

JULY 2021

CELEBRATING 142 YEARS AS CANADA'S PREMIER HORTICULTURAL PUBLICATION

THEGROWER.ORG

PROTECTED AGRICULTURE

Riding the berry revolution



Nothing has been easy at EZ Grow Farms for the last pandemic year. And yet, pre-laid plans to expand the footprint of the strawberry plant propagation greenhouse has come to fruition near Langton, Ontario. Dusty Zamecnik is riding a revolution that's taken the Ontario greenhouse strawberry industry from 50 to 120 acres in the last two years. Photo by Drew Walmsley.

KAREN DAVIDSON

Draped by strawberry runners, Dusty Zamecnik sees a future unfolding that could not have been forecast five years ago. He's tripled the size of a strawberry plant propagation greenhouse that was originally built in 2019 near Langton, Ontario.

The pandemic notwithstanding, the new facilities are erected with a critical change: equipment that lessens dependence on labour. The 6.5 acres are equipped with state-of-the-art technology. Rainwater is collected from the rooftop. Leachate is disinfected and returned to the water circulation system. Robotic booms for spraying have been installed. It's the third phase of a minimum-touch and zero-waste nursery.

"Technology is allowing us to expand and redefine our needs for labour," says Dusty Zamecnik, general manager, EZ Grow Farms, Langton, Ontario "We expect a 30 to 40 per cent reduction in workers per acre, but also with the prerequisite of two to three metre distancing."

While expansion may seem counter-intuitive during crisis times, EZ Grow Farms is ramping up to fulfill not only its traditional Florida field business, but demand for Ontario greenhouse-grown strawberries. Renovated or new purpose-built greenhouses for strawberries now total about 120 acres in southwestern Ontario, double the acreage of just two years ago. Cielo Vista, for example, is one of the newest entrants with 16 acres in Leamington as is Parks Blueberries with one acre in Bothwell.

The greenhouse sector has not only told its story to consumers of locally grown, but surpassed expectations for flavour. That's been several years in the making because there's a complex recipe for the ever-bearing strawberry variety, light and nutrition that will yield flavour akin to field-grown.

Global networks

Some of the genetics, for example, are globally sourced. This quest for flavour took Zamecnik to Italy prepandemic. "I was on a high-speed train between Rome and Naples when the coronavirus virus arrived," he recalls of January 2020. He made his connections with breeders just before borders closed. Since then, the pandemic has nixed international travel and nipped those budding relationships for understanding the nuances of new berry growing systems. Once borders open, it's expected there will be pent-up demand for knowledge transfer at research stations, field tours and trade shows, globally.

Continued on page 3

More than a migrant worker PG 6

Planning in uncertain times PG 11

Business management PG 12



THE GROWER

AT PRESS TIME...

Ontario welcomes new ag minister

After a tough pandemic year and one year before an anticipated provincial election, Ontario premier Doug Ford has shuffled his cabinet. The Hon. Lisa Thompson (Huron-Bruce) becomes the new minister of agriculture, food and rural affairs. She hails from a rural riding and has a degree in public administration and consumer economics from the University of Guelph. First elected in 2011, she has a decade's track record, most recently in the role of minister of government and consumer

She'll be taking over the reins from Hon. Ernie Hardeman (Oxford) who has steered the ministry for precisely three years. He had been active on horticultural files such as business risk management as well as the health and safety of temporary foreign workers.

These files will continue to take precedence on the minister's desk as preparations are made for a federal-provincial-territorial agriculture ministers' meeting in September 2021. She'll be the co-host of the meeting in Guelph, Ontario.

"We appreciate the leadership and commitment from outgoing Minister Hardeman and the tremendous work by his staff over the past years to support our sector, in particular over the challenging pandemic period," says Bill George, chair, Ontario



Lisa Thompson, (Huron-Bruce)

Fruit and Vegetable Growers' Association. "Minister Thompson has always been a strong advocate for our sector, and we very much look forward to working with her to keep local fruit and vegetable production thriving in Ontario."

The 28-member cabinet now has 18 men and 10 women. The next Ontario election is scheduled for June 2, 2022.

Ottawa leaving farmers to cover full cost of worker quarantines

This past spring, the federal government changed its funding levels for worker quarantines months after most farmers had already made hiring arrangements for their international workers for the 2021 growing season. The Quarantine Act and isolation protocols remain in place, but as of June 16, Ottawa is no longer reimbursing up to \$1,500 per worker in isolation. That amount

is cut in half to a maximum of \$750. The support program will end as of August 31.

Under the Quarantine Act, Canada requires temporary foreign workers to adhere to a mandatory isolation period of 14 days upon arrival and to provide evidence of a negative COVID-19 test before they are permitted to begin work.

During the quarantine period, employers are responsible for covering a number of associated costs, including suitable accommodation that meets strict public health protocols on their farms or in hotels, wages for workers in isolation, transportation and meals.

Research by the Ontario Fruit and Vegetable Growers' Association indicates it costs farmers up to \$1,750 per worker for a 14-day quarantine in accommodations on the farm and up to \$3,125 to isolate at a hotel for the same time period.

Growers grappling with an array of increasing costs and economic impacts from the pandemic are calling on the federal government to continue to honour its commitment to share a portion of the financial burden associated with quarantine rules for temporary foreign workers. Farmers point out that in the early weeks of the pandemic crisis, the federal government announced the program would be available as long as the Quarantine Act is in force and the isolation protocol is followed.

NEWSMAKERS

The Ontario Produce Marketing Association appointed seven new board members at its annual general meeting held on June 9, 2021. The newly elected directors will serve three-year terms from 2021 to 2024. They include: Ryan Goad from Loblaw Companies; Dan Tukendorf from the Ontario Fruit and Vegetable Growers' Association; Madison Hopper from Equifruit; Andrew George from EarthFresh Farms; Marc Wall from Sandy Shore Farms; Amanda Knauff from Taylor Farms; and Matthew Quiring from Nature Fresh Farms.



The British Columbia Agriculture Council (BCAC) is reorganizing with 12-year veteran Reg Ens resigning as its executive director effective August 1, 2021. He's moving into a new role as general manager of the Western Agriculture Labour Initiative (WALI), a wholly-owned subsidiary. Moving into his former role will be Danielle Synotte, who's been BCAC director of communications and stakeholder engagement for four years. In additional news, BCAC has decided to stop delivering government-funded programs through ARDCorp, another subsidiary.

"This restructuring, along with separating program delivery from the organization, will enable BCAC staff to focus on building out major advocacy areas such as policy development, key issues management and government relations," says Stan Vander Waal, president, BCAC.

Congrats to Dr. Mary Ruth McDonald, who has been awarded for Outstanding Research from the Canadian Phytopatholgical Society. She is a research program director for the Ontario Agri-Food Innovation Alliance as well as the lead for the integrated pest management program at the Muck Crops Research Station in the Holland Marsh.



Mary Ruth McDonald

Condolences on the passing of Allen Monsma, 87, the founder of AMA Horticulture. The Dutchman, who arrived in Canada in 1956 with \$56 in his pocket, parlayed his expertise into a horticultural supplier respected throughout North America from his base in Kingsville, Ontario. His lifelong motto: Go slowly, but with all your strength.

Jim Chaput, Ontario's minor use coordinator for the last two decades, retired on June 30, 2021. On behalf of the Ontario Fruit and Vegetable Growers' Association, we extend a heartfelt thanks for his expertise, dedication and industry contributions. And we wish you the happiest of days ahead. Jim has been a frequent contributor to The Grower. We prevailed upon him for a final column. And it's one for the books! Turn to page 18.

NORSECO



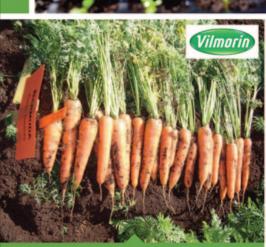












during harvest and store well. Also strong against Alternaria

Customer Service order@norseco.com 514 332-2275| 800 561-9693
450 682-4959| 800 567-4594

Our Team of Experts

Warren Peacock

warren.peacock@norseco.com yves.thibault@norseco.com 519 427-7239

f Montreal

michel.gratton@norseco.com 514 898-4281

Ben Yurkiw

ben.yurkiw@norseco.com 604 830-9295

Gilliane Bisson gilliane.bisson@norseco.com Yves Thibault, agr.

418 660-1498 Marie-Pierre Grimard, P. Tech

marie-pierre.grimard@norseco.com **450 261-7468**

Marie-Hélène Monchamp

marie-helene.monchamp@norseco.com **514** 968-2906

Stéphanie Gosselin, agr.

stephanie.gosselin@norseco.com 418 254-1469

AT PRESS TIME...

Access to second vaccine doses

Employers and/or workers are encouraged to contact their local public health unit or visit https://covid-19.ontario.ca/book-vaccine/ to inquire about eligibility for vaccinations as part of Ontario's vaccination implementation. It is important to note that workers can determine whether or not they want to share their personal information, such as their vaccination status, with their employer.

Riding the berry revolution

"

A benefit of this whole-crop approach is that pots of raspberries can be taken out of cold storage and planted into fields, under cover, with estimated timing to fruit of about three months.

~ DAVE KLYN-HESSELINK

"

Continued from page 1

This theme of global networks sounds familiar to Christine and Dave Klyn-Hesselink, long-cane raspberry growers near Fenwick, Ontario. They were in the Netherlands in 2018, sponging up the knowledge to grow long-cane raspberries. Growers in the raspberry sector, like strawberries, are ground-truthing soilless substrates as the way to grow stronger, more fibrous roots and avoid soil-borne diseases. This revolution in growing raspberries requires two 1.6 metres tall canes per 1.7 litre pot with a bamboo support. One of the advantages is that this cane is in full production within months.

The transformative travel experience spurred a new nursery, Ready-Set-Grow in 2020. As one of Ontario's first long-cane raspberry producers, the Klyn-Hesselink's are betting that the Tulameen variety grown under protective tunnels will encourage other growers to offer a superior ready-picked and pick-your-own product.

"The flavour is delicious," says Christine Klyn-Hesselink. "Plus, it's a raspberry that can be planted without worry of winter hardiness since the canes do not overwinter outdoors."

Soilless substrates

Coached by a virtual consultant in the Netherlands, Christine and her husband Dave have navigated a new growing soilless substrate protocol for this high-yielding raspberry variety that strains standard staking systems. Without proper supports, the fruiting laterals bow down, constraining the flow of nutrients to the fruit. In little time, the fruit dries up.

"You have to trellis properly with tape and staples, attaching the floral cane to the vertical bamboo stake," says Christine. "The horizontal shoots need to be supported as well. Once the trellis

is installed, it's permanent. The system is 70 per cent more efficient in fruit harvestability and with yields of 1.2 kg/cane."

