packing" will have only one audit each year, regardless of the timing of those activities

As of April 1, 2022 - the only CanadaGAP certification option available to brokers

HEATHER GALE

Since the inception of the CanadaGAP Food Safety Program in 2008, a range of different certification options have been available to fresh produce suppliers seeking food safety certification to meet the requirements of their customers - whether retailers, food service companies, manufacturers and processors, or other buying organizations.

On April 1, 2022 CanadaGAP will be making available two new certification options for companies who need certification, but who do not need to meet the requirements of a GFSI-level program: Option E and Option F.

GFSI (Global Food Safety Initiative) is a benchmarking scheme that recognizes credible food safety programs at an international level. Three of the currently available CanadaGAP certification options are GFSI-recognized:

- Option B (group certification)
- Option C (individual certification for

producers, packers, and storage operators) Option D (individual certification for repackers and wholesalers)

Recent GFSI requirements implemented by CanadaGAP

Within the past year, a number of changes to GFSI requirements have affected program participants certified under CanadaGAP Options B, C and D. CanadaGAP has introduced the following changes to maintain GFSI recognition (Table 1).

Are there alternatives within the CanadaGAP program to GFSI-recognized certification? CanadaGAP has been offering two non-GFSI-recognized certification options since 2008: Option A1 and Option A2. While acceptable to some customers, not all are willing to accept the four-year audit cycle that characterizes Options A1 and A2.

As a result of mounting pressure on producers from increasingly stringent GFSI requirements, CanadaGAP

committed in 2021 to exploring further alternatives to GFSI-recognized certification for companies whose buyers may accept an alternate path to certification.

In collaboration with the Canadian Horticultural Council (CHC) and facilitated by the Canadian Produce Marketing Association (CPMA), CanadaGAP participated in discussions with customer and buyer representatives from a number of retailers and food service companies in Canada. Buyers indicated willingness to consider new options for CanadaGAP certification that are not fully compliant with GFSI requirements. In consultation with these customer representatives, further non-GFSIrecognized certification options were developed within the CanadaGAP program and will become available to program participants starting April 1, 2022.

The two new CanadaGAP certification options, Option E and Option F, have the following features (Table 2).

It is critical to note that general support from buying organizations (retailers, manufacturers, food service companies) for CanadaGAP offering alternatives to GFSIrecognized certification does not lead to automatic acceptance of the new certification options by every buyer. Some customers may agree to accept these new certification options; others may not. A buyer may approve only certain vendors to be certified to a non-GFSI-recognized option (such as their smaller or more local suppliers).

It's very important that program participants confirm directly with their customers/buyers regarding which CanadaGAP certification option(s) may be acceptable.

Further details about CanadaGAP certification options can be found at www.canadagap.ca

Heather Gale is executive director of CanAgPLUS, the organization that manages CanadaGAP.

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CHAIR'S PERSPECTIVE

Taking a proactive approach



CHARLES STEVENS CHAIR, OFVGA

This is my first column as chair of the Ontario Fruit and Vegetable Growers' Association (OFVGA). I appreciate the confidence that my fellow board members have placed in me to lead this organization. We're in a turbulent time in the world – two years into a pandemic, we're also dealing with global supply chain disruptions, rapidly rising prices, war in a major global foodproducing region, and a growing realization of what a changing

climate will mean to our lives.

Turbulence makes it extra challenging to be a leader and I'd like to take a moment to recognize our past chair, Bill George, for his service to our organization. It's something I didn't get a chance to do properly at our recent annual meeting, which was held virtually again this year due to the pandemic.

I've been involved with OFVGA in different capacities for many years, and I believe Bill has had the toughest job by far as chair of this organization. Most people going into a chair position have some ideas on what they'd like to achieve during their tenure, particularly on a proactive basis. Bill didn't get much chance to do that as the pandemic has defined the majority of his time as OFVGA chair.

It's beyond imagination how much time and effort leading during crisis takes, including on evenings and weekends, and how much stress it can place on business and family - but, together with the OFVGA team, Bill has done a phenomenal job in getting us through the past two years and the growers of Ontario appreciate everything he has done.

As we transition into the recovery phase of the pandemic, I hope we will get a bit of a break from being reactive and instead, have the opportunity to once again concentrate on more proactive work on behalf of our industry.

We've already started down that road in the last year with the More than a Migrant Worker outreach program. Early successes in getting our side of the labour story out to politicians, media and the public are encouraging and as a board, we hope to apply a similar approach to other big issues affecting our industry such as crop protection and environment/climate change.

It's a bit of a shift in thinking for OFVGA, as we've long focused our efforts almost exclusively on government relations and lobbying. We're not going to move away from that or lessen our advocacy efforts, but we are going to be more active in reaching consumers directly. This includes working with our More than a Migrant Worker program partner Farm & Food Care Ontario, whose principal mandate is ensuring public trust and talking to consumers about where food comes from.

During my first week as chair, I participated in OFVGA's Queen's Park outreach days. Pre-pandemic, we held these meetings with elected officials, political staffers and bureaucrats in person, but we've shifted on-line for the last couple of years. One of the topics that came up frequently in those meetings was food security, and in particular access to and protection of top-quality farmland for food production.

From a horticulture perspective, we are lucky in Ontario to have some unique specialty soils and microclimates that let us grow crops most other parts of our country cannot. This gives us opportunities to expand

our sector and strengthen our place in Ontario's economy by producing food not just for our own consumption, but also for export markets.

At OFVGA, we've long been advocating for a strong focus on domestic food production throughout all aspects of public policy, and the pandemic has heightened the need. This means a consistent and balanced approach to land use planning, crop protection, labour and energy policy at all levels of government so that growers can remain productive and competitive.

Many people don't understand the complexities of food production and everything that goes into ensuring food is available in our stores, so it's up to us to help ensure our ability to grow food isn't curtailed by wellintentioned but impractical or unrealistic government policy and regulation.

WEATHER VANE



Russia's invasion of Ukraine is causing ripples across the agricultural world, particularly in fertilizer. In response, Nutrien, headquartered in Saskatoon, Saskatchewan will be expanding potash production in the second half of 2022. The company is projecting a 20 per cent increase above 2020 levels – or 15 million tonnes which will be a historical record. In this photo, Gwillimdale Farms is receiving a fertilizer delivery near Bradford, Ontario. Photo by Glenn Lowson.

STAFF

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VIEW POINT

Tariffs on Russian fertilizer will impact Canadian farmers

RUSSEL HURST

Russia's February 24 invasion of Ukraine is reverberating around the world for farmers who depend on fertilizer for spring planting in the northern hemisphere. Ontario, for example, has capacity to store only two-thirds of the fertilizer needed for spring operations. The remaining fertilizer supply – nitrogen and phosphate –- is usually in transit from Russia and the Baltic area for later delivery to the ports of Montreal and Hamilton.

The situation is made more complex by the fact that the Canadian government announced 35 per cent tariffs on all imported goods from Russia and Belarus that were not in transit prior to March 2, 2022. The Ontario Agri-Business Association (OABA) is providing a sample letter that can be shared with local MPs to raise awareness of the effects on farmers.

As a sector, we are fully supportive of punitive actions against Russia resulting from their decision to invade Ukraine. Although the tariff is intended to be a punitive action against the Russian economy the consequences will be ultimately felt by Ontario farmers through spring fertilizer supply shortages and price increases.

We are recommending:

1. Standing Committee on Agriculture

and Agri-food (AGFI) hold an emergency meeting to address the supply chain challenges the Eastern Canadian fertilizer value chain is currently facing due to the implementation of the tariff and associated supply chain restrictions on Russian goods.

2. Amend the tariff policy on Russian fertilizer to include the following:

a. 35% tariff would not apply on fertilizer imports that have a documented fertilizer purchase order made prior to March 2, 2022.

Context: Purchase orders for Russian fertilizer are typically made by Canadian-based companies which import fertilizer into Eastern Canada several months in advance of shipments being initiated. As a sector, our position is that fertilizer importers should not be penalized for business decisions made prior to the implementation of the tariff.

b. 35% tariff applies to fertilizer purchases orders made as of March 3, 2022.

