

NOVEMBER 2020

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MEETUPS

Growing live, virtually



With trade shows and field tours cancelled due to COVID-19, growers are relying on new platforms for information. But nothing can replace a field visit to see how the crop is faring. That was the case earlier this summer when Ontario vegetable crop specialist, Travis Cranmer (left) and brothers Ian and Nathan Teetzel met up near Exeter, Ontario. In this photo, they are looking at bulbils, an alternative method of propagating garlic, that will be harvested in a week's time and prepared for fall planting. Photos by Glenn Lowson.

KAREN DAVIDSON

Six years into growing garlic, Na Teetzel still considers himself an apprentice.

While he and his brother Ian inherited their grandfather's savvy in growing onion sets, they are on a steep learning curve with 60 acres of garlic near Exeter, Ontario.

Garlic, says Teetzel, is such a specialized crop that only a handful of farmers know how to cultivate it for profitable yields in Ontario's climate. The pungent crop is more at home in

the Mediterranean.

For the 50-plus members of the Garlic Growers of Ontario, information transfer is pivotal to moving the sector to a critical mass to supply metropolitan retailers consistently. He predicts that the global COVID-19 pandemic and cancelled meetings will have untold effects on efficiency.

"We're living through groundhog days," says Teetzel who has let go of external activities. "I think we have become more inwardly-focussed and that's not a good thing."

One lifeline this past summer has been the weekly visits of Travis

Cranmer, one of Ontario's four vegetable crop specialists who ran a leek moth trial in garlic and a sterile fly release project in onion sets. For Teetzel, this was a valuable opportunity to assess disease and insect pressure in the crops and to share observations.

"Travis Cranmer is very instrumental in encouraging the garlic industry in Ontario to flourish," says Teetzel, "because he doesn't have a personal economic interest. He's an independent voice, very realistic and down-to-earth."

Going forward, the prospects for technology transfer are daunting.

"Zoom meetings don't cut it," says

Teetzel. "I don't experience interaction and I don't look forward to them."

For his part, Cranmer has been challenged with executing his extension responsibilities. Last spring, several Integrated Pest Management (IPM) scouting workshops which would normally take six hours in person, had to be telescoped to two hours via a Zoom meeting. Multiple sessions were recorded and posted. (Link here: https://bit.ly/2FCQgL6)

Continued on page 3

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Workers' rights

Seed & rootstock PG 12



AT PRESS TIME...

OPMA 2020 Virtual Awards Ceremony



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Order tickets

Due to COVID-19, the Ontario Produce Marketing Association is hosting a virtual awards ceremony on November 19, 2020, in place of the in-person gala. Details on the 7 pm event can be found on a new website, https://theopma.ca/event/annual-opma-gala-and-awards-ceremony/.

Join from the comfort of your own home with a delicious charcuterie board and premium Ontario wine, beer, or cocktail mix. The evening will feature a celebration in honour of the OPMA's 30th anniversary, recognition of four award winners and messages from sponsors.

And there will be prizes! During intermission, you will have the choice to take part in a virtual craft brew tasting, a wine tasting, a cocktail/mocktail demo, or view some entertainment.

Tickets are available in a range of prices from \$25 to \$165. Note order deadlines on the website. Proceeds go to Student Nutrition Ontario.

Federal funds to protect worker safety

Ontario's fruit and vegetable growers are pleased with the joint federal-provincial government funding announcement of an additional \$11.6 million to protect farm workers during the COVID-19 pandemic. This funding will help offset new costs and will better prepare farms for similar challenges in 2021

"The health and safety of farm workers is of the utmost importance to all fruit and vegetable growers and this costshare funding will help us ensure we can continue to safely provide food for Canadians," says OFVGA chair Bill George. "Like its impact on many other Canadian businesses, the pandemic has created overwhelming challenges for growers with unexpected additional expenses such as helping workers to complete their mandatory quarantine periods, adapting equipment and modifying workflows."

The October 13 announcement by Canada's Minister of

Agriculture and Agri-Food Marie-Claude Bibeau and Ontario's Minister of Agriculture, Food and Rural Affairs Ernie Hardeman also extends government cost-share funding to a category for small capital projects of up to \$100,000 for housing and workplace modifications and equipment to allow greater physical distancing for workers.

The new funds build on the existing \$15 million of government cost-share funding available to Ontario growers announced earlier this year, and will continue to cover projects that prioritize the health and safety of workers, including building physical barriers for more effective separation, upgrading HVAC systems and enhancing hand-washing facilities.

The Ontario Fruit and Vegetable Growers' Association has been working closely with the provincial and federal governments to ensure the sector is prepared for similar challenges in 2021, should the pandemic persist.

Source: Ontario Fruit and Vegetable Growers' Association October 13, 2020 news release

NEWSMAKERS

The Fruit and Vegetable Dispute Resolution Corporation has announced that Luc Mougeot, currently vice-president, will become the new president and CEO on January 1, 2020. He replaces Fred Webber, whose has held the role since 2011 and who is retiring. Webber is staying on as senior advisor until June 2021. A search for a new vice-president is ongoing.



Photo right: Luc Mougeot.