Dave Klyn-Hesselink explains that the kinks have been ironed out and that 40,000 canes are now available this year. A benefit of this whole-crop approach is that pots of raspberries can be taken out of cold storage and planted into fruiting fields, under cover, with estimated timing to fruit of about 12 weeks. He removed a batch of pots June 15, for example, with plans to sell fresh fruit about September 15.

To date, sales of Fenwick Berry Farm raspberries have been at the roadside market and through stores in the Niagara peninsula. But the quality and flavour are attracting fame beyond the locals. Representatives of retail chains are nosing around for larger volumes of the notoriously perishable raspberry. With shelf life of seven days and promise of season-long availability from mid-June through October, Dave Klyn-Hesselink says the calculus is quickly changing to supply local raspberries to a much larger consumer base.

In no small measure, the Ready-Set-Grow propagation nursery may encourage other farmers to adopt the growing system and to create critical mass in the Ontario market.

Superlative flavour

In Québec, growing raspberries in soilless substrate has already been adopted where Ferme Onésime Pouliot has been a leader since 2008 trials. The owners, brothers Guy and Daniel Pouliot, have deep roots as seventh-generation growers of 200 acres of field strawberries on I'le d'Orléans, east of Québec City. Their investment in 16 acres of tunnel-grown raspberries has further cemented their berry reputation. Again, the Tulameen variety has topped the flavour charts in their breeding trials.

"It's the best raspberry out



Long-cane raspberries, staked in high tunnels, are protected from morning dew, rains and winds, for a higher percentage of harvestable fruit that yield 1.2 kg/cane.



Ferme Onésime Pouliot has named the Tulameen variety of raspberries on its packaging. That's how convinced they are of the quality and flavour. Their 16 acres of tunnel-grown raspberries supply 80 Québec stores and retailer chains' warehouses every summer morning.

there," vows Joey Boudreault, business development manager, Ferme Onésime Pouliot. "The Québec consumer has a very exacting eye for colour and favours a sweeter-tasting berry."

Over the last decade, Ferme Onésime Pouliot has developed enough consistent supply to deliver to 80 Québec stores every summer morning. About half of the volume is sent directly to retailer chains' warehouses. Plus some sales go to Pennsylvania, Massachusetts and New York states. There are no on-farm sales.

"We get a solid week of shelf life as long as there's no break in the cold chain," says Boudreault.

Ferme Onésime Pouliot did not expand its raspberry acreage for 2021, waiting out the upsand-downs of the pandemic, but its four in-house breeders continue to search for varieties that might fruit earlier than Tulameen and, with luck, yield 1.2 to 1.5 kilograms fruit per

These growers of strawberries and raspberries, in both Québec and Ontario, are examples of fearless innovators. They are tapped into global expertise, sustainable growing methods and consumer-pleasing flavour profiles.

"I firmly believe that the North American berry industry is changing," concludes Dave Klyn-Hesselink. "Growers large and small are quietly revolutionizing how raspberries are grown."

Dusty Zamecnik agrees with how quickly the market is evolving. With an eye to the future, he's propagating raspberries on an experimental basis and has set up performance trials in Leamington, Ontario greenhouses. The Grower goes "Behind the Scenes" with Dusty Zamecnik, EZ Grow Farms, Langton, Ontario, to understand what's driving the trend to protected agriculture and how expansion plans will affect supplies of local fruits. This series is sponsored by BASF Agricultural Solutions.



THE GROWER

CROSS COUNTRY DIGEST

BRITISH COLUMBIA

Western Agricultural Labour Initiative to improve efficiencies

KAREN DAVIDSON

The pandemic has revealed pain points – and opportunities – for many organizations. At the British Columbia Agriculture Council (BCAC), leaders believe that restructuring and reallocating resources will alleviate strain and allow the association to have a more unencumbered position in how it relates to government and stakeholders.

At a June 9 board meeting, BCAC president Stan Vander Waal announced that Reg Ens, a 12-year veteran is resigning his current role of executive director and becoming general manager of the wholly-owned subsidiary, the Western Agriculture Labour Initiative (WALI). The move takes effect August 1, 2021.

"WALI has a small but incredibly talented team that is currently overwhelmed," said Vander Waal. "There is a need to develop additional business processes and systems that address challenges and improve efficiencies. The WALI team is looking to improve the current service challenges experienced with temporary foreign workers while expanding services provided by WALI."

There are 7,500 seasonal agricultural workers who come to British Columbia from Mexico and the Caribbean every year.

Many kudos have flowed to the BC agriculture ministry for how it's funded and managed the 14-day quarantine at Vancouver-area airport hotels. However, WALI is responsible for the logistics from foreign countries and in supporting farmers with ongoing labour shortages which are expected to worsen.

As Reg Ens explains, the labour challenge pre-dates the COVID-19 pandemic. But the media lens has drawn more attention to the living conditions of temporary foreign workers – an issue that requires response. At the same time, limits on government resources in source countries are adding long-term administrative burdens in Canada.

WALI's \$300,000 budget is funded by employer fees and two grants from BCAC and the BC agriculture ministry. Ens is acutely aware that financial sustainability is a near-term goal. Longer term, he foresees the need to integrate government housing inspection policies and to set up better oversight.

The overlapping jurisdictions of provincial inspectors and local health authorities are confusing enough in terms of basic needs but Ens points out that WALI is concerned about quality-of-life issues.

"We want to mirror the public's interest in what amenities contribute to quality of life for these workers," says Ens.

For growers, the wherewithal to provide more amenities is dwindling as federal government support is tapering quickly. As of June 15, the \$1,500 per worker support dropped by half to \$750. The support completely evaporates on August 31, just as apple and pear harvests are about to ramp up.



Reg Ens to become general manager, Western Agriculture Labour Initiative

"We've been hung out to dry," says Ens, referring to the escalating costs for farm employers to keep their employees safe. "This is going to be a big number for employers."

As WALI remains the primary contact for all labourrelated issues in BC agriculture, the leadership realizes that farmers must also look at other solutions. Selecting crops or varieties that maximize labour efficiency or investing in innovative automation processes are two potential opportunities.

"WALI will support related efforts that work to address the labour shortage from other perspectives," says Vander Waal. "We do not know what this will look like yet but work on this will be done in collaboration with industry."

SASKATCHEWAN

More funding for immediate irrigation

Potato and vegetable production is set to expand in Saskatchewan with more access to irrigation. The Saskatchewan government is allowing growers to access up to \$500,000 per applicant to finance irrigation infrastructure.

"Increased irrigation supports the growth of diverse, high-value crops and will generate significant returns for our producers and our province," said agriculture minister David Marit. "This funding will provide more support for producers to develop irrigation projects and bring the sector closer to achieving our growth plan goal of adding 85,000 new irrigated acres in Saskatchewan by 2030."

This additional provincial funding of \$5 million over the next two years will support projects that are greenlighted for the next two years. This program increases irrigation capacity by helping finance the infrastructure required to bring a secure water supply to the edge of irrigable cropland. The funding tops up the existing commitment under



the Canadian Agricultural Partnership. The maximum program payment per applicant was previously \$300,000.

As of 2020, close to 10,000 acres were brought under

irrigation as a result of the Irrigation Development Program. This new funding will help to advance projects in areas outside of the Lake Diefenbaker Irrigation Expansion Project.

Source: Government of Saskatchewan June 2, 2021 news release

QUEBEC

TFWs offered vaccines at Montreal airport

Since early June, temporary foreign workers (TFWs) have been offered a COVID-19 vaccine at Montreal's international airport.

Montreal public health

officials are at Pierre Elliott Trudeau International Airport to offer a first dose to about 2,275 foreign temporary workers on 13 chartered flights in June. Those who consent to a vaccine will receive a second dose in the region where they work.

Each worker must have a negative test before entering Canada and submit to a second test during a mandatory 14-day





quarantine.

The province of Québec receives the second-most temporary foreign workers of any Canadian province for field, orchard and greenhouse



operations – about 26 per cent. Ontario receives 45 per cent and British Columbia receives about 17 per cent.

CROSS COUNTRY DIGEST

PRINCE EDWARD ISLAND

PEI Aphid Alert Program reflects dynamic changes in aphid species

The Prince Edward Island Department of Agriculture and Land is revising some of the parameters of the Aphid Alert Program to respond to changes in both aphid species dynamics and grower practices in recent years.

The program – coordinated between the PEI Potato Board, PEI ag ministry and participating growers – is important in monitoring aphid species which are vectors for viruses.

Mary Kay Sonier in the May/June 2021 issue of the PEI Potato News wrote: "Unlike Potato Leafroll virus which can be spread by a limited number of aphid species vectors, there are a great number of species of aphids that are able to spread PVY. Many of these species are not colonizers of potatoes, but move through potato fields probing and infecting plants while they search for viable hosts. The abundance of aphid vectors is variable from year to year and very dependent on the climate and local weather conditions. Although the number of aphid vectors is not controllable, monitoring their abundance and timing seed planting and spraying activities around them are under a grower's control."

This scientific background is important to understanding the changes to the alert program. As Lorraine MacKinnon, potato industry coordinator for the PEI department of agriculture and land explains, "Diligent producers are applying an insecticide at planting and starting applications of mineral oils shortly after emergence. Regular oil applications, supplemented with aphicides throughout the season, combined with planting seed with the provincial virus test cap and early roguing has translated into high pass rates with post-harvest virus testing."

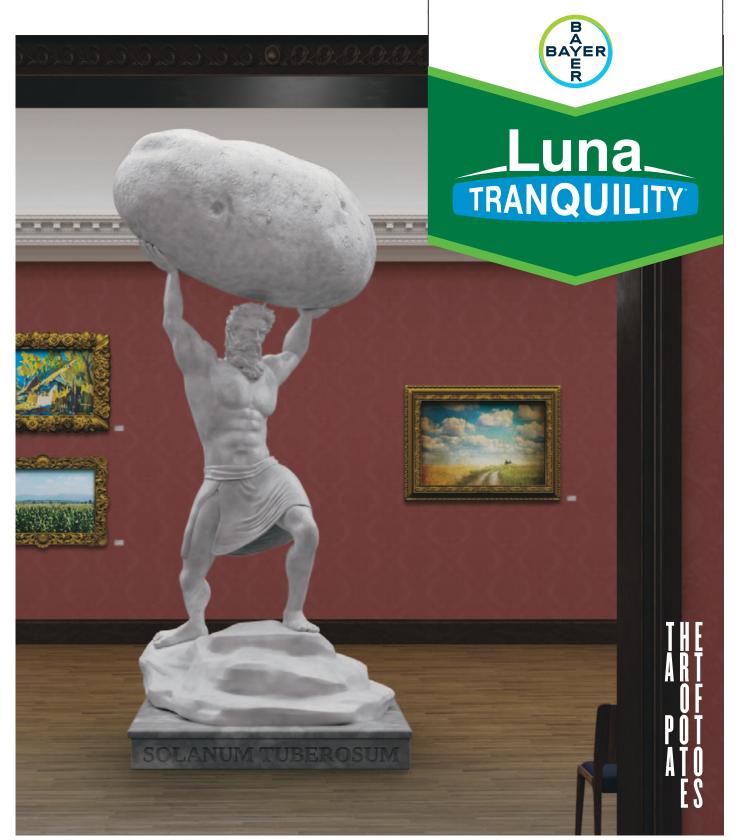
During the 1990s, MacKinnon explains that hundreds of green peach aphids were identified in traps annually. But recently, only one or two have been found or none at all. The ministry has continued to report on GPA, Buckthorn, Potato and Bird Cherry Oat aphids in weekly reports, however the numbers of these species are lower in magnitude than the category of "other" aphids.