Context: OABA and its 500 members are fully supportive of a tariff on Russian fertilizer for all purchase orders initiated on or after March 3, 2022.

c. 35% tariffs paid by fertilizer importers be put "in-trust" until further clarity on tariff policy decisions can be made by government decision makers.



Context: This would allow for Canadianbased companies importing fertilizer into Eastern Canada to recoup tariff payments, if amendments are made to the current policy to mitigate the undue burden placed on the domestic fertilizer supply chain.

3. Ensure that vessel shipments of fertilizer that are of Russian or Belarus origin currently in transit are allowed to off-load at Canadian ports (i.e. Port of Hamilton and Port of Montreal), if all necessary shipping requirements are adhered to (i.e. ship and crew is not of Russian origin, per Customs Notice 22-02).

Context: It is vital to Ontario farmers that vessels currently en route to Canada from the Black Sea/Baltic region are permitted to deliver the fertilizer that Ontario farmers vitally need during the spring planting season. If this is not allowed to happen there is the very real probability that some Ontario farmers will not be able to access adequate fertilizer to grow their crops.

4. Government of Canada examine providing the sector (i.e. fertilizer importers, distributors, ag-retailers and farmers) compensation for undue financial hardships associated with the implementation of the 35% tariff on fertilizer.

Context: The timing of the tariff decision and implementation significantly impacted long established supply chain operations and agreements that had already been negotiated and logistics established. The tariff negatively impacts product availability with no feasible global sourcing alternatives weeks before the crucial spring planting period. The tariff further escalates farm level pricing due to tariff fees being incorporated into mid-spring fertilizer imports.

Russel Hurst is executive director of the Ontario Agri-Business Association.







info@cleanfarms.ca

Cleanfarms' recycling programs help Canadian farmers take care of their land for present and future generations. By taking empty containers (jugs, drums and totes) to nearby collection sites, farmers proudly contribute to a sustainable community and environment. When recycling jugs, every one counts.

Ask your ag retailer for an ag collection bag, fill it with rinsed, empty jugs and return to a collection site.

And, go to cleanfarms.ca to find out about managing empty seed, pesticide and inoculant bags in your province.

FARM & FOOD CARE

More than a Migrant Worker campaign expands

Canada is welcoming and offers opportunities for a better life, say migrant workers

Rodrigues has been leaving his wife and three children in Mexi every year to work on Canadi fruit and vegetable farms. For the past four years, he's been at a vege table greenhouse near Windsor, and although be misses his family. he's proud that he's able to provide eus with a better life. Thanks to his job in Outario, for

espile, his oldest daughter is go ing to university - an opportunity Fernando himself never had. He's also proud of the role he plays in feeding Canadians and appreci-ates the strong relationship with his employer, DC Farms.

"We do our work with pride, with care, and we come here to do things right. We are not just workers, we are people who come to give our best to this country, to help our economy, and help Can-ada's economy," he says. "This is also a family farm. We are not just a worker or only an employee. We are family. They look after us and

they take care of us." Fernando is one of 17,000 migrant workers who come to Ontario annoally from Mexico, Jamaica, Trinidad & Tobago, Barbados and the Eastern Caribbean through the federal Seasonal Agricultural Worker Program (SAWP). Additional workers come from other countries as partici-sants in the agricultural stream of the Temporary Foreign Worker Program CIFWP); all of them are essen-tial to keeping homogrown produce



Fernando Nieto Bodrigues's work at a vegetable gree

Migrant farm workers have been coming to Ontario since the 1990s, when farmers first began struggling to find enough local employees to help them grow and harvest crops. Growing fruits and vegetables is very labour-intensive because many of the delicate crops need to be planted, harvested and cared for by band. Fruits and vegetables also generally have very short planting or harvesting sea-sons, which means, for example, that crops can spoil in the field or on the vice if they're not harvested at just the right time. But it wasn't until the COVID-29

ndemic and travel restrictions national worker arrivals that more Ontarians started to become awarof just how dependent fruit and vegetable production in this prov-

Tragedy and sensation grab headlines, but the real stories of workers like Fernando, why they leave their families, and how they feel about Canada and Canada are not often told.

Fellow Mexican Jaime Madrid has been working on a vegetable farm near Bradford for years. So far, he's finished building his bouse and is puring for his two oldest chilidren to go to college. Being away from his family is tough and he's not a fan of winter, but Canada has nade him feel welcome, he says. "What I like most about Canada

is its people. They are bonest people; I see a lot of human warmth in them. When people in Canada unile at you, it is a sincere smile; you can see the affection in their eyes," be explains. "I would say the weather is a bit drastic for us, but you learn



eople, the warmth you feel here. tu feel at home."

As soon as they arrive in Can-da, workers on the government-approved programs have the same rights and privileges as Canadian workers, and their emplayers have the same obligations owards them as they do for their following government regulation about minimum wage and other employment standards, as well as access to health care, workplace ment Insurance. And worker hous-ing is inspected by local public health units to make sure regula-

For the last five of his nine sea ons in Canada so far, Jamaican Nicholas James has been working for EZ Grow Farms, a strawberry plant grower in Norfolk County. Like many Canadians, be's become a fan of the Tomoto Raptors, even folin Jamaica, He also enjoys playing socort, especially on the socort field

"I also think - no, I know - that I'm working for one of the best fam-

llies in the program. I'm lucky to he working here. I love them and here and working in Canada." To learn more about tempo

ary farm workers in Outario, visit

THIS STORY WAS PROVIDED BY THE ONTARIO FRUIT & VEST TABLE SHOWERS ASSOCIATION

AMBER ANDERSON

Farm & Food Care Ontario (FFCO) is proud to partner with the Ontario Fruit & Vegetable Growers' Association (OFVGA),Ontario Apple Growers, Ontario Greenhouse Vegetable Growers and other industry supporters on the More than a Migrant Worker campaign. The initiative, launched in 2021, highlights the importance of the Seasonal Agricultural Workers and Temporary Foreign Workers who help Ontario farmers grow our food.

Through photography, video interviews and written profiles of workers, the campaign gives voice to these workers and

demonstrates their valued role on farms across the province. Follow @MtaMigrantWrkr on Twitter, Instagram and Facebook to see these profiles and share them through your own accounts.

The project is attracting a lot of interest. OFVGA has signed a contract with both Post Media (National Post) and Metroland (Toronto Star) to feature stories, website videos and social media campaigns through both publications throughout the year. The first article written by

reaches as many people as possible, a search-ads campaign is ongoing to boost its visibility in Google search results when people look for information on migrant workers. A video advertising campaign also began in March 2022 on television screens located in restaurants, hospitals, gyms, medical offices, etc. in southwestern Ontario and will run for six months.

Since the project began, more than 50 seasonal workers have been interviewed in 2020 and 2021. The committee is now looking for farms and workers to profile throughout the upcoming season - ideally from commodities not yet covered. Email Farm & Food Care at info@farmfoodcare.org if you've got workers interested in participating.

FFCO Annual Conference

FFCO's annual conference and speakers' program is taking place April 13, 2022. Register now at www.farmfoodcareon.org/Confer ence to attend virtually or in person at The GrandWay Events Centre in Elora from 10 am to 4 pm. This year's theme is

"Evolving in a Changing World." Continued recognition of FFCO's 10th anniversary will continue with a series of events and promotions throughout the

Amber Anderson is communications manager, Farm & Food Care Ontario.