Welcome to **Dr. Tejendra Chapagain**, soil fertility specialist – horticulture for the Ontario Ministry of Agriculture, Food and Rural Affairs. He will be working with growers on cover crops, precision agronomy and complex horticultural cropping systems. He's based at the University of Guelph.

New Brunswick's new minister of agriculture, aquaculture and fisheries is **Margaret Johnson** (Carleton-Victoria). The Progressive Conservative assumed office on September 29, 2020. With provincial elections scheduled for October 24 in British Columbia and October 26 in Saskatchewan, there's potential for three new faces at the upcoming federal-provincial-territorial agriculture ministers' meeting in November.

Congratulations to **Prof. Youbin Zheng**, School of Environmental Sciences at the University of Guelph. He received the Ontario Agricultural College Alumni Association Distinguished Researcher Award. Thanks to his controlled environment plant production research, greenhouse growers have improved their practices.

The CEO of Metro, Eric R. La Flèche, has been named Canada's outstanding CEO of the Year for 2020. Presented by Bennett Jones LLP, Caldwell Partners International Inc., the National Post and BNN Bloomberg, the award recognizes the company's performance over time in several categories: vision and leadership, corporate performance, global competitiveness, innovative business achievements and corporate responsibility. Under La Flèche's guidance, Metro has increased revenues to more than \$16 billion annually and employs 90,000 Canadians.

The Canadian Agri-Food Policy Institute has announced a new management team. **Ted Bilyea** transitions from interim CEO to chief strategy officer. **Tyler McCann** becomes chief engagement officer. **Jenel Bode** becomes director of fundraising.

The Vineland Research and Innovation Centre has appointed **Karen Belaire** as the new chair of the board for a two-year term. She is president and CEO of Shared Services West, a not-for-profit shared services organization with expertise in healthcare supply chain optimization. She is joined by four new directors: **May Chang, Lori Hall, John Groenewegen** and **Mark Picone**.

Condolences are extended to the family of **Garry Wagner**, 84, who passed away in Calgary on October 3, 2020. He was a pioneer in the produce industry in Manitoba, Saskatchewan and Alberta, helping to steer the transition from the Canadian Wholesalers' Association to the Canadian Produce Marketing Association (CPMA). He was The Packer Produce Person of the Year winner in 1985, chair of CPMA in 1990 and CPMA's Lifetime Achievement Award recipient in 1997.

Congratulations to Glenn
Lowson, a freelance
photographer who has been
working with The Grower for
almost a decade. His photo of
Thinley Sangpo, Fresh Taste
Produce, at the Ontario Food
Terminal took first place in the



Photography-People category of the recent Canadian Farm Writers' Federation (CFWF) awards. The same photo earned third place, overall, in the category of Photo of the Year.

The Grower's podcast with editor Karen Davidson interviewing Oleen Smethurst, Costco Canada, earned second-place honours for its exploration of what taste means today in the produce marketplace.









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COVER STORY

Growing live, virtually

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Zoom meetings don't cut it. I don't experience interaction and I don't look forward to them.

~ NATHAN TEETZEL

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Contiuned from page 1

"It's tough to be engaged and engaging in this environment," says Cranmer. "It's tough for growers because there is screen overload. But the technology is getting better every month."

One success is the use of Slido.com, a question-and-answer polling platform for remote meetings. Growers can access the website on a smartphone, enter the event code and participate in real-time polling.

Cranmer partnered with ag ministry colleague Dennis Van Dyk to host several IPM seminars last May. Growers could see a photo of an insect pest, and then answer the Slido poll of five examples of what it might be. After polling, participants could see how many got the correct answer. The hosts then explained the defining characteristics of the pest.

Did this technique work? When the growers were polled at the end of the seminar with the same set of questions, correct responses typically rose from 20 to 60 per cent to 60-95 per cent. These metrics were worthy of sharing not only with the growers but the managers of extension services. For the subscription cost of \$199, Slido is a very useful tool.

Challenges remain in sharing in-depth technical data such as trial results, but Cranmer maintains that the future of extension is digital.

"One of the Ontario ag ministry's strengths is the archive of factsheets that's been built over the years. Those resources can be updated and made available online, in due time."

The biggest hurdle is that many rural farmers don't always have access to high-speed Internet. That's a bottleneck that's been exposed even more during the pandemic.

The effects of cancelling trade shows and field days will

be felt in the short and long term. These events frequently offer the expertise of international experts and the opportunity for face-to-face dialogue. What's lost is the relationship-building that leads to trust.

To overcome this deficit, the Nova Scotia Fruit Growers' Association decided to make a virtual event out of its annual orchard tour in August 2020. The expertise of Michelle Cortens, tree fruit specialist, was tapped at Perennia Food and Agriculture Inc in Kentville.

With only two months of lead time, the amateur photographer hustled to film video with a smartphone and Go-Pro camera at several orchards in the Annapolis Valley. She used a tripod and macro-lens camera for the close-up shots. And she used entry-level editing software.

In planning the orchard visits and researcher interviews, she realized that organizing the information into separate videos -- replant disease, for example -- would be helpful for independent viewing. In the end, she recorded nine videos plus a promotional trailer.