These aphids are flying earlier in the season and are able to spread PVY when moving through potato fields. High numbers make them important vectors of PVY.

In 2021, therefore, the Aphid Alert will report on total aphid numbers only. And aphid traps will be distributed more evenly across the island, to include areas such as Souris and Crapaud. The monitoring program will inform integrated pest management decisions which will be compared against post-harvest virus test results. The data will also track aphid populations over time and PEI's geography.

Source: PEI Potato News May/June issue





A great work of art is a thing of beauty.

You work hard to create your masterpieces. Help keep them awless from spring to harvest with Luna Tranquility® fungicide. Its systemic activity and two modes of action offers outstanding protection from early blight, brown spot, white mould and black dot. Your potatoes are your world. Give them the best with Luna Tranquility.

cropscience.bayer.ca | 1 888-283-6847 | ⊚ ¥ @Bayer4CropsCA | #AskBayerCrop

Always read and follow label directions. Bayer, Bayer Cross and Luna Tranquility®, are registered trademarks of the Bayer Group. Bayer CropScience Inc. is a member of CropLife Canada. ©2021 Bayer Group. All rights reserved.

PUBLIC TRUST

Growers launch proactive communications initiative focused on labour

LILIAN SCHAER

The Ontario Fruit and Vegetable Growers' Association (OFVGA) and some of its member organizations have joined together to create the More than a Migrant Worker campaign. It's a recently launched proactive communications initiative focused on ensuring horticulture's voice is part of the broader public narrative around farm labour and seasonal workers.

Agriculture has long lamented media and consumers who lack a basic understanding of farming and have little to no knowledge of how food is produced or where it comes from.

Pesticide use and GMOs, for example, are perennial hot topics, but for horticulture, that list also includes farm labour. The pandemic has strengthened public and media interest in farms and migrant labour, often with coverage that doesn't accurately depict the true situation on Ontario farms.

Unbalanced coverage is an increasing irritant for growers who feel unfairly targeted and maligned - and frustrated that their side of the story isn't being told, according to OFVGA executive director Alison Robertson.

The last year has been tough for growers dealing with worker safety, increased costs, reduced workforces and many new regulatory hurdles to overcome as a result of the pandemic. The challenges continue this year as government processes around worker arrivals have become more complicated, and quarantine requirements and testing problems have resulted in



significant extra costs that growers have no real way of recouping.

"It would have been much easier for some growers to just throw in the towel on fruits and vegetables and instead grow crops that don't come with all the labour headaches," she notes. "But growers are dedicated to what they do and feel strongly about producing food, so to continually be unfairly targeted in the public eye can feel a bit like a slap in the face."

The pilot project will run for this growing season and focus on: • promoting the vital role of seasonal labour in Ontario horticulture

- addressing misconceptions around seasonal labour
- providing current, factual information about seasonal labour

OFVGA is leading the initiative with input and support from its member organizations and Farm & Food Care Ontario (FFCO). Working group members include staff from OFVGA, Ontario Greenhouse Vegetable Growers (OGVG), Ontario Apple Growers (OAG) and FFCO.

"It is really important to be sharing positive information about the essential work that these men and women do when they come to our farms in Ontario," says OAG general



Photos by Glenn Lowson

manager Kelly Ciceran. "And we want to be sure that we have resources of credible information available for people who want to know more about workers, their lives here and at home, and why they come to Canada."

According to Robertson, the use of the term "migrant worker" is deliberate. Although not liked by growers, it's a label that has become commonplace in referring to seasonal agricultural workers or temporary foreign workers - and if the industry wants to ensure its information is part of what the public sees when searching for information on farm workers online, it has to adapt its language, she notes.

"The title of the campaign also reflects that these people are much more than "just" migrant workers. To growers, they're an indispensable part of our industry

as experienced employees, co-workers, and in some cases, also friends," she says. "And in their home countries, they are husbands, wives, parents, friends and employers - and part of our mission with this project is to share some of those stories with Canadians."

The new website, found at www.morethanamigrantworker.ca shares facts and stats about horticulture and migrant workers, addresses frequently asked questions people have about farmworkers, and showcases profiles of workers on various farms across the province. It is complemented by social media activity on Twitter, Instagram and Facebook, and will be expanded with traditional media outreach as the season progresses.

"More than a Migrant Worker is a wonderful initiative to help

educate Canadians as to the true relationships of farmers and their workers and to show how incredibly valuable these partnerships are," says Joe Sbrocchi, general manager, Ontario Greenhouse Vegetable Growers. "The health and safety of our employees is our top priority. They are the lifeblood of our farms and integral to providing safe, nutritious food for our families."

More opportunities for member and stakeholder involvement will become available as the project expands.

Find us on social media! Twitter: @mtamigrantwrkr Instagram: @mtamigrantwrkr Facebook: @MtaMigrantWrkr/

Fruit and vegetable farmers push back on reports of poor worker housing

Ontario's fruit and vegetable growers are pushing back on recent allegations of poor housing standards and lax inspections around employer-provided housing for seasonal agricultural workers.

Workers who come to Ontario through the Seasonal Agricultural Worker Program (SAWP) to work on fruit and vegetable farms have access to housing from their employers. This housing is built, occupied and operated according to official fire and building codes and local public health standards. All housing is supervised and inspected by federal and provincial government officials, local public health units, and liaison officers from the SAWP workers' home countries. If there are any issues with housing, anonymous reports can be made to the federal government or liaison officers for appropriate investigation.

"As farmers who employ

SAWP workers in Ontario, we are subject to multiple layers of legislation and inspection, and those who don't follow the rules face penalties that include temporary suspension or even permanent removal from the program," says Ken Forth, president of Foreign Agricultural Resource Management Services (FARMS). "Farmers support a strong regulatory framework to protect the health and safety of seasonal agricultural workers in their working and living environments, and housing that does not meet government standards should not pass inspection."

Ontario was one of the first provinces to establish a consistent housing standard for SAWP workers, which was developed and supported by Ontario's local public health units. During 2020, farmers, health units and the Ontario government developed recommendations to further



strengthen housing requirements in light of the COVID-19 pandemic. Individual public health units also implemented their own quarantine accommodation requirements, some of which are the strictest in Canada.

"Farm employers of SAWP workers have been working hard since the beginning of the pandemic to adapt to evolving health and safety guidelines and meet federal quarantine requirements to protect workers and Canadians," says Bill George,

chair of the Ontario Fruit and Vegetable Growers' Association. "The well-being and safety of all farm workers is top priority for farm employers. Without a strong workforce, Ontario's farms cannot carry out their essential role of producing food for Canadians."

PROFILE

Dr. Mary Ruth McDonald: ground-breaking work earns national award

Easily identified by her trademark sunhat, Dr. Mary Ruth McDonald is getting another day in the sun. On June 11, the Canadian Phytopathological Society bestowed its most prestigious award: Outstanding Researcher.

She's the research program director for the Ontario Agri-Food Innovation Alliance and a professor in the Department of Plant Agriculture, University of Guelph. She's regularly seen at the Muck Crops Research Station in the Holland Marsh in her role as lead for the integrated pest management program.

The award recognizes her contributions to the science of plant pathology and the substantial impact on managing plant diseases in several crop systems including carrot, onion, cabbage and other muck vegetables, and more recently, in canola.

The research innovations and achievements that were recognized included studies on Allium white rot on onions and the role of mycorrhizae and synthetic garlic oil for disease management, disease forecasting

and management of Sclerotinia on carrot, the role of nitrogen in leaf blights on carrot and studies on Stemphylium leaf blight of onion. Her group is studying the role of weeds as host for fungal diseases of muck crops. Research conducted in her program has improved the pest management of onions, carrots, celery and lettuce, including the management of insect pests of onions and carrots.

In recent years, Dr. McDonald has been collaborating on research on clubroot of canola and vegetable crops. Her group conducted important studies to show how resistance is induced and suppressed and made useful discoveries on pathogen survival and the interaction of temperature and pH. These have been used to improve the management of clubroot.

Dr. McDonald has also led studies related to the impact of climate change on vegetable crops, identifying 'climate resilient' cultivars of onions and carrots and showing how high daytime temperatures reduce the yield of Brassica vegetables.

Much of Dr. McDonald's research has focused on providing

industry and growers with practical information and solutions to help manage important diseases in Canada. This focus and many innovative approaches applied in her research has had a positive impact on sustainability and profitability of vegetable and canola production in Canada and beyond.

Dr. McDonald also initiated and maintained an IPM program for the Holland Marsh and other regions of Ontario, including disease/insect pest forecasting and management. This enables new research results to be rapidly incorporated into current recommendations and practices.

Recognitions

Dr. McDonald's standing in the research community is reflected by the invitations received as a feature or keynote speaker. She was a keynote speaker, presenting on "The Future of Plant Protection', at the Swedish National Crop Protection Conference in Uppsala, Sweden in 2017, and a keynote speaker at the Plant Canada conference in 2019. She has been an invited



Dr. Mary Ruth McDonald is searching out carrot weevil with Master's student Alexandra Dacey at the Muck Crops Research Station, Bradford, Ontario. Photo by Glenn Lowson.

speaker at many grower conferences in the United States, and at onion conferences in the U.K (2017) and Mexico (2018). In February, 2020, she did a Zoom presentation on Stemphylium on onions for the Swedish Onion Growers Association while in California, she also presented at the California Garlic and Onion Research Conference. She has

also been an invited speaker at many symposia, including a talk on "Combining technologies, new and old, to reduce pesticide use" at a symposium for the 2018 CPS annual meeting.

Dr. McDonald is also a member of the Advisory Panel for the Carrot Specialty Crop Research Initiative, a five-year, four-million dollar project for carrot research in the United States.



EXECUTIVE DIRECTOR'S PERSPECTIVE

The link between food sovereignty and domestic vaccine production

We won't know how important it is until we no longer have it



ALISON ROBERTSON EXECUTIVE DIRECTOR

There was a news story on CBC about how fishing industry groups in Prince Edward Island (PEI) were pushing back on a report into alleged mistreatment of temporary foreign workers on the island, categorizing it as inaccurate, misleading, and presenting an unbalanced viewpoint.