COMING EVENTS 2022

April 5-7 Canadian Produce Marketing Association Convention & Trade Show, Palais des congrès de Montreal, Montreal, QC

Fruit Logistica, Berlin, Germany April 5-7

Grape Growers of Ontario Annual General April 6 Meeting, Club Roma, St. Catharines, ON

April 6 & 7 Muck Vegetable Growers' Conference, Bradford, ON VIRTUAL

Farm & Food Care Ontario Conference, April 13 Grandway Events Centre, Elora, ON

May 30-June 2 11th World Potato Congress, Ireland

June 12 Ontario Agricultural Hall of Fame Induction Ceremony, Grand River Raceway, Elora, ON

International Cool Climate Wine Symposium, St. July 17-21 Catharines, ON

July ??? FPT ag ministers meeting, SK

the barnders

Sept 13-15 Canada's Outdoor Farm Show, Woodstock, ON

Sept 29-Oct 1 Canadian Farm Writers Federation Conference, Saskatoon, SK

Oct 5-6 Canadian Greenhouse Conference, Niagara Falls,

Royal Agricultural Winter Fair, Toronto, ON Nov 4-13

Alberta Potato Conference and Trade Show, Nov 15-17 Cambridge Hotel and Conference Centre, Red

the barnders

by gord.coulthart



It's been a weird two years.



by gord.coulthart

Don't forget we have to share the road.

Lilian Schaer for the National Post last fall, generated 50,000 impressions of the written piece, 12,860 YouTube impressions and almost 100,000 Facebook impressions.

To ensure that this campaign

The right mindset for selling in 2022



PETER CHAPMAN

There are so many challenges to producing great products that we can lose enthusiasm for the mindset needed to sell. With increasing costs, challenges to find labour, weather and sometimes demanding customers, it is difficult to maintain the right approach to the sales process.

One thing to remember is your customers are going through many of the same challenges you are in your business. Their costs are increasing and they find it difficult to get people as well. This is not an excuse for being difficult to work with, but they do face similar challenges.

Focus on where the market is today, not where it was

A lot has changed. To succeed in 2022 you need to focus on where consumers and customers are today and where they are going. Some of the priorities have changed.

Relationships with retailers are more important now than ever. Retailers are being forced to do more with less and when you have good relationships, they will trust you to do your part. Developing new relationships is more challenging right now. Most of the interaction is virtual and that can be more difficult when you do not know the person. Do your best to keep your customers informed as to what you see out in the market. People are not moving around as much as they used to so any information can be a help to them.

Service level is a big challenge across many categories. Logistics and availability of labour are really causing many interruptions. Service level is defined as the cases you deliver (on time, in full, with the right labels and the right packaging) divided by the number of cases ordered by the retailer. Retailers are very focused on this issue and they will appreciate your efforts to get product to them. Let them know what you are doing to overcome the problems. It is their nature to focus on the problems and not notice the suppliers who are meeting or exceeding targets. Monthly service level updates are a good practice to keep them informed. Do not wait for the problems.

There is more focus on food than ever before. Consumers and customers want to understand more about where food is coming from. The empty shelves during the pandemic forced consumers to question our food supply and many want to know more. There is such a great opportunity to tell your story right now. You will have to tell it over and over. You will be tired of it far earlier than consumers and customers.

Consider the other side of the

Believe it or not, when I worked at Loblaw, I did try to understand some of the challenges facing suppliers. I believed I could do my job better when I had a better sense of what producers were facing. I would encourage you to do the same when you approach selling in 2022.

The first consideration is the cost increases everyone in the industry is trying to manage. Retailers have almost every supplier coming at them looking for an increase. Many are justified, given the increases to inputs, labour and logistics. Just remember when you talk to them about this issue you are not the first and will not be the last.

Focus on your own business and try to be as realistic as possible. They do not want to hear "everything is going up, I don't know how we can stay in business." They do need to hear "we are experiencing increases in the following areas and the impact on our price will be XX%."

Stick to the facts and avoid the "everything is terrible" strategy. They will be much more likely to work with you when you are realistic and do not waste their time with generalities and negative thoughts. It is a long day for them when every supplier tells them how bad it is. It is a breath of fresh air for them when suppliers come in and share what they are working on to minimize the impact of increases or even negotiate with their suppliers to reduce the increase.

Category managers have more pressure than ever to deliver results. The competition in retail remains intense. With inflated sales during the pandemic they will likely be working in an environment of sales decreases in retail. As food service comes back, food dollars will shift again. Working in an environment of sales decreases is difficult. They will want to maintain the sales they have achieved, even if it is not realistic!

Trucks are in shorter supply and produce depends so much on this industry. With short shelflife products, we need to move them quickly and properly. This costs more and more. Retailers are struggling with this like everyone else. Many do have their own trucks to deliver to stores but they rely on many carriers for inbound freight. Short and late orders cause them a lot of challenges. Similar to the cost increases, it is a long day for them when orders are not arriving when they had them planned.

These are not meant to be excuses for retailers. They are some issues to be aware of and if you can help them in any way on these issues your efforts will be appreciated.

The right mindset

Find a balance between the opportunities, positives, cost increases and challenges. People have to eat, so we know there is demand for our products. More demand than ever for many that are produced close to home. Bring a balanced position to your customers. You do need to get the increase to generate the return required so you have to address it. Discussion about opportunities and increases is more effective than just the increases and the negatives.



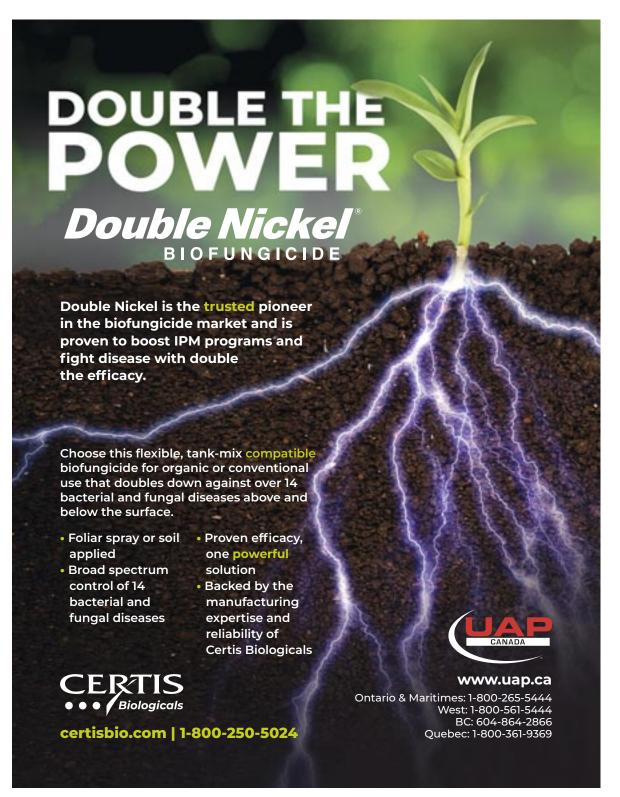
Focus on where the market is today, not where it was. With the exception of bananas and citrus, grown-in-Ontario apples, potatoes and greenhouse vegetables are front and center in this Shoppers Drug Mart display.

Before you meet with customers, find a solution that takes you away from the day-to-day challenges. Some people might want to go for a walk, others might do the call from your home office. I prefer going for a walk in a grocery store to get my mind focused on that environment. Find your own solution with the goal being to have the right mindset for the conversation.

The approach you bring to your customers can have a

significant impact on the relationship you develop. These relationships are so important to the results you can achieve.

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.



FOCUS: WORKER HEALTH & SAFETY

Be prepared for the unexpected

KAREN DAVIDSON

Be prepared. The boy scout's motto is just as relevant in today's fast-moving business environment.

Shawn Brenn, chair of the Ontario Potato Board, agrees there are a lot of moving parts on the farm, and that's precisely what can lead to accidents or near-misses. His questions are those of every diligent farmer: What do I need to do legally for worker health and safety? How do I prepare for a surprise visit from the Ministry of Labour, Training and Skills Development (MOL)?

Brenn recommends starting with the Workplace Safety and Prevention Services (WSPS) website and personnel. A program is available, funded by the Ontario Ministry of Agriculture, Food and Rural Affairs, to engage WSPS for an on-site consultation.