"The storytelling worked," says Cortens. "We've had 2,500 YouTube views and the numbers keep rising."

Cortens shares technical learnings from the project.

First, early planning is important to videotape different stages of apple production.

Secondly, sound quality is paramount. Add a voice-over. Don't attempt recording in the field without specialized equipment.

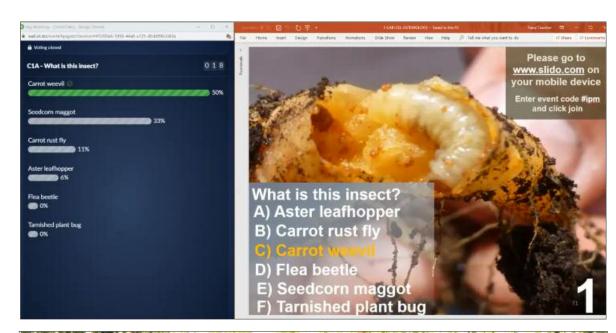
Thirdly, editing will proceed more smoothly in landscape mode on your smartphone. Don't record video in portrait mode.

And lastly, buy a selfie-stick to be your own video director.

"I considered this an opportunity to be creative, to bring people along with me," says Cortens. "Find the right



Nathan Teetzel is pictured with a clutch of onion sets at his farm near Exeter, Ontario.





From front to back: Michelle Cortens, tree fruit specialist, Perennia and research associates Jill MacDonald, Shane Wood, and Jonathan Bent. The team is pictured harvesting a Honeycrisp thinning trial. The Virtual Orchard Tour can be viewed here: https://bit.ly/3duD5Ix

format to have the most impact."

Like garlic grower Nathan Teetzel, everyone is an apprentice in learning new ways of sharing information. The Grower goes "Behind the Scenes" with Travis Cranmer, vegetable crop specialist with the Ontario Ministry of Agriculture, Food and Rural Affairs. As an extension worker, he's using polling software to be more interactive with growers during call-in webinars. This series is sponsored by BASF Agricultural Solutions.



CROSS COUNTRY DIGEST

BRITISH COLUMBIA

U.S. investigates impact of blueberry imports

Rapidly rising imports of blueberries from Chile, Peru and Mexico have raised the ire of American growers. On September 29, the United States Trade Representative triggered an investigation that will target all source countries for cultivated and wild blueberries. Canada is on the list.

Several state blueberry groups, including the American Blueberry Growers Alliance, say too many blueberry imports are undercutting their prices.

According to news reports,

U.S. blueberry imports have increased from 50 million pounds in 2005 to nearly 400 million pounds in 2018.

Shipments last year were worth US\$1.2 billion. Canada's exports, while relatively small at US\$116 million, are nevertheless under the microscope in the latest trade investigation.

The United States Trade Representative Robert Lighthizer issued a request on September 29 to the International Trade Commission to start a Section 201 global safeguard investigation. The product description includes not only cultivated blueberries (fresh or chilled) but wild blueberries (fresh or chilled) and frozen products.

Whereas a country-specific investigation could only yield a country-specific remedy, a Section 201 investigation for blueberries must analyze blueberry imports from all countries comprehensively and account for such in any recommended action to the president.

A determination of injury,



yet to be proven, must be made within 120 days of receipt of the U.S. Trade Representative's request.

Source: The Packer

BRITISH COLUMBIA

Apple growers protest poor prices

Apple returns have been a disaster for the past three years, and orchardists are going into debt to survive. That statement was made last winter by Pinder Dhaliwal, president of the BC Fruit Growers' Association (BCFGA)– before COVID-19.

His forecast has darkened. During the 2020 Thanksgiving weekend, the association took the unprecedented decision to sell apples at the current farmgate price -- 12 cents per pound -- at the Kelowna farmers' market.

The October 10 event was dubbed the "BC Apples Farewell Tour." The timing coincided with consumers' heightened awareness of local foods but also during BC's provincial election slated for October 24.

The BCFGA points to an environment of heightened

competition citing consolidation in Canada's supermarkets, BC's lowest support of any province for agricultural support programs and seven-cent-perpound subsidies to nearby apple competitors in Washington state.

As Dhaliwal points out, it's one thing to save the Agricultural Land Reserve, but more is needed to save the farmers.



NEW BRUNSWICK

More than 21,000 viewers visit virtual Open Farm Day

More than 21,000 viewers took part in the first-ever virtual Atlantic Open Farm Day on September 20, 2020. Due to current circumstances with COVID-19, farm videos were

the safest way for agricultural producers to showcase their operations and for the public to

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get a better understanding of how their food is produced. A total of 80 farms participated in this virtual event.

"I am extremely pleased with Open Farm Day 2020," said Lisa Ashworth, president of the Agricultural Alliance of New Brunswick. "Producers really embraced the challenge of providing online content, and the results were spectacular. The number and quality of both videos and Facebook likes gave the public "backstage access" to a great diversity of farm families and to the work that they do to produce food and fibre for consumers. I look forward to this content remaining online for future learning opportunities and I thank New Brunswick families for their understanding of the agricultural communities' need to make the socially responsible choice for