It struck a chord because this seems to happen with increasing regularity in Ontario too, only the targets are fruit and vegetable

growers who hire foreign farm labour. Like the PEI seafood industry, growers here are stressed out and fed up with uninformed opinions and one-sided reporting about labour in the fruit and vegetable sector. There is growing frustration with people not understanding how critically important our foreign workers are - and how without them, we simply would not have fruit and vegetable production in Canada.

Because of our climate, there are already times of the year when we simply can't grow our own produce - or at least only crops that can be grown indoors - so we know we have to rely on imports. Similarly, there's unlikely ever to be pineapple, mango or banana production in Canada, so again, we rely on farmers in other countries to grow those crops

There's an inherent risk. though, in an over-reliance on other countries to feed us. We've learned that the hard way throughout the COVID-19 pandemic, depending on the

United States and other countries for our PPE supplies and vaccines. Every one of us has realized how exposed we are to the fickle winds of international politics when it was revealed that after years of decreasing investment and despite warning from industry about potentially dire consequences, Canada no longer has domestic vaccine production capacity. Investments were hurriedly made, but it will be well into next year before Canada is back in the vaccine production game in any serious

I see a link between vaccine production and food sovereignty critically important, but we won't realize that until we no longer have it. And when it's gone and our international markets can't or won't supply us with what we need, it will take a long time to get that domestic food production capacity back, if at all.

We've long been beating the drum about domestic food production being part of Canada's critical infrastructure, but it often

feels like what we're saying is falling on deaf ears. Even during the last year, arguably the closest Canada has come to market disruptions and shortages in several generations, those shortages didn't hit the produce

That's because growers were willing to take on the stress, extra costs, and added bureaucracy to continue to grow food. They even tried hiring out-of-work Canadians to fill positions left empty by foreign workers unable to get to Canada, but with little success, as few local employees were willing to commit to the hard work and hours needed for an entire growing season.

Now into year two of the pandemic, costs for worker quarantines and delays due to testing problems are astronomical for some growers, and they're unlikely to recoup that from the marketplace. At some point, even the most dedicated grower is going to call it quits, especially when faced with the added stress of continual public attacks and

inaccurate portrayal of farm workers in Canada and the pressure of negative public

That's why the Ontario Fruit and Vegetable Growers' Association, supported by Farm & Food Care Ontario, Ontario Greenhouse Vegetable Growers and Ontario Apple Growers have launched the More than a Migrant Worker project. You can read more about it in the article on page six of this issue, but it's our effort to make sure our voices are included in the public dialogue about seasonal agricultural workers. As this initiative expands, we hope to have more involvement from our members and stakeholders.

If we stay silent, we risk losing one of our most valuable resources, our workers - and with them will go our ability to feed ourselves. Let's hope Canadians realize how critical a situation that would be before it is too late.

WEATHER VANE



In early July, squash flowers make their debut at the farmers' market of the Ontario Food Terminal. The delicacy, favoured by restaurateurs, is easy enough to cook at home. For a recipe, go to the Produce Made Simple website and google Fried Zucchini Blossoms. Photo by Glenn Lowson.

Publisher: Ontario Fruit and Vegetable Growers' Association Editor: Karen Davidson, 416-557-6413, editor@thegrower.org Advertising: Carlie Melara 519-763-8728, advertising@thegrower.org

The Grower reserves the right to refuse any advertising. Any errors that are the direct result of The Grower will be compensated at our discretion with a correction notice in the next issue. No compensation will be given after the first running of the ad. Client signature is required before insertion.

The Ontario Fruit and Vegetable Growers' Association is the sole owner of **The Grower**. All editorials and opinions expressed in **The Grower** are those of the newspaper's editorial staff and/or contributor, and do not necessarily reflect the view of the associa-

All rights reserved. The contents of this publication may not be reproduced either whole or in part without the prior written consent of the publisher.

355 Elmira Road North, Unit 105 Guelph, Ontario NIK IS5 CANADA Tel. 519-763-8728 • Fax 519-763-6604

The Grower is printed 12 times a year and sent to all members of the Ontario Fruit and Vegetable Growers' Association who have paid \$30.00 (plus G.S.T.) per year for the paper through their commodity group or container fees. Others may subscribe as follows by writing to the office:

\$30.00 (+ HST) /year in Canada \$40.00/year International

Subscribers must submit a claim for missing issues within four months. If the issue is claimed within four months, but not available, The Grower will extend the subscription by one month. No refunds on subscriptions.

P.M. 40012319

ONTARIO FRUIT AND VEGETABLE GROWERS' **ASSOCIATION BOARD OF DIRECTORS 2020**

MANAGEMENT COMMITTEE

Bill George Jr., Beamsville Charles Stevens, Newcastle Norm Charbonneau, Port Elgin Vice-chair Fruit Vegetable

BOARD OF DIRECTORS

Apples Fresh Veg other Tender Fruit Charles Stevens, Newcastle Kenny Forth, Lynden Fred Meyers, Niagara-on-the-Lake Mike Chromczak, Brownsville Asparagus Fresh Grape Bill George Jr., Beamsville Fresh Veg muck John Hambly, Bradford Shawn Brenn, Waterdov Norm Charbonneau, Port Elgin Small Fruit Ginseng Greenhouse Glen Gilvesy, Tillsonburg Jan VanderHout, Waterdown George Gilvesy, Tillsonburg Greenhouse Ron Van Damme, Wallaceburg Processing Vegetables

OFVGA SECTION CHAIRS

Crop Protection Environment and Conservation Labour Safety Nets Energy, Property, Infrastructure and Food Safety

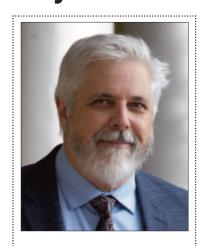
Charles Stevens Jan VanderHout Ken Forth Mike Chromczak

Brian Gilroy



URBAN COWBOY

Fruit and vegetables: stay focussed on your natural advantages



OWEN ROBERTS

Some agricultural sectors are engaged in very public endeavours right now, trying to convince the consumers – and legislators – that their commodities are healthy and sustainable.

For example, in this country, dairy is still reeling from Buttergate, the palm oil management practice that left butter hard and cooks cold.

As well, livestock producers are making efforts to keep uninvited activists off their farms, but are likely headed for a court battle over the provincial Right to Farm legislation.

And Ontario grain farmers have just released a new video series called Grain Farming 101, to, in the organization's words, "help researchers, post-secondary educators, policy makers and students gain a better foundational knowledge of grain farming in Ontario."

In the U.S., corn producers have announced sustainability goals to stay ahead of U.S. President Joe Biden's environmental juggernaut.

Farmer versus farmer situations have arisen there, with white farmers filing discrimination charges against the federal government, claiming they should have access to pandemic recovery funds set up exclusively for non-white farmers. It's ugly.

Back in Ontario, the fruit and vegetable sector took a blow when it pushed back against what could kindly be called uneven housing laws for international workers.

But in this sector, intrinsic, natural advantages – and expert opinions about growers' commodities – always seem to bring hope.

Take Local Food Week (June 7-13 this year) in Ontario. Agriculture leaders committed to neutrality will try hard not to favour one commodity over another. But at this time of the year, it's nearly impossible to illustrate local food celebrations with something other than fruit and vegetable blossoms. Ontario Culinary chose a photo of freshly harvested radishes, with earth clinging to them, for its home page photo to promote Local Food Week.

That's no coincidence.

The fruit and vegetable sector refreshes the entire country, and beyond. That's especially true this year when so many people were

devastated by the pandemic and losing hope. Asparagus shoots started emerging at about the same time COVID-19 numbers were falling. There's natural symbolism at its best.

But beyond imagery is the promise of health offered by increased fruit and vegetable consumption. To me, this makes the sector like few others, particularly with the pandemic having thrown more of a spotlight on healthy eating. What a great opportunity for the sector to capitalize on that natural advantage.

Dietitians are onside. They can – and do – point to studies among their peers as well as the national food guide as proof positive that eating more fruit and vegetables is an imperative.

Even food retail magnate Galen Weston says he has his sights set on eating more salads, which could mean his empire is likely to feature more produce, as well.

A recent story by the U.S. farm publication Successful



Photo by Glenn Lowson

Farming showed that food sector leaders cited the fruit and vegetable sector in most of their 14 leading trends, including immune system boosters, adventurous ingredients, more diverse produce varieties and breakfast salads.

And we know that the term fresh food has a continually evolving and modern meaning in Ontario, thanks to the booming high-tech greenhouse industry producing more fresh commodities with ever-increasing vigour.

Fruit and vegetables transcend many of the cultural barriers that

could hold other agricultural sectors back. Diversity is an inarguable plus for growers who can respond to culturally driven changes in diets.

Growers have experienced huge challenges through the pandemic and the changes in society that have either been caused by it, or paralleled it. Can growers be patient with a public that is likewise trying to get its feet on the ground? It needs, and wants, what you produce.

Owen Roberts is a faculty member at the University of Illinois at Urbana-Champaign.



SCENE ON TWITTER





New field of grapes along the Niagara River on what used to be a chicken farm @NiagaraParks @WineGrowerON @growernews







Ultimate Crop Defence



- Superior control of sucking & chewing pests
- Excellent defence against Lepidopteran pest
- Fast knockdown activity of adult & larval stage pests
- Excellent crop safety profile for beneficials
- Foliar translaminar movement provides superior leaf coverage
- As little as 1 day pre-harvest interval and 12 hour re-entry period
- Economical label rate

Harvanta is a registered trademark of Ishihara Sangyo Kaisha Ltd. Always read $\boldsymbol{\vartheta}$ follow label directions



GROWTH OPPORTUNITIES

Greenbelt Foundation: more room to grow Ontario markets for apples, snap beans and two kinds of cabbage



Cathy McKay, Nature's Bounty, Port Perry, ON



Nick Van Berlo, Berlo's Sweet Potatoes, Simcoe, ON



Van Raay's harvesting garlic, Dashwood, ON. Photos by Glenn Lowson.

Building on a report released in 2020, the Greenbelt Foundation is announcing new research on opportunities to expand Ontario's fruit and vegetable sector to increase local production of apples, snap beans, and two kinds of cabbage. Expanding production of these crops could add \$35 million to farm-gate revenues, on top of the \$100 million opportunity outlined in the 2020 report. Collectively, this could make an important contribution to Ontario's rural economic recovery from the COVID-19 pandemic.

The report outlines how the region—of which the Greenbelt contributes 750,000 acres of highly productive farmland—could provide an even greater contribution to the province's rural economy."

An updated version of Plant the Seeds: Opportunities to Grow Southern Ontario's Fruit and Vegetable Sector report was released June 15, 2021. The report outlines how the regionof which the Greenbelt contributes 750,000 acres of highly productive farmland—could provide an even greater contribution to the province's rural economy by helping it rely less on imported fruits and vegetables and expand production of nine crops including the four mentioned above plus those covered by the 2020 report: fresh grapes, strawberries, pears, garlic, and sweet potatoes, as well as vertical farming.