Another step that Brenn has taken is to participate in the voluntary Health and Safety Excellence program (HESp) that's under the umbrella of the provincial Workplace Safety Insurance Board. It's a voluntary program. Workplace Safety & Prevention Services (WSPS) is an approved provider of the program. Link here: https://bit.ly/3tryrVc

Jay Remsik, health and safety consultant, WSPS, explains that the program has a "rolling registration." Join when you want during the calendar year and pick a maximum of five topics that are relevant for your farm," he says.

There are 36 topics arranged in tiers from Foundation to Intermediate to Advanced. The program is geared towards all kinds of horticultural businesses that range from orchards to greenhouses. When a cycle of topics has been completed, the member receives not only a financial rebate but also a digital badge. The value of the badge is displaying it on your website and communicating your commitment to worker health and safety. Remsik says that eight horticultural members have completed the program, mostly in the greenhouse vegetable sector.

Under the Occupational Health and Safety Act, employers with six to 19 workers must have a health and safety representative on the property. That representative cannot be in a management function and must be elected amongst the employees. Remsik notes that in the agricultural sector, these rules apply only to beef, dairy, greenhouse, mushroom, poultry and swine sectors. All other operations (cash crop, orchard, nursery) are required to have a health and safety representative once they exceed six or more workers.

For employers with 20 to 49 workers, the legal requirement is to have a joint health and safety committee comprised of one manager and one worker. The worker can be a volunteer or elected by colleagues. The employer can appoint who



Photo by Glenn Lowson.

represents management.

For employers with more than 49 workers, the health and safety committee is comprised of two management representatives and two worker representatives. One of the management committee and one of the worker committee must be certified with five days of health and safety training (Certification: Part I (3 days) and Certification: Part 2 (2 days).

Orchard operations, for example, have seasonal employees, usually April through to November. A health and safety representative must be in place. The requirement would be to conduct workplace inspections only once during the active growing season. However, if MOL appeared in your yard outside the growing season, you would be required to show the workplace inspection from the previous year.

To prove that you're protecting workers from excessive tractor noise such as an open cab tractor, the grower must prove that training has taken place and that hearing protection has been provided.

"The point is that your training has to be documented," says Remsik. "You need to show that the training was provided on a specific day and by whom."

As some orchardists point out, seasonal workers often come back year after year. Or workers may transfer from one orchard to another. It's a chore to track who has received health and safety training. So some growers simply offer a refresher course every year to make sure that safety is front

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"Post-COVID pandemic, MOL inspectors have been more proactive in their approach. While their role is to enforce the Ontario Health & Safety Act, they also educate," says Remsik.

and center for everyone.

If an inspector arrives on a proactive Internal Responsibility System visit, the likely questions will be as follows. Who's in charge here? How many workers are here? Do you have a health and safety representative and who is that? Where is the proof of your training program?

From Brenn's perspective, the end goal is to have his binder ready with policies and procedures undertaken on the farm. He's not there yet, but it will be peace of mind when a representative arrives from the provincial ministry of labour.

"Yes, the HESp takes time, but there's a list of 36 topics to choose from and, after successful completion, there's a \$1,000 rebate for your time investment."





New Zivata insecticide offers applicators a safer working environment

A safer, greener option for insect control is now available for Canadian fruit and vegetable growers. The launch of ADAMA's newest insecticide Zivata signals the company's commitment to providing an improved balance of performance along with environmental safety and sustainability.

Zivata (lambda-cyhalothrin) is registered in Canada to control a range of insect pests and pest stages in a variety of fruits and vegetables and row crops. Zivata will be available across Canada for the 2022 growing season.

"We've had a gap in the marketplace when it comes to enhancing worker health and safety, user experience, product odour and safer application," says Cornie Thiessen, general manager, ADAMA Canada. "That's why we developed Zivata, so growers and their employees can confidently and consciously choose a product that is effective against pests while prioritizing a safe working environment and reducing environmental impact. We're filling the innovation void with unique mixtures and formulations such as Zivata by leveraging our access to 265+ actives, and delivering first-toimprove products and solutions for Canadian growers."

Zivata was formulated for performance and protection of human and environmental health. The insecticide has a higher flashpoint (>110°C) to improve storage and handling safety. It contains sustainable, plant-based solvents compared to non-renewable, petroleum-based solvents used in most insecticides that improves user experience and flexibility of the product around odour-sensitive areas.

This is especially beneficial for growers and employees who are sensitive to product odours or who apply pesticides close to urban areas or near sensitive neighbours where the product smell could pose concerns.

This new insecticide goes even further to improve sustainability and stewardship for farmers with a reduced level of volatile organic compounds (VOCs) in its formulation. VOCs are known to negatively impact people, the environment and air quality, and the innovative formulation in Zivata improves user experience and offers flexibility of use in odour-sensitive areas. And Zivata performs, just like ADAMA's lineup of other first-to-improve products, this new choice in insect control contains a proprietary, sustainable solvent and adjuvant to improve product penetration and knockdown.

"Zivata is an ideal pest control choice for Canadian growers looking for product performance and safer application and working conditions," says Thiessen. "It's a great option for large farms with

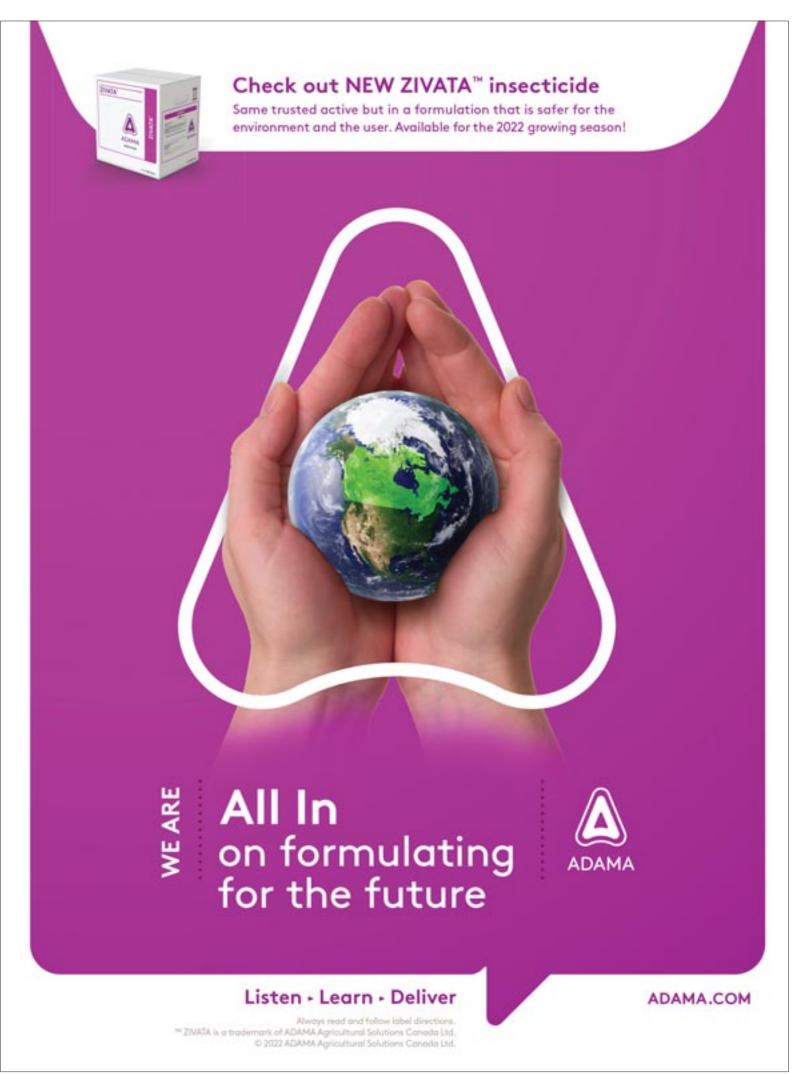


employees who are responsible for pesticide application, for growers who want a better user

experience, and anyone who wants to promote a safer alternative for their family,

employees and our environment."
For more information, visit
www.adama.com

Photo by Glenn Lowson



FOCUS: WORKER HEALTH & SAFETY

Sowing a foundation for safer Ontario greenhouses

Good things happen when industries grow together. And now, stakeholders from across Ontario's greenhouse sector are leveraging insights gleaned from a multi-year, multi-perspective think tank to cultivate safer, healthier, and more sustainable workplaces.

Launched in 2015, the Greenhouse Risk Assessment Project was undertaken by Workplace Safety & Prevention Services (WSPS) with the Ministry of Labour Training and Skills Development (MLTSD). It's mission: to engage industry

partners to unearth the risks and hazards that make the greenhouse sector home to one of the higher rates of lost-time injuries across all industry sectors and to develop the controls and solutions to improve safety.

"The good news is we've seen injury rates come down over time with the introduction of new guidelines and best practices, but more needs to be done to ensure greenhouse employers are aware of risks and obligations, and are embracing health & safety as a responsibility," says Kristin Hoffman, Consultant with

Workplace Safety & Prevention

The project gave greenhouse employers, workers, health & safety experts, and allied organizations a forum to share real-world experiences, illuminate worker concerns, and collaborate on evidence-based solutions.

"Uniting a sector to identify workplace risks and hazards and root out the causal factors is no small feat. But all participants recognized the value in bringing their collective experience to the table as the only way to begin identifying and developing

tailored solutions," says Hoffman, adding, "It was their meaningful contributions and insights that made this project a success, and that same spirit of collaboration is putting words to action."

Raising industry voices

Led by MLSTD's Chief Risk Officer Dr. Sujoy Dey, WSPS hosted a series of workshops focused on bringing representative workplaces together to identify the top ten risks in the greenhouse sector based on likelihood and severity and then, determine

the top root causes to those hazardous conditions. Working at heights was ranked highest among all perceived risks by both employers and workers due in part to lack of fall prevention programs, safety railings and other supports, and factors that were contributing to slips, trips,

Other primary root causes identified included:

• Personal protection equipment (PPE) and Internal

Responsibility System (IRS), which include guidance, policies and training on the recognition, identification, and control of hazards, required PPE, near-miss processes and corrective action

• Preventive maintenance, including a pre-risk assessment policies and regular inspections of greenhouse equipment (e.g., lifting devices, ladders, machinery, and equipment.).

plans.

- Workplace Culture and Mental Health Considerations, which influence all elements of a healthy workplace including culture, the physical environment, personal health and community
- Fit for Duty, referring to various factors beyond working conditions and physical demands including fatigue, substance use, unresolved conflict or harassment, environmental factors etc.) that can impede a worker's ability to do their job safely and effectively.

With the risks assessed and the top ten root causes revealed, the next step in the process involved the stakeholder's recommending solutions and controls most essential in greenhouse operations, to effectively address the root causes, manage the risks and prevent accidents.

Putting results into action

As a result of the findings and guided by industry stakeholders, WSPS developed and launched a training program for greenhouse managers to help them understand their roles and responsibilities for managing these risks in the workplace. A full suite of resources, tools and training are also available in the Greenhouse Resource Hub to assist in the implementation of the solutions and controls.

Over the coming year, WSPS will be surveying the workplaces that implement solutions and controls to improve management of health and safety to determine the effectiveness of this industry driven approach.

The vast suite of solutions can be found here: www.wsps.ca/resourcehub/greenhouse-growers/greenhouse-growers-risks-hazards-andsolutions



Increase your family's food literacy skills this spring with Six by Sixteen

Spring marks the beginning of another growing season as Ontario farmers work hard to plant and nurture over 200 commodities that will eventually make their way from the fields to your forks.

As you list priorities for the upcoming year, make food literacy a part of your family's spring resolutions.

Source local produce, meats, proteins, dairy, preserves and herbs from the Farmers' Market, farm gate sales or look for the Foodland Ontario logo when shopping at the grocery store.

You can find the farmers and growers in your community that sell directly to the public on your county's Buy Local Map or by visiting farmersmarketsontario.com.

Need recipes? Our website sixbysixteen.me has a bounty of locally sourced recipes, youth activities, a downloadable recipe guide and much more.

Make preparing, cooking and plating the meal a family affair by getting everyone in the kitchen. To brush up on safe food handling practices, knife safety skills and more visit youtube.com/ontariofarms.

Follow us on social for additional recipes, what's in season updates and links to additional food literacy resources:

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We can all appreciate the simpler things in life. Like how Miravis® Duo fungicide sets a higher standard in vegetable disease control by pairing cutting-edge science with proven technology, convenience and value.

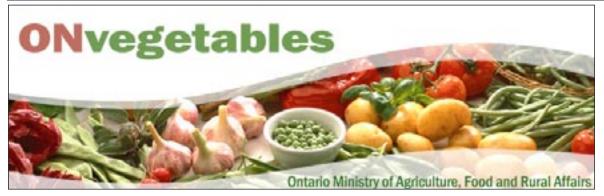




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THE GROWER



A new strategy for managing garlic stem and bulb nematode

Pest Suppressed	Rate	PHI	Use Information
	500 mL/ha		One application at planting in the fall or in the spring.
Stem and bulb nematode (<i>Ditylenchus dipsaci</i>)	or 3.75 mL / 100 m row (based on 75 cm row spacing)	30 days	Spray specified dosage in a 10-15 cm band in-furrow at planting and cover with soil. For best results, direct the in-furrow spray to the seed and soil.
	spacing)		Apply in 50-300 L of water per hectare.

TRAVIS CRANMER, KATIE GOLDENHAR AND JOSH MOSIONDZ

Velum Prime (fluopyram) has been recently registered on garlic via the Minor Use Program for the management of stem and bulb nematode. The stem and bulb nematode (Ditylenchus dipsaci) is a major pest of garlic that has destroyed hundreds of acres of garlic in Canada over the past decade. The nematodes survive in the soil as well as in garlic cloves that are being used to plant subsequent crops. Cloves with low numbers of nematodes are asymptomatic, and it may not be until the third or fourth year of growing the crop that rot is observed just above the basal plate (Figure 1).

Female nematodes can lay up to 500 eggs during their lifespan and can start producing eggs in as few as 19 days at an average temperature of 15°C. The fourth juvenile life stage of the nematode can resist dry environments and freezing temperatures allowing it to survive the winter in cloves or soil (Yuksel, 1960).

Symptoms of the stem and bulb nematode include premature senescence prior to harvest and the yellowing of the lower leaves moving upwards. As the root plate rots, infected plants can be easily pulled, and the plants appear to have no roots attached. Symptoms can be easily confused with Fusarium basal rot. Garlic

infected by a subspecies of Fusarium oxysporum are also easily pulled, but some roots typically remain attached to the bulb. Both stem and bulb nematodes and Fusarium oxysporum f. sp. capae can colonize the bulb at the same

The best management practice is preventing the introduction of nematodes into the crop. Testing planting stock for stem and bulb nematode prior to planting is the most effective way to avoid this pest. Bulbs can be submitted to a pest diagnostic lab qualified for nematode extraction, identification and count. Soil from fields prior to planting can also be sampled. Stem and bulb nematodes are most prevalent in the top five cm (two inches) of the soil profile (Blauel et al., 2021). Avoid allowing samples to dry out and keep in a cool place prior to submitting to the lab. Submit soil samples within two days of sampling to help avoid false negatives. Before planting, growers should consider sending their poorest looking cloves to determine whether stem and bulb nematode is present in their planting stock.

Many growers have started clean, with nematode and virusfree roundels from the Garlic Growers Association of Ontario / SPUD Unit or planted bulbils in nematode-free soil. Both strategies can result in a nematode-free crop that can be multiplied and phased into

production in two to four seasons. These methods are effective at reducing the pathogens present in the crop, but it can take several years to reach the number of plants desired. In addition, it takes careful planning to avoid contamination from infested fields.