"We are very fortunate in southern Ontario to have some of the country's most productive agricultural operations in the Greenbelt and adjacent areas, due to a unique growing climate, excellent soils, and proximity to major markets," says Edward McDonnell, CEO of the Greenbelt Foundation. "This latest research is part of the Greenbelt Foundation's ongoing efforts to help Ontario get the most benefit from the region's agricultural lands, while supporting farmers and helping strengthen rural economies."

Outlined in this new version of the report is an opportunity to increase the market share of Ontario-grown fresh apples from an average of 74.5 per cent of annual consumption up to 83 per cent; fresh snap beans from 45 per cent to close to 50 per cent of annual consumption; "Chinese" cabbage from an average of 50 per cent of annual consumption to almost 68 per cent; and regular cabbage from an average of 78.5 per cent of annual consumption to up to 90 per cent. Altogether, these expansion opportunities would contribute \$34.4 million to Ontario's rural economies in farm-gate revenue.

"This report is very timely," says Alison Robertson, executive director of Ontario Fruit and Vegetable Growers Association (OFVGA). "As Canadians emerge from the COVID-19 crisis, it is my hope that the public and governments have a new appreciation for food sovereignty and security. As we continue to address ongoing challenges in the agri-food sector, such as competing in a global market and declining margins, we must also explore opportunities to increase Ontario production."

As the research explains, farmers in Ontario generate \$4.2

billion in economic activity annually, employing 96,000 people directly and indirectly. Accompanying the release of the updated Plant the Seeds report is a profile of four farmers who are leading expansion efforts: Nature's Bounty, in Port Perry; Fenwick Berry Farm, in Pelham; Berlo's Best Sweet Potatoes, in Simcoe; and Van Raay Farms, in Dashwood.

The full report, a summary report, and farmer profiles can be viewed here: www.greenbelt.ca/planting_seeds

COMING EVENTS 2021

July 8	Potato Growers of Alberta Annual Golf
	Tournament, Paradise Canyon Golf Resort,
	Lethbridge, AB

July 26-29	Potato Association of America Annual Meeting,
	VIRTUAL

July 31 Food Day Canada	l
-------------------------	---

Sept 28-30 Asia Fruit Logistica CANCELLED

0-4 (7	C 1:	C 1	C C	TADTIAL
Oct 6-7	Canadian	Greenhouse	Conference,	VIKTUAL

Oct 13-14	Public Trust Summit, Canadian Centre for Food
	Integrity, Toronto, ON

Oct 28-30 Produce Marketing Association Fresh Summit, New Orleans, LA LIVE

Nov 4 -6 Interpoma, Bolzano, Italy

Nov 22-24 Alberta Potato Conference and Trade Show, Cambridge Hotel and Conference Centre, Red Deer, AB

Nov 30-Dec 2 Grow Canada Conference, Calgary, AB

2022

Feb 9-11	Fruit Logistica, Berlin

Feb 22 Canada's Agriculture Day

Feb 23-24 Ontario Fruit and Vegetable Convention, Scotiabank Centre, Niagara Falls, ON

RETAIL NAVIGATOR

Take your farm to your customer



PETER CHAPMAN

We know there are fewer in-person meetings happening due to the pandemic. There is no doubt the summer months are the best time for most Canadian growers to entertain your customers and show them all the hard work you are doing in your location. Visits do not happen as often as you would like at the best of times.

Category managers are busy and it is a challenge for them to get out of the office to see your operation. Add in a pandemic and it becomes very difficult if not impossible, for retailers to visit agriculture. Travel is limited in many areas of the country. Even if you had planned to visit your customer in another province it might be difficult.

If your customers cannot get to you, take your operation to them. There are a number of opportunities for you to show them what you are doing and there are many benefits. You can control the message and focus on the content you want to share. Remember it is about them, so include the information they need and reinforce what you are working on.

Email is effective

Email updates are effective to keep your customers informed. Include updates on the metrics you discussed prior to the season: Volume to date

Forecasts Service level Quality

Start dates and end dates

There is a balance between providing them with the information they want and including some information that helps build your relationship. Perhaps at the beginning of the season you talked about a new grading line you were installing to ensure they got better quality. Now is the time to share some photos. Remember to focus on what they see as important.

Retailers do not get enough exposure to what is happening in the field. Share photos of your crops growing and find the right timing to show updates but not too repetitive. If you are experiencing some problems such as a new pest or disease pressure you can share that as well. It is difficult to produce crops and retailers know that. It helps them understand if they know what you are dealing with.

Labour is a big topic in all areas of the food industry. Share some photos of the people working in your operation and that is your chance to include some information about what you did to get them working and how your proactive approach enabled you to produce and harvest a crop.

If you are in stores you can share those photos as well. People are just not out there as much so any photos you have will be appreciated.

Photos are great and video is better. Most people have a phone that will allow you to record a decent video. There are some basics that lead to better video such as landscape view and slow pans to make it easier to watch. Keep them short which makes the file size smaller.

Test your email communication to ensure it is easy to open. An email with a string of photos might not be best. Find the best method of delivery so they can open the images or video easily and remember many people are on wireless or slower internet connections when they work remotely. You might need to use a file transfer application to improve accessibility.

Social media can be effective too

If your operation is posting on social media find your customers to ensure they are part of your online community. It can be very effective for them to see the posts you are creating. When they are part of your online community, remember they are watching. Do not create posts specifically for them but consider what they will take away.

If you are connected to your customers on LinkedIn, consider posting some more information about your business and some of the initiatives you are working on. They will see it and it is an opportunity to reinforce the positives with them.

Creating your own online community can pay dividends

People are willing to share their email address and it is relatively easy to maintain a database of all of your customers and other important people you want to communicate with. This can be a valuable asset to save you time and maintain a level playing field with different customers.

Plan the schedule through your season with a topic for each



Photo by Glenn Lowson

issue and then take the opportunity to provide an update on crops, initiatives and other news from your operation. Create a template that is easy to complete each issue and ensures you stay focused on the right content. Your customers do want to know and this is your chance to build your relationship.

A common newsletter does not replace your individual communication. Keep that flowing at the appropriate pace to keep them informed, one-on-one.

Send them a care package

Everyone is feeling isolated these days. Send them some product (assuming it is permitted within their organization) to show them what you are doing and how good it is. When we had in-person meetings, you incurred expenses to travel, your time etc. Re-invest some of this to deliver some product to your customers. Reinforce the key messages again, such as your new grading line.

Welsh Bros. @WelshBros · 2h

We thank our lucky stars for our amazing farm team. Here's an inside peak at the asparagus feeder conveyor. Then they're off to the laser for thickness grading & sorting...onward for one final trim - & over to the banding station. #WelshTeamInAction



In all of your initiatives to take the farm to your customers, do your best to include as many people as possible. Your retail category manager is a key point of contact but there are many other people in their organization you can interact with. Make sure you include them in your communication. This will all contribute to stronger relationships with your customers.

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.

Replace your single use plastic packaging with biodegradable, innovative, fibre packaging.



Book your orders for sustainable, bio-mass based packaging.

Many options in stock now. Local manufacturing to begin November 2021.

We can also develop a customized product to suit your requirements







Contact us for sales information at www.bio-origins.ca or www.wellingtonpp.ca

FOCUS: BUSINESS MANAGEMENT

'Still optimistic' says business owner launching Spirit in Niagara Distillery



KAREN DAVIDSON

Not every peach is destined for toothsome glory. But the fermented juices of overripe and misshapen peaches are just the right ingredient to turn into an alcoholic sip.

That's the thinking of Arnie Lepp, a fourth-generation tender fruit grower and local business owner in Niagara-on-the-Lake, Ontario. He's known for Niagara Orchard and Vineyard Corporation, a supplier to grape and tender fruit growers. Now he's launching Spirit in Niagara, a distillery adding value to what would otherwise be discarded fruits.

"Overripe fruits do not store well,

however they are high in sugars," says Lepp. He explains that one tonne of tender fruit can be reduced to 700 litres of fermented juice, which is then distilled to 70 litres of alcohol.

"I see this venture as vertical integration," says Lepp, who farms 200 acres of tender fruit. He says about 10 per cent or 3,000 tonnes of tender fruits go to waste in Niagara region every year. Disposal is more than a chore. The off-spec fruit attracts spotted wing drosophila, a pest that makes fruit unmarketable. It's best to turn the cast-off fruit into another product.

For the past three years, Lepp has been designing a 10,000-square foot facility located at 458 Lakeshore Road, Niagara-



on-the-Lake that houses a hospitality room, a retail store and a production room. At the core of the enterprise are three 500-gallon stills. The building's architecture is a nod to historic homes of Queenston Heights and the spirit of the 1920s. This stylistic choice is complemented in the bottle's labels and brandings.

"Overripe fruits do not store well, however they are high in sugars," says Lepp. He explains that a tonne of fruit can be reduced to 700 litres of fermented juice which is then distilled to 70 litres of alcohol.

The small-batch distillery emphasizes the local provenance of the fruit ingredients to make eau de vies, gins and vodkas. Currently, the brand produces five fruit-based spirits: a peach-based Juiced-Up Vodka and a Juiced-Up Gin, as well as a Juicy Peach, Sun-Ripened Yellow Plum and Sweet Pear eau de vie. After a soft launch in May with online sales, Spirit in Niagara opened to the public in early June.

The timing for the launch of Spirit in Niagara hits a note with pandemic-tired consumers looking to support local enterprises. While the launch of the business may not be optimal, Lepp waves any concerns aside.

"We're farmers," he says, "We live with an optimistic outlook. As far as the pandemic goes, this too shall pass."

For more details, link here: www.spiritinniagara.com

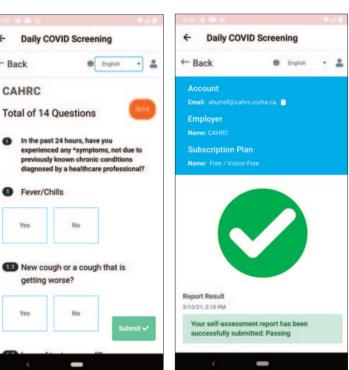
NEW - DAILY COVID SCREENING APP FOR EMPLOYERS IN ONTARIO

COVID-19 screening of workers - in accordance with local health unit direction - is a requirement for Ontario employers under the Reopening Ontario Act. This app is being provided to make it easier for growers to fulfill this requirement.

- **✓ Eliminate paperwork**
- ✓ Automate the collection and reminders
- √ Instant notification of failed screens
- √ Each farm is independently managed
- ✓ English, Spanish and Thai assessments
- ✓ Includes employees and visitors
- √ NO CHARGE for Ontario producers to use for 2021
- ✓ Available for free through the HUB Connect App





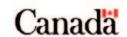


Thanks to the government funding, this program is offered at NO CHARGE to Ontario growers for the full 2021 year. Go to https://www.ofvga.org/screening-app or scan the QR code to download the HUB Connect App and get access to the free daily screening feature for the rest of 2021.