Once stem and bulb nematodes are present in the crop, it is difficult to manage. The Ditylenchus nematode genus has an extensive host range that includes more than 450 plant species (Mckenry and Roberts, 1985). According to studies conducted at the University of Guelph and University of Manitoba, the specific nematode species that is found to infect garlic in Canada reproduces well in alfalfa, peas, beans, and onion. Crops that reduce the population of stem and bulb nematode after garlic include soybean, wheat, canola, corn, barley, potato, carrot, and lettuce (Hajihassani et al., 2016; Ives 2019). Once the bulb and stem nematode is introduced to a field, utilizing a four-year crop rotation with a non-susceptible crop can help suppress this nematode.

A hot water treatment (soak) of cloves at 49°C for 20 minutes prior to planting has shown to be an effective method of suppressing nematodes; but it can be difficult to implement. Temperatures below 49°C may not kill the nematodes, and temperatures above 50°C may



Figure 1. Stem and bulb nematode causing rot above the basal plate on garlic.

damage the germination rate of the planting stock.

It's also important to prevent soil moving from infested fields to a nematode-free field. Clean machinery, boots, tools and other equipment of all soil between fields to help prevent nematodes from establishing in a new field.

Several crop protection products have been evaluated for their potential to manage this nematode in Canada. Multiple field trials conducted by the University of Guelph and OMAFRA have shown fluopyram (FRAC group 7) to be effective at reducing nematode levels thus improving yields.

Trials conducted by Ives in 2016 and 2017 showed a drench application of fluopyram to infested planted stock in muck or mineral soil significantly decreased nematode survival resulting in a greater marketable yield compared to other treatments. Work conducted by Celetti in 2017 and 2018 showed fluopyram drenched over infested planting stock in open furrows resulted in reduced nematode damage, fewer nematodes in the harvested bulbs, and marketable bulbs when harvested the following year. In a trial conducted by Blauel et al. in 2019, a fluopyram drench provided a significant increase in the percent marketability and yield in planting stock that had both low and high levels of nematodes.

Velum Prime (fluopyram) has since been recently registered on garlic via the Minor Use Program for the management of stem and bulb nematode. This registration is the result of an URMULE submission and as of March 10,

2022, the PMRA has approved a use pattern of Velum Prime on garlic as outlined below. This product provides a new management strategy that will be useful for managing nematode populations in lightly infested planting stock, or on planting stock that was harvested from a field with a history of stem and bulb nematode. This label expansion was made possible due to past work conducted by Michael Celetti, Lilieth Ives, Mary Ruth McDonald and Jim Chaput.

Summary

- Always test new planting stock for stem and bulb nematode by sending a sample to a lab prior to planting
- Obtain clean seed roundels from the Garlic Growers Association of Ontario / SPUD unit or plant bulbils in nematode-free soil
- Implement a four-year crop rotation using non-hosts to stem and bulb nematode
- Clean machinery prior from nematode-infested fields prior to entering a new field
- Rogue out symptomatic plants throughout the growing season
- When Velum Prime is applied as a soil application for control of stem and bulb nematode, use another FRAC mode of action (not a group 7) for the first foliar fungicide application of the season if applicable.

Travis Cranmer is a vegetable crop specialist, OMAFRA; Katie Goldenhar is pathologisthorticulture, OMAFRA; Josh Mosiondz is minor use coordinator, OMAFRA.

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ONTARIO VEGETABLE NEWS

The looper situation: what is going on in Ontario vegetables?

AMANDA TRACEY

Cabbage looper is often considered the primary looper species causing damage to field and greenhouse horticultural crops in Ontario, when it is in fact part of a larger looper complex. Cabbage loopers, along with other noctuid species such as the soybean looper and tomato looper, can be difficult to distinguish without specialized training and equipment (Fig. 1a. and b.). Therefore, growers often confuse these species with other moths, which is why most current biological and chemical control agents have largely been tested with cabbage looper as its target.

From 2017 to 2021, looper surveys were conducted across Southwestern Ontario using pheromone baited diamond traps targeting adult moths of cabbage, soybean and tomato loopers (Fig. 2). Over the course of the survey, both cabbage and soybean loopers were present across a total of 81 tomato, pepper and soybean and other crop field sites. However, the overall number of cabbage loopers captured compared to other looper species was low, ranging from 10-25% of the total. This suggests that other looper species in Ontario have for years been mistakenly assumed to be cabbage loopers on a variety of horticultural crops, which likely affected successful pest management. There were also 20 other moth species captured on pheromone traps throughout the course of the survey. This highlights the importance of proper identification for the successful management of loopers in commercial agriculture.

In outdoor horticultural crops, loopers are generally not considered economically important pests. Chemical control agents used against these species are mostly applied by growers targeting other pests, such as variegated cutworms, imported cabbageworm, diamondback moth and the European corn borer to name a four

A variety of chemical control agents are currently available for targeting loopers, though many product labels explicitly state cabbage looper as the target looper species. This can be an issue as each looper species responds differently to chemical and biological control agents partly due to their genetic resistance profiles.

Cultural control of looper populations in the field is also possible, though less common. In crops with multiple seeding dates, incorporating a block of the field shortly after harvest can help break the looper lifecycle and prevent remaining crop material from supporting a large looper population.

Economic thresholds for cabbage looper have been established on many horticultural crops in Ontario. For *Brassica* crops specifically, growers and scouts can use a Cabbage Looper Equivalent calculator that helps determine when to spray for *Lepidopteran* pests, including cabbage looper, diamondback moth and imported cabbageworm

If you are concerned about loopers in your crop(s), reach out to the appropriate OMAFRA crop specialist. They can help with identification and discuss management strategies that will work best for your situation.

Amanda Tracey is a vegetable crops specialist, OMAFRA.





Figure 1a. and b. Two different looper larvae on tomato leaves.



Figure 2. Diamond trap set up on the edge of a processing tomato field to capture adult looper moths.



What's New

Connecting producers with programs

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Updates from Agricorp on 2022 coverage

Making decisions about program coverage is important, especially given the value of your business and risks you may face, such as rising costs. Programs offer predictable and dependable risk management coverage and are designed to help meet producers' needs.

Here are some highlights of what you can expect this year. As always, full details about AgriStability and Production Insurance can be found on **agricorp.com**.



Production Insurance

We know you are facing uncertainty about markets and input costs this year, which is a factor as you make important planting decisions. That is why this year the deadline to enrol and make changes for the 2022 Spring Policy is extended to **May 16**. Watch your mail for your Spring Policy renewal.

16

Production Insurance

Coverage for production losses caused by on-farm labour disruptions due to COVID-19 is extended for 2022.

 \longrightarrow

2022

AgriStability

Visit agricorp.com for examples of coverage for various operations – apply by April 30.

30

AgriStability

Compensation rate increased on the provincial portion of payments.

70% Now 80%

AgriStability

No reference margin limit means smaller income declines trigger payments, improving coverage for many farmers.

Reference Margin Limit







BITS & BITES

Mapping tomato flavour preferred by consumers

Using genetic mapping and metabolomics analysis, Vineland and collaborators at Laval University, Québec, Canada the University of Florida, USA and McMaster University, Ontario, Canada have identified the gene responsible for producing several important aroma chemicals, including the familiar tomato vine aroma associated with fresh tomatoes.

"Tomatoes like many other plants, carry nitrogen-containing volatiles dericed mainly from the amino acids leucine and phenylalanine which were assumed to provide the nitrogen atom for these volatiles, says Dr. David Liscombe, Vineland's research scientist, biochemistry and lead researcher for this project. "However, in our research, we found tomatoes produce nitrogenous volatiles in a unique way compared to other species - using cysteine as a source of nitrogen."

Cysteine is an amino acid present in all organisms, and in plants, it plays a central role in converting sulfur from the environment into other amino acids and vitamins as well as flavour and defense-related chemicals.

"Well-known for its contribution to sulfurous chemicals like the pungent flavours in onion and garlic, we were surprised to find that cysteine is required to make all nitrogen-containing flavour volatiles in tomatoes, even those that do not contain sulfur," explains Liscombe. "This is a very different way to make these chemicals compared to other plants."