FOCUS: BUSINESS MANAGEMENT

The new world of work is more complex than ever

Vaccination policies can be a polarizing issue.

~ LAURA WILLIAMS WILLIAMS HR LAW



KAREN DAVIDSON

The pandemic has transformed our perspectives of work. Mental health has taken a hit. New anxieties have stemmed from media headlines about social justice movements. Adjustments have been made to accommodate new social distancing rules. Lightning-quick responses have been made to new regulatory requirements at three levels of government.

From a farm employer's perspective, many new responsibilities have emerged in terms of managing worker anxieties and COVID-19 safety rules.

Vaccination policy is one highlighted by Laura Williams, managing partner, during

Williams HR Law's 10th Annual Proactive Workplace Webinar on May 27, 2021. Mandatory vaccination policies carry constructive dismissal risks if policies are not properly established for new and existing employees. The question to ask: is it reasonably necessary?

"Vaccination policies can be a polarizing issue," says Williams. She points out the importance of explaining why the policy is needed. The rationale may be for business or service reasons. The requirement may be to protect a vulnerable population.

"The new world of work is risky because employers are coming to understand new legal realities," says Williams. "There are new exposures to liability that have never been encountered before regarding new

standards of safety."

Perhaps it's never crossed your mind about implementing a specific policy to address the potential for COVID-19related misconduct. As a proactive measure, employers may wish to update existing policies governing employee conduct, such as social media policies or off-duty conduct policies. When drafted and rolled out effectively, these policies can ensure that COVID-19-related rules and expectations are clearly defined. These policies also establish a base for workplace discipline and just cause termination if employees are found to be in breach.

At the end of the day, an employer should make every attempt to minimize the sense of uncertainty. Clarify expectations.

Manage expectations. Gain buy-in of new requirements. Be that leader who knows how to fulfill a worker's need for meaning and belonging.

Editor's note: Williams HR Law provides labour and employment law services to employers across the Greater Toronto Area and Southern Ontario. Based in Markham, Ontario, the firm specializes in helping organizations of all sizes manage human resource challenges on a proactive basis, before they negatively impact business results.

For in-depth videos and articles, visit the Williams HR Law COVID-19 Resource Centre at covid19.williamshrlaw.com/



Custom coverage for Ontario farms

OFA partners with NFP to provide comprehensive coverage for your farm and farm business.

Protect your farm and family with one of our flexible individual and group plans.

- Health, dental, drug, vision and out-of-country options
- Critical illness and disability coverage
- Customized plan for your farm and farm business
- All OFA members and associate supporters are eligible

For more information, contact Yvonne at Members Services – 1-800-463-2555 or agrihealth@nfp.com

Protecting what matters most to you. Powered by















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

Ontario Berry Grower

Ministry of Agriculture,



You suspect herbicide drift - now what?

KRISTEN OBEID, ERIKA DeBROUWER, TOM COWAN

With the new 2,4-D- and dicamba-tolerant crop technology available in field crops, horticulture growers are concerned about drift of these pesticides, especially with the experience the United States has been having. Crop injury caused by herbicide drift is guaranteed to cause misery and confrontation, not to mention insurance claims and legal charges. No one wins when herbicides drift - the applicator loses two ways: the herbicide misses the target, giving poor weed control, plus they are liable for damage; the "receiving" grower loses yield, crop health, perhaps timely markets plus their time. Sometimes our environment loses, and in general, agriculture loses in the public eye.

There Are a Number of Steps to Follow When you Suspect Herbicide Drift:

1. Diagnose the problem:

- Familiarize yourself with the symptoms of auxin herbicide damage on your crops.
- Is it really drift? Eliminate other possible causes. Disease, insect, nutrient deficiency, herbicide carryover, improper spray tank cleanout, environmental stress can resemble herbicide drift injury.
- Are there patterns in the field? Is the damage worse next to the spray source, with less damage occurring across the field? Is the damage patchy? If it is, you need to check your soil pH. If your pH is considered high or low, test for herbicide carryover.
- Is there evidence of a spray application? Look for wheel tracks, weed symptoms, boom patterns and overlap on the headlands. Look for spray evidence in neighbouring fields, lawns, ditches, etc.

2. Contact the appropriate people:

- Talk to your neighbour or the sprayer operator. Ask what was sprayed, when it was applied and who did the application.
- Contact the Ministry of the Environment Conservation and Parks District Office or Spills Action Center (SAC): 1-866-663-8477. The SAC is available 24/7 and they will then contact the appropriate Environmental Officer and pesticide specialist in your region. Local MECP offices

- can be found at the following web address: www.ontario.ca/ environment-and-energy/ ministry-environment-districtlocator
- It is extremely important to report as soon as possible because the concentration of herbicide drops quickly within the plant. Do NOT wait until there are symptoms.
- MOECC officers can do a site visit, take samples of tissue and soil, and have them analyzed for the suspect herbicides. Where appropriate, the offending applicator may face charges under the Pesticide Act. Charges will be pursued only if off label use is identified from the information gathered.
- o Because of the wording of some of the labels and the difficulty of tracking down all the information needed, this has always been a very difficult thing to pursue in grower-to-grower drift incidents.
- o The results from the MOECC lab are available for the grower and, if enough information is collected, the grower is encouraged to pursue civil court if insurance and/or cooperation with the applicator does not work. According to the label of most pest control products, the applicator is liable for any damage caused by the misapplication of a pesticide.
- Contact your insurance adjustor and advise the applicator to contact theirs.
- Report the incident to the PMRA Voluntary incident reporting system: https://www.canada.ca/en/health-canada/services/consumer-product-safety/pesticides-pest-management/public/protecting-your-health-environment/report-pesticide-incident.html
- Report the incident to the manufacturer of the product. See the label for the 1-800 number. Labels can be found at: pr-rp.hc-sc.gc.ca/ls-re/indexeng.php

3. Document all details of the problem:

- Collect spray records (yours to prove it wasn't your sprays) and the offending applicators'.
- Collect weather records (temperatures, possible temperature inversions, wind speed, wind direction, rainfall for the date of application).
- Take photos (many). Record date and location on each photo. Repeat photos several times through the season.

• Document yield loss from the damaged area and an undamaged area. Choose a similar planting (same age, cultivar, rootstock, etc). For perennial crops (e.g. vineyards, orchards, asparagus, berries) document the effects for several years after the damage occurred.

Every herbicide applicator must take all possible steps to avoid herbicide drift. So what should an applicator do?

1. Work with the weather.

Avoid spraying when the weather is against you, e.g. when winds are above 11 km/hr or dead calm, when temperatures are above 30°C, and/or when relative humidity (RH) is above 80%.

2. **Identify vulnerable crops near your fields.** Choose a spray day when winds are blowing away from these sites.

3. Make your spray less prone to drift. Choose herbicides with a low risk of volatility. Avoidproducts such as 2,4-D or dicamba near susceptible crops (grapes, tomatoes, peppers, sweet potato, tobacco, non-2,4-D or dicamba tolerant soybeans, etc.) or greenhouses. Choose higher water volumes and use airinduction (AI) nozzles which will greatly reduce drift risk. Do not exceed the recommended driving speed if there is one listed on the

4. Work with your neighbours. Let them know your intentions. Consider creating buffer areas between vulnerable crops. Greenhouse growers need to be notified to close vents during early morning spray times to avoid any possibility of drift.

Other resources

- 1. OMAFRA Fact sheet: Pesticide Drift from Ground Applications www.omafra.gov. on.ca/english/crops/facts/11-001.htm
- 2. Sprayers 101 www.sprayers101.com for resources on sprayer cleaning and the dangers of temperature inversions.

Originally written in 2018 by: Kristen Obeid, OMAFRA Weed Management Specialist – Horticulture; Wendy McFadden-Smith, OMAFRA IPM Specialist – Horticulture and Karl Soetemans, MOECC Pesticide Specialist – Southwest Region.



Figure 1. Auxin injury on grapes, showing leaf cupping



Figure 2. Auxin injury on grape leaf



Figure 3. Auxin injury on non-tolerant soybeans

Updated May 2021 by Kristen Obeid, OMAFRA Weed Management Specialist – Horticulture: Erika DeBrouwer, OMAFRA Tree Fruit Specialist and Tom Cowan, Pesticides Specialist, MOECC

Strawberry anthracnose management in 2021

ERICA PATE

Strawberry anthracnose fruit rot is caused by Colletotrichum nymphaeae, and is a major fungal disease that strawberry growers should always be protecting their crop against.

Anthracnose infection occurs when rain is followed by hot (20-32oC), humid conditions, and can attack fruit, blossoms, petioles, runners and crowns. The fruit rot infections can occur on green or ripe fruit and look like brown and black sunken, circular lesions (Figures 1 and 2). You may also be able to see salmoncoloured spore masses on these lesions in humid conditions.

In Ontario strawberry growers manage this disease throughout the season. Anthracnose control is particularly challenging for plasticulture, day-neutral growers with the longer flowering and fruiting season, and because dayneutral strawberry bloom and harvest occurs during the warmer summer months. Growers need to spray for anthracnose regularly, rotating through effective products.

Two of the main tools growers relied upon for anthracnose management were group M and

group 11 fungicides. Strobilurin fungicides (FRAC group 11) have been especially effective in controlling anthracnose infection in strawberries, however, anthracnose resistance to group 11 fungicides in Ontario has been confirmed and growers should no longer rely on group 11 products alone for anthracnose control.

Broad spectrum, group M products are great disease management tools for resistance management and to expand the spectrum of disease control. However, captan products now have a six-day restricted entry interval, so these products can no longer be used during harvest for day-neutral growers. As we get into July and August and dayneutral harvest, growers should plan to use an integrated management approach for anthracnose control: including the following:

- · As much as possible apply broad spectrum fungicides (group M) during bloom.
- During harvest your options are more limited because of the longer REI and PHI intervals. Options include Switch, Diplomat, Quadris Top.

- Do not rely on group 11 products alone.
- · Clean up diseased fruit and remove from field.
- Nitrogen management is very important. Avoid over-application of nitrogen.
 - o The source of nitrogen can also have an effect; avoid ammonium forms of nitrogen.
- Don't let the plant canopy get too thick.
- Sanitize between fields (eg. equipment, tools, hands).
- Work in older fields, and/or diseased fields last.

If pressure is high and there is a lot of anthracnose damage present, workers should strip off diseased blooms or berries, spray captan, and begin harvest again in

If any growers are having challenges with anthracnose this year or you suspect resistance to a group 11 in your field we are very interested in hearing about it. Please contact Katie Goldenhar, pathologist- horticulture (Katie.goldenhar@ontario.ca) or Erica Pate, fruit crop specialist, (erica.pate@ontario.ca).









THE GROWER

GREENHOUSE GROWER

DelFrescoPure expands cogeneration systems

As of fall 2021, DelFrescoPure will be increasing its pre-existing cogeneration system by 6.5 MW, for a total of 10+ MW across facilities near Kingsville, Ontario. DelFrescoPure grows and markets greenhouse tomatoes, peppers, cucumbers, beans, eggplants, and strawberries.

Cogeneration or combined heat and power (CHP) is the onsite generation of electricity from the use of natural gas. The byproducts of CHP are heat that can be stored and used to create the desired microclimate within the greenhouse, and CO2 that is used to fertilize the crops. The CHP units will additionally produce the electricity required to power the grow lights as well as the mechanical load of the facility. While electricity generation alone is typically 40 per cent efficient in converting fuel to power, adding heat recovery to the equation can bring that efficiency to 90 per cent, a reality that suits greenhouses well.

DelFrescoPure intends to use the electricity to power the lights at Via Verde Hydroponics Ltd. These grow lights allow for an extended growing season, making

produce that would originally be grown in the summer available all year round. The heat harnessed by CHP will also be recycled to heat the greenhouses and meet all daily power needs. Being able to produce electricity more cost-effectively onsite also means DelFrescoPure does not have to worry about voltage fluctuation from the area maxing out the local grid. With electricity no longer being a concern DelFrescoPure is primed for the 25-acre expansion currently underway.

"DelFrescoPure is excited to increase our cogeneration power units," said Carl Mastronardi, president of Del Fresco Produce Ltd. "We are very pleased to be working with Martin Energy again to install the new CHP technology and solutions they offer. The results from using the Cogeneration technology over the past three years have been great. We look forward to expanding the system so we can continue to provide fresh produce all year long."

Along with the financial benefits, CHP power is better for the environment. This method ensures that fewer resources are



DelFrescoPure is increasing its pre-existing cogeneration system by 6.5 MW, for a total of 10+ MW across facilities. The family-owned business has been operating for more than 50 years in Kingsville, Ontario.

wasted and required to produce electricity. The extended growing season also reduces the carbon footprint by decreasing the need for local retailers to import high milage commodities.

CHP is perfectly suited for the greenhouse environment since it is able to

harness all three attributes of the technology (electricity, heat & CO2).

Source: DelFrescoPure June 4, 2021 news

Mastronardi Produce partners with Rhode Island Grows

Mastronardi Produce and Rhode Island Grows, a familyowned farming operation spanning three states, have broken ground on the construction of a 25-acre greenhouse in Exeter, Rhode Island.

"This high-tech, state-of theart facility will use Controlled Environment Agriculture (CEA) to provide environmentally sustainable, high-quality produce even through the winter," says Paul Mastronardi, president and CEO of Mastronardi Produce. "This is a significant milestone that we're honoured to be a part of; it will increase our ability to efficiently bring more locallygrown produce to the Northeastern region of the U.S."

The new build represents phase one of Rhode Island Grows' CEO Tim Schartner's plan to supply SUNSET branded



produce, and it will leave almost a zero-carbon footprint, using solar and other green energy components.

"Our state-of-the-art greenhouse will provide a consistent supply of fresh fruits and vegetables to an area that generally relies on outside sources to provide food," says Tim Schartner, CEO and 5thgeneration family member to lead Rhode Island Grows. Together, with Mastronardi Produce, we are bringing innovation and wealth creation to the area through sustainable advanced technologies, acumen and food security."

Sunset-branded tomatoes and peppers are expected to arrive in

stores in 2022.

Source: Mastronardi Produce June 4, 2021 news release

MARKETPLACE WORKS

advertising@thegrower.org 866-898-8488 x 221

CONTAINERS AND PACKAGING



ROWN STORAGE

P: 519-373-9679 F: 519-599-2609

Email: 27west@bmts.com

RETIRING

This is our last season !!!

Anyone wanting to purchase this bin manufacturing business, please call us for information.



CLASSIFIED ADS

2-1550 Sure Farms Frost Fans with Honda auto start engines in very good shape. Delhaven Orchards Ltd. 519-676-4475 or email us

delhavenorchardsltd@gmail.com.

Cheechi and Magli F300L 2-row potato, garlic, etc planter, mint condition. \$5000 Lucan, Ontatio. Phone or text 519-317-0936 before 7pm, Thank you!

For Sale: used refrigeration equipment, 2- 25 HP 5H40 carlyle compressors with motors mounted on frames. 2- 42" squirrel cages with 10 HP motors. 4- coolrite 5 ton floor mounted cabinets and several slim line coils. 1- Storex nitrogen generator. Crown Storage Corp. 519-373-9679. 27west@bmts.com

MARKETPLACE WORKS

advertising@thegrower.org 866-898-8488 x 221

REFRIGERATION





EFFICIENCY PERFORMANCE

Premium fruit and vegetable refrigerated cold storages

519-983-6995 info@heye.ca

INNOVATION

DESIGN - SUPPLY - CONSTRUCT - MAINTAIN



@growernews

FOR SALE - 2 Self **Unloading Wagons** \$5,500 each



Please contact Jeff at rondykefarms2@gmail.com *located in the Blenheim area*

NURSERY & ROOTSTOCK



- Bench graft
- 9 month bench
- KNIP tree
- · Top grafting existing orchard

Call sooner and get what you want with better savings ... contract work available.

> **BRIAN VAN BRENK** 31760 Erin Line Fingal ON, NOL 1KO 519-902-6353

CLASSIFIED ADS

Carrot grading & packaging equipment for sale: Hedge Hog Conveyor and frame with cross conveyor. Cyclone Destoner 1-Bin tipper 60" w x 50" D X 51" H. 2 Ton capacity Jacuzzi with conveyor. Allround polish/washer type TD with stand. Gooseneck rinse elevator and Newtec Celox optical Grader for carrots 5 cross conveyors and catwalk. 1-Wet Hopper with conveyor to feed Newtec weigher. Newtec Weigher 12 Head. 2-Newtec poly wicket bagger with funnels, 2-conveyors for under bagger, 2auto bag closers Kwik Lok Printer, 1-Bin tipper 48" L x 50" D x 54"h, 1-1 Ton Capacity Jacuzzi with conveyor, 1-Trimming conveyor for carrots and parsnips, 1-grading table with cull conveyor, Conveyors Stainless steel: 24" x 140", 19" x 202", 16" x 300", 18" x 144" Reversible, 15" x 313", Conveyor to feed turntable 15"x 130" 2section 1-Turntable 96" diameter. Touch screen Control Panel to operate Carrot line. Water Recycling system, Heat shrink tunnel with L bar sealer. Please contact Gerald 902-393-4805 or info@redsoilorganics.ca

EQUIPMENT

TURBO-MIST - 400, 500, 600 GAL IN STOCK



LOW DRIFT SPRAY TOWERS - FIT ANY TURBO-MIST

Perfect KV-220 flail - recent new hammers

\$4,400

REMAINING NEW INVENTORY: INTEREST-FREE TO DECEMBER

Myers centrifugal pumps in stock for John Bean, Durand, Turbo-Mist

*** PERFECT ROTARY MOWERS & FLAIL MOWERS *** *** WANTED: GOOD CLEAN SPRAYER TRADES ***

DON ARTHUR ORCHARD EQUIPMENT (519) 599-3058 donarthur3@gmail.com Thornbury, ON

GROW TRAYS



Make the smart choice. Reusable EPS trays



1-888-453-5961 growerinfo@beaverplastics.com

NURSERY & ROOTSTOCK



Visit our website for information about our varieties, pricing, research, and production guide.

Plants for sale at www.phytocultures.com admin@phytocultures.com | 902.629.1229



Turn your used farm equipment in to cash with a classified ad.

advertising@thegrower.org

CROP PROTECTION

A PMUC and an URMULE

JIM CHAPUT

For those of you who have known me for many years, you may find it strange that I am at a loss for words. Throughout my 34-year career working in Ontario's agricultural environment, I rarely minced words or held back from pushing forward what at the time seemed like good ideas and practical advice to those who sought guidance and sometimes to those who simply needed to hear it. I've lived a dual and at times polar opposite existence away from work where I am reserved and shy (except when it comes to the Leafs and stopping whale killers).

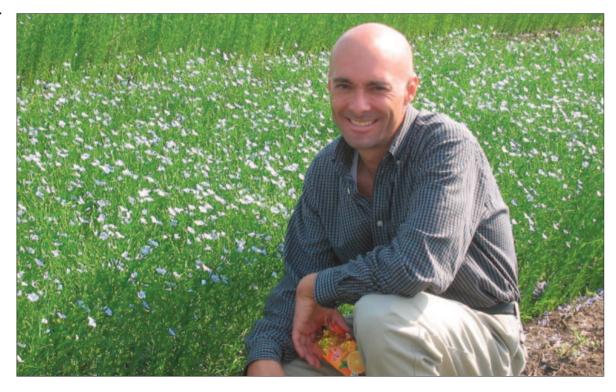
So what does one say at this point in one's life. I expect it is a different experience for everyone. I was asked to highlight the most important minor uses and what I predict for the future, but first a little context. Having spent the first 10 years of my career seeing what growers really have to deal with, the complexity of decisionmaking required and then documenting and reporting on the successes and sometimes failures of hands-on intensive integrated pest management prepared me well for the position of minor use coordinator.

Many people, both professional acquaintances, family and friends have asked me what is a 'minor use coordinator'? It is a title that makes little sense except to those of us who know. What, who and when are you coordinating and why do these things need coordinating? That's for another article in another forum. For most of you reading

here, you know that the role of minor use coordinator has everything to do with coordinating communication and collaboration among a plethora of organizations, interests, persons and most importantly priorities established by growers of fruits, vegetables, ornamentals and other specialty crops, things our society at times takes for granted like the multitude of choices available to them in the produce section, things that didn't exist when I was a child or that hops grown in Slovenia, Canada and Germany might be in your favourite brew.

Because we are trying to feed this variety of foods to a population larger than the planet can viably sustain, they must be grown in situations that trigger what we call 'pest' infestations and then we humans invent ingenious ways to manage these pests. In my 30+ years as a civil servant I was granted the luxury of seeing or meeting farmers around the world who try their very best to protect their crops and be good stewards of the land. Access to safe (as judged by appropriate regulatory bodies) and effective minor use pest control products has been vital to protecting fruits, vegetables, ornamentals and specialty crops. Besides that, I learned what the difference was between a jujube here and jujube in Australia.

So, let's bring this a little closer to home; as Ontario's minor use coordinator there were some notable minor use registrations and some memorable events. The first registration for a newly discovered pest called swede midge, the first weed control registration for



miscanthus and the first biopesticide registrations on medical cannabis were notable but every approved use was important to the producers who felt they needed them.

Timelines have always been important to the minor use program and securing new uses in a couple of years is the general expectation. However when one weed management minor use for rutabaga took 22 years to complete, my average was thrown right off. As far as events go, the formation of the Agriculture and Agri-Food Canada Pest Management Centre was likely a pivotal event during my career as it has made Canada a leader in the field.