Vineland team members Christine Kempthorne, PhD candidate, biochemistry and Kevin Hooton, senior research technician, biochemistry can now incorporate this important knowledge into its tomato breeding program to meet consumer preference for flavourful tomatoes.

These research findings have been published in the acclaimed Proceedings of the National Academy of Sciences of the United States of America. The article "A flavin-dependent monooxygenase produces nitrogenous tomato aroma volatiles using cysteine as a nitrogen source" can be accessed at a cost here.

Funding for this research has been provided by Genome Canada, the Ontario Ministry of Research and Innovation, Growing Forward 2, Ontario Greenhouse Vegetable Growers, the Canada Foundation for Innovation (CFI). A Canada Graduate Doctoral Scholarship from NSERC supported Vineland's graduate student Christine Kempthorne.



Vineland team members Christine Kempthorne (L) PhD Candidate, Biochemistry and Kevin Hooton, Senior Research Technician, Biochemistry.

New Retail Market Annual Report show produce sales grew in 2021

The Ontario Produce Marketing Association (OPMA) says that fruit outpaced vegetables in sales and tonnage growth, as well as inflation in 2021 according to its new Retail Market Annual Report. The fruit market experienced a 2.3 per cent growth year-over-year with stable tonnage at 0.2 per cent -- the largest tonnage gain being from stone fruit (+9%). Total inflation for fruit increased by 2.1 per cent, with increases in most categories.

Diving deeper, the report shows that melons, cut fruit, and specialty fruit such as kiwifruit, persimmon and pomegranate were key drivers of year-over-year sales growth in Ontario retail produce departments in 2021.

"We have seen produce sales increase due to a continued pandemic-related shift away from in-person dining venues that began in 2020," said Stephen Reid, OPMA president.
"Produce suppliers and retailers continue to adapt and meet the changing needs of Ontario consumers."

The vegetable market experienced negative growth in sales and tonnage. Total sales growth and tonnage declined by 0.3 per cent and 1.4 per cent

respectively, while total inflation on the price per kg for vegetables increased by 1.4 per cent, driven primarily by root vegetables, cooking greens, and field vegetables.

Organic produce outpaced conventional produce on sales growth with organic fruit sales increasing by 3.7 per cent compared to conventional fruit at 2.2 per cent. While organic vegetables sales increased by 4.7 per cent, conventional vegetables declined by 0.6 per cent.

The report identifies many opportunities for both suppliers and retailers. Suppliers can benefi¬t from growth in emerging categories such as specialty fruit and international vegetables as a means towards filling supply gaps. There are also opportunities for retailers to begin or expand organic choices for consumers in core categories such as berries, bananas, mushrooms and root vegetables.

Mike Mauti, managing partner of Execulytics Consulting, noted: "Extraordinary events continue to shape consumer demand in unpredictable ways. Only by closely researching the market could produce professionals across the supply chain have discovered the



re-emergence of cut fruit as a growth category or that mushrooms are moving closer towards becoming an organic-only category. The market research continues to identify key growth areas for produce suppliers and retailers as the province navigates through supply challenges."

This report is based on NielsenIQ MarketTrack data for fresh produce sold in Ontario grocery banner, mass merchandiser and drug channels for 52 weeks ending October 9th, 2021

Additional analysis was

conducted by Execulytics Consulting. Access to the full report is available to OPMA members at www.theopma.ca.

Source: Ontario Produce Marketing Association March 10, 2022 news

BITS & BITES

Ginseng Storage Loan Guarantee Pilot Program announced

The Ontario government is creating an industry-led pilot loan guarantee program to assist the province's ginseng farmers in sustaining and growing their businesses.

"The ginseng industry is an important part of the agri-foods sector in Ontario, and the development of this programming is the result of months of discussions with our ginseng farmers about how we can help them given their unique growing cycle," said Lisa Thompson, Ontario Minister of Agriculture, Food and Rural Affairs. "The new Ginseng Storage Loan Guarantee Pilot Program will help stabilize and strengthen ginseng operations, ensure their long-term economic viability and growth, and provide a boost for the communities where they grow this world-renowned crop."

Three counties are home to about 150 growers who account for most of the ginseng production in Ontario: Norfolk (65%), Brant County (24%) and Oxford County (5%).

The \$130 million, three-year commitment to back the Ginseng Storage Loan Guarantee Pilot Program enables participating farmers to borrow up to \$1 million against the value of their stored crops with the government guaranteeing up to 25 per cent of any loan portion that cannot be repaid.

It's been a challenging period in which the ginseng sector has seen its cash receipts decrease from \$271.5 million in 2015 to \$131.9 in 2020. This support comes following a difficult time where ginseng producers have been impacted by unfavourable weather conditions, trade barriers, COVID-19 and other factors that presented a unique set of challenges.

"Ontario Ginseng Growers Association members are the world's leader in the production of the most desirable, premiumquality North American ginseng, says Glen Gilvesy, chair Ontario Ginseng Growers' Association. "But over the past few years our producers have been hit by significant challenges in our primary market in China along with challenges from COVID-19. In the face of these challenges, the new Ginseng Storage Loan Guarantee Pilot Program will go a long way toward providing support to addressing these hurdles. We want to thank the provincial government for its responsiveness to our concerns. Minister Thompson has worked hard with the Ontario Ginseng Growers Association to design a program that will assist our members."

Source: Ontario Ministry of Agriculture, Food and Rural Affairs March 11, 2022 news release

Photo by Glenn Lowson





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COMING UP



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CROP PROTECTION

A big step for growers: Québec will compensate for sustainable practices!



Mid-February 2022, the Québec government announced a new approach regarding sustainable practices in agriculture. As of 2022, growers can be paid for specific practices regarding protection of the environment. The program is planned for three crop seasons (2022- 2024) and a total amount of \$50,000 is available for each registered grower. This new approach fits into the sustainable plan for agriculture adopted in 2020 and ending in 2030. Growers can have access to

- categories:Increasing crop rotation
- Increasing cover crops in winter

money by working on five major

- Decreasing pesticide use
- Using corn seed without any insecticidal seed treatment
- Planting areas that help biodiversity

In one or more of the categories, growers must determine their goals. When complete, the compensation will be based on the improved area. Depending on the impact of the practice, the gain can be higher or lower. To have access to three years of funding, a farm needs to increase the goals by 10 per cent each year.

The most interesting part of the program is that sustainable practices can be compensated. This is radically changing the approach. Now a grower can target sustainable goals and depend on receiving money if performed according to plan.

Is the program worth it? At first sight, I would say yes! March 7th: This was the first day of registration for the program. Less than 48 hours later, all the funds were booked by more than 1,800 growers. This is less than 10 percent of the total farms in the province! I think this shows



Red clover under seeded into corn could be compensated.



A new extended riparian strip that could be compensated.



Autumn rye protecting the soil from erosion is an example of a specific practice that could be compensated. Photo by Isabelle Dorval, agr.

"

The program is planned for three crop seasons -- 2022-2024 - and a total amount of \$50,000 is available for each registered grower.

that growers are ready to put significant efforts into sustainable agriculture. Achieving specific goals is easy to evaluate and that is a good thing. No evaluation is required before or after. It is simple: no paper, no consultant, no expert needed, just positive

But now, what are the challenges?

First, sustainable practices do not address all crops. A lot of energy has been put into corn and soybeans. This is a bit frustrating for growers already involved in sustainable agriculture in other crops. An improved program should be refined to cover more practices in more crops. Even if it's less than 10 per cent of the farms involved in this first round, it will be interesting to see how many acres are covered.

For growers outside the program not receiving compensation, they will need agronomic support. It is important that these growers can count on experts. The benefits of some practices take time to be profitable and it is essential that these growers are

supported.

In the sustainable plan for agriculture adopted in 2020, reduction of pesticides has the most commitment compared to other practices. In fact, the two major targets are reducing 40 per cent of the health and environment risk index of pesticides applied.