Over the years it's been the people I've worked with who have made the most impact on my career and without them it would not have been as successful. There are many to thank for helping me along the way. Accepting the fact

that Craig Hunter's favourite vegetable was eggplant prepared five different ways and never forgetting the 'giant meatball fiasco' on my 3rd or 4th trip to the IR-4 meetings in Florida with Shirley Archambault, Victoria Brooks and the other Canadian minor use delegates.

Knowing that I would never have a dull day at work unless I chose to make it that way and learning that artichoke dip isn't the only way to enjoy artichoke, after visiting Ontario's one and only artichoke producer and learning a whole heck lot more than expected made my career memorable.

Realizing that what you viewed as a crisis of conscience at work or the pressure of a deadline missed was truly miniscule to the crises of life and death our fragile human bodies face and that family and trusted friends were what really mattered. Which leads me to final thoughts.

I was asked to comment on the future. Certainly, from a minor use perspective the needs will remain demanding and challenging, the use of biopesticides will continue to increase and the term 'minor use' will become less and less relevant as we now do global 'minor' use projects. More broadly though it should be apparent to most that we need to proceed with precaution, and that events now beyond our control are propelling humanity and our planet toward challenging times. Therefore, to those of you who made my life and my career never feel minor, thank you.

Editor's note: For those who aren't familiar with the insider's use of acronyms, a PMUC is a provincial minor use coordinator and an URMULE is a User Requested Minor Use Label Expansion.

Five-year project continues to sample Colorado potato beetle

Attention all potato growers in Ontario, Manitoba and Alberta!

Colorado potato beetles (CPB) are the focus of a five year national survey on tolerance levels to selected registered insecticides. Dr. Ian Scott is a research scientist with the London Research and Development Centre at Agriculture and Agri-Food Canada (AAFC), and is the co-lead on this project.

He is looking for approximately 150 "live" beetle adults and larvae per sample site. If you have a few you can spare, please contact him and he will arrange for someone to come immediately to your farm and take some beetles off your hands. If you are outside of southwest/south central Ontario, a collection kit will be sent that can be returned by overnight courier (pre-paid) to AAFC London, Ontario.

Please contact Ian Scott at ian.scott2@agr.gc.ca or Sophie Krolikowski at sophie. krolikowski@agr.gc.ca for further information and to arrange delivery of the kits.

Source: Agriculture and Agri-Food Canada



Tracy S Carnelley @TracySCarnelley · 51m #beetlebattle2021 is underway. CPB with the early advantage at this site.





Diplomat Fungicide LABEL EXPANSION

Botrytis, Powdery Mildew, Anthracnose, Early Blight, Gummy Stem Blight

- broad spectrum protection for fruits & vegetables
 Now Includes:
- Phomopsis & Leather Rot in Strawberries
- Phomopsis & Downy Mildew in Grapes
- Powdery Mildew in blackberry, loganberry & raspberry
- 0 day PHI & Unique mode of action to manage resistance



CROP PROTECTION

Canadian farmers set record recycling rate for ag-plastic jugs

Every year for the past 32 years, Cleanfarms has calculated the rolling three-year average recycling rate of agricultural pesticide and fertilizer containers that are 23L and smaller. The 2020 recycling rate just calculated shows another major surge in recycling these containers in 2020 at 76 per cent compared to 71 per cent in 2019. This sets an all-time record for recycling empty ag-plastic jugs in Canada.

The recycling rate measures the percentage of containers collected for recycling compared to the number of containers sold into the market in that year. The three-year rolling average recovery rate evens out the rate over three years considering factors which could cause variations such as differing needs due to weather. The rolling average rate in 2018 was 64 per cent.

"Canadian farmers deserve huge credit for these unparalleled results," said Cleanfarms executive director Barry Friesen. "They are bringing back rinsed, empty containers in increasing numbers year over year, which means more of these ag plastic jugs are getting recycled into new products in a circular economy."

In total, farmers returned more than 5.5 million pesticide and fertilizer jugs 23L and smaller in 2020.

Canadian farmers typically purchase crop input products such as fertilizers and pesticides in easy-to-handle 23L jugs. The crop protection industry started a volunteer stewardship program for empty containers in 1989. In 2010, Cleanfarms took over the program and expanded it nationally. Until four years ago, the recycling rate hovered annually between 60 per cent and 65 per cent.

In addition to farmers, Cleanfarms attributes the increased recycling rate to the more than 1,200 ag-retail and



municipal operations across the country that run recycling collection sites and that work with farmers to get the empty, rinsed containers back.

Cleanfarms is also developing incentive programs such as offering free recycling collection bags that make it easier for farmers to collect, store and transport empty containers.

"For the last few years in our

promotion and education materials we've been asking farmers to bring back 100 per cent of their empty containers. We want to recycle every one of them and it looks like we're getting closer to that goal," Friesen said. "We know Canadian farmers are committed stewards of their land and that they want to be environmentally responsible when it comes to how they

manage this plastic ag packaging on their farms. We are grateful that they are responding positively to these programs," Friesen said.

Recovered agricultural plastics are recycled into new products such as farm drainage tile, flexible irrigation pipe and plastic bags.

Source: CleanFarms May 31, 2021 news release

Entrust insecticide label expanded for blueberry maggot

JIM CHAPUT

The Pest Management Regulatory Agency (PMRA) recently announced the approval of a minor use label expansion registration for Entrust insecticide for the suppression of blueberry maggot on highbush and lowbush blueberries in Canada. Entrust insecticide was already labeled for use against insects on many crops in Canada.

This minor use proposal was submitted by the Association des producteurs maraichers du Québec (APMQ) 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 pest management decisions within a robust integrated pest management program and should consult the complete label before using Entrust insecticide.

Entrust insecticide is highly toxic to bees exposed to direct treatment, drift or residues on blooming plants. This product is also harmful to parasitoids and predatory mites and highly toxic to aquatic invertebrates. Do not contaminate off-target areas or aquatic habitats when spraying or when cleaning and rinsing

Crop(s)	Additional Target Pests	Rate (mL/ha)	Application Information	PHI
Highbush and lowbush blueberries	Blueberry maggot	219 - 440	Application should be based upon the presence of adult flies as determined by local monitoring	1 day
			Allow 7 – 10 days between applications.	
			Do not apply more than 3 applications per year.	



spray equipment or containers.

Follow all other precautions, restrictions and directions for use on the Entrust insecticide label carefully.

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

Jim Chaput, OMAFRA minor use coordinator, retired June 30, 2021.

Corteva to offer abiotic stress management technology

Corteva Agriscience and Elemental Enzymes, a life sciences company that develops novel biotechnology and enzymes solutions, have announced a multi-year global agreement around a unique abiotic stress mitigation technology. The agreement expands Corteva Agriscience's biological portfolio of biostimulant, biocontrol and pheromone solutions.

Called Waterflux, the optimized osmoprotectant blend provides plants with small organic molecules that help crops overcome abiotic stressors such as soil salinity, drought, and extreme temperatures.

The technology will be offered through a family of products to be branded under the name Sosdia Abiotic Stress Mitigator/Biostimulant. Two different products and

formulations will be offered for a broad range of crops, including specialty and row crops, sugar cane, and turf and ornamental, as well as range and pasture.

"This agreement is another demonstration of Corteva Agriscience's commitment to provide farmers biological solutions that offer proven, predictable performance in complement with our broad portfolio of conventional crop protection and seed solutions, as well as digital tools," said Rajan Gajaria, executive vice president, Business Platforms, Corteva Agriscience.

"We are excited to partner with Corteva Agriscience to deliver a new tool to growers that helps manage water related stresses and increase water use efficiency in both the row crop and specialty crop markets," said Brian Thompson, CEO of Elemental Enzymes. "Crops around the world are increasingly exposed to water and drought stresses that rob growers of yield. Waterflux Technology allows growers to both maximize their water usage and protect against adverse conditions for their farms."

Corteva's model for developing its best-in-class Biologicals portfolio combines external innovation, R&D collaboration, licensing, and distribution. This agreement shows how Corteva collaborates with leading companies to accelerate commercializing customer-centered innovations.

Source: Corteva Agriscience June 1, 2021 news release

Optimize Fruit Bulking with "Science Driven Nutrition"™



Growers have four main windows of opportunity to maximize their harvest as the apple crop's nutritional needs change through the season. Apple bulking, when fruit cells expand and the apple increases in size and weight, is an important opportunity to impact fruit development. Growers who use Science-Driven Nutrition™ to better understand their apple crop can support optimal growth and an enhanced marketable yield.

A proper nutrition plan ensures cohesiveness throughout the growing season. Bulking is the period of time when growers must focus on facilitating the production and movement of sugars into the cell structures. During cell division, the crop timing prior to the fruit bulking window, growers increased calcium applications to support fruit cell development and fruit firmness. When this opportunity to introduce calcium into the fruit ends four-to-six weeks post petal fall, maintenance applications using products like Agro-K's **Vigor CalTM** or **Clean Calcium**, are required to support tree growth and fruit firmness.

In addition to supplemental calcium, the apple tree requires an increased amount of energy to support the rapid leaf expansion and shoot growth that occurs at this time. Agro-K's **AgroBest 9-24-3** is an excellent source of phosphorous, which is a key nutrient behind the energy driving healthy cell development. Zinc assists with the leaf and vascular tissue development on the new growth, while magnesium, manganese, sulfur and iron synergize to maximize chlorophyll production and photosynthesis. Agro-K's **Zinc Plus +4** is a great example of a foliar product containing multiple micro nutrients designed to support leaf development and function during fruit bulking.

Potassium, which helps to move sugars throughout the plant and regulates plant moisture through the opening and closing of the stomata, is one of the most important nutrients during this time. The apple crop's potassium needs increase exponentially during the summer months. Fruit color, weight and uniform maturity at harvest all hinge on maintaining proper potassium levels during cell bulking with products like Agro-K's **KDL** and **Clean Potassium**. Excessive nitrogen, an inhibitor to fruit color, must also be avoided during this crop window.

Science-Driven Nutrition™

Science-Driven Nutrition™ was developed to help growers manage the apple's diverse and complex nutritional needs by following the **Five Rs**: The Right nutrient applied at the Right time in the Right form in the Right mix targeting the Right location in the plant. This approach maximizes effectiveness and minimizes product waste.

During apple bulking, Agro-K's soft foliar products ensure producers don't inadvertently create fruit lenticel cell damage, a problem that inevitably worsens over time. Agro-K's **Vigor** and **Dextro-Lac** product lines use a proprietary biological finishing technique that safely improves crop performance by enhancing nutrient uptake and utilization. Using soil testing, sap analysis, fruit sampling and other tools, growers determine which products will be most helpful for their unique orchard.

For more information on using Science-Driven Nutrition $^{\text{m}}$ to help your crop flourish throughout the season, visit www.agro-k.com.

Rick de Jong

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



CORPORATION

8030 Main Street, NE • Minneapolis, MN 55432 800-328-2418 • www.agro-k.com

© 2021 Agro-K Corporation.