Risk indexes are specific to Québec. The Health Risk Index (HRI) and Environment Risk Index (ERI) have been created to compare different pesticides on a health and environmental basis. HRI and HRE are the result of a complex calculation considering numerous factors such as toxicity, formulation, rate of application, type of spraying, chemical and physical properties and so on. The result is a number for each index for any pesticide. The higher the number, the higher the

HRI goes from one to 2420 and ERI goes from one to 961. The objective is to lower the amount of pesticides sold yearly by 500,000 kilograms. These two commitments are based on 2006-

2008 pesticide statistics.

These are huge numbers, considering that in 2019, the amount of pesticides sold was around 400,000 kg higher than the 2006-2008 reference. With more than 3.4 million kg of pesticides sold in 2019, this means a need to reduce the sales by 25 per cent of those in 2019! When considering climate change, the risk of new pests and resistance to pesticides, growers will have to perform a great job to achieve that goal!

On the pesticide risks index side, I would say the picture is better. Data from 2019 show a decrease of the health index by 25 per cent and by 10 per cent for the environment. The previous goal was to decrease the two risk indexes by 25 per cent. Now, the target is 40 per cent decrease for 2030. We can estimate that the Québec agronomists' prescriptions for some pesticides such as atrazine, chlorpyrifos and neonicotinoids will be much fewer, helping to achieve the target. In addition, ending the use of some pesticides with higher

toxicity will contribute to a good decrease in the risk index. Perhaps achieving a 40 per cent lower index will be more difficult on the environmental side.

Since 2014, I have been working with potato growers to lower their HRI and ERI and I can see the same effect. It is easier to reduce the health index and it is the same result in other trials and in other crops. When considering my field work with growers, I am questioning if lowering both indexes by 40 per cent is realistic.

Finally, even if all the goals are not easy to achieve, the good news is that growers can expect to be compensated for practices that have a social impact. This is a huge gain for growers asking for this program for a long time. Seeing how fast the funds have been booked for this first round, I really think this will put pressure on the Québec government to put in place a long-term compensation program.

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Madex HP assists in controlling codling moth and oriental fruit moth

Andermatt Canada Inc. is introducing Canadian pome and stone fruit growers to a new product to assist in controlling codling moth and oriental fruit moth. Both these pests can have a detrimental impact on the marketability of a grower's crop if left unchecked.

The active ingredient in Madex HP is a naturally occurring virus of *Cydia* pomonella. It is a highly selective pathogen of *Cydia pomonella* (codling moth) and *Grapholita molesta* (oriental fruit moth). There is no evidence of this active ingredient infecting non-target organisms. Application from eggs or 1st instar larvae is recommended to control each generation. Several applications may be required with an effective monitoring program.

The product is recommended for use in conventional, soft and organically managed orchards. It has a four-hour re-entry

interval and no post-harvest interval.

Madex HP is a convenient liquid formulation offering a two-year shelf life when stored at or below 5°C or lower. With a superior formulation Madex HP can be stored below freezing and remain in a ready-to-use state.

Andermatt Canada Inc. is a member of Andermatt BioControl, a leading global developer of biological solutions for growers. Based in New Brunswick, Andermatt Canada Inc. is actively developing biological products for insect and disease control in agriculture and forestry markets.

For additional information contact Colin. Smith, Sales & Market Manager, Andermatt Canada Inc. 1350 Regent Street Fredericton, NB colin.smith@andermattcanada.ca



Source: Andermatt Canada Inc January 2022
negus release

Velum Prime nematicidefungicide label expanded

JOSH MOSIONDZ

The Pest Management Regulatory Agency (PMRA) recently announced the approval of a minor use label expansion registration for Velum Prime nematicide/fungicide for control of stem and bulb nematode (Ditylenchus dipsaci) on garlic in Canada. Velum Prime nematicide was already labeled for management of nematodes and diseases 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 Velum Prime nematicide/fungicide.

Toxic to aquatic organisms

and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE. Toxic to birds. This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

Follow all other precautions, restrictions, and directions for use on the Velum Prime nematicide/fungicide label carefully.

For a copy of the new minor use label contact Travis Cranmer, vegetable crops specialist, OMAFRA, Guelph

Crop	Pest Suppressed	Rate	PHI	Use Information
Garlic	Stem and bulb nematode (<i>Ditylenchus dipsaci</i>)	500 mL/ha or 3.75 mL / 100 m row (based on 75 cm row spacing)	30 days	One application at planting in the fall OR in the spring. Spray specified dosage in a 10-15 cm band in-furrow at planting and cover with soil. For best results, direct the in-furrow spray to the seed and soil. Apply in 50-300 L of water per hectare.

(519) 835-3382, your regional supply outlet, or visit the PMRA label site www.hc-sc.gc.ca/

cps-spc/pest/registranttitulaire/tools-outils/label-etiqeng.php Josh Mosiondz is OMAFRA minor use coordinator.

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Funding available

Funding is available for producers, agri-business, consultants and extension personnel to submit Ontario weed samples to be tested for herbicide resistance again in 2022.

Contact Kristen Obeid for sample collection kits, sampling procedures and how to submit samples to Harvest Genomics www.harvestgenomics.ca kristen.obeid@ontario.ca 519-965-0107 @WeedProfesh

Project partners that have provided funding and/or in-kind support are: AAFC, AAFC-PMC, Bayer CropScience Inc., FMC Canada, FVGO, MAPAQ, OAG, OFVGA, OPVG, and Syngenta Canada Inc.

Science Driven Nutrition™ Improves Crop Quality and Yield - Bloom to Petal Fall



Apple growers who want to maximize their marketable economic yield must capitalize on limited opportunities to positively impact the crop. Science-Driven Nutrition™ empowers growers with the information, tools, and roadmap they need to succeed throughout the season.

When integrating a foliar nutrition program, the bloom through petal fall period is a critical window of opportunity and Agro-K's pollinator friendly products have a strong fit. This is when the crop begins to enter fruit cell division, and the right mix of nutrients are required to support and energize this process.

During this point of the season growers can have a significant number of products in the tank. Science-Driven Nutrition™ ensures growers only apply the nutrients necessary to produce consistently high-quality apples. Using sap analysis testing, growers quickly learn what their crop needs to perform its best, ultimately saving time, money, and tank mix conflicts.

Certain nutrients are critical at this stage. Calcium, for example, optimizes the bloom window and maximizes pack out at the end of the season. Effectively applying foliar calcium using products like Agro-K's **Vigor Cal** require growers to appreciate the limited timeframe for getting the nutrient into the fruit.

Calcium applied from pre-bloom until four-to-six weeks post-petal fall can positively impact the fruit cells that are forming within the apple. After cell division ends, calcium applications help to maintain the crop's nutrient levels from depleting but do not influence the fruit cell development. When boron is combined with the calcium applications, such as with Agro-K's **Vigor Cal-Bor-Moly**, there is a synergistic effect that increases the uptake of both nutrients. Boron is essential for pollen viability, pollen production and flower health making Agro-K's **Top Set DL** another ideal tool for this window of opportunity.

During fruit cell division phosphorus helps energize the crop and maximize fruit size. To ensure foliar uptake it is important to use a 100% ortho phosphorus based, food grade product such as Agro-K's **AgroBest 9-24-3**. Balanced with nitrogen to ensure continuing development, and a minimal amount of potassium to avoid antagonizing calcium, **AgroBest 9-24-3** provides the essential nutrition needed for bloom and early fruit formation.

To help maximize their investment in crop nutrition, Agro-K sets growers up to make smart decisions using Five Rs: The \underline{R} ight nutrient applied at the \underline{R} ight time in the \underline{R} ight form in the \underline{R} ight mix targeting the \underline{R} ight location in the plant. Science -Driven Nutrition^{\mathbb{M}} is implemented to determine crop nutrient levels and foliar product applications ensuring the apples get what they need to thrive.

For more information on using science-driven nutrition to help your crop flourish throughout the season, visit www.aqro-k.com.

Rick de Jong International Business Development Manager rick@agro-k.com • 778-215-6723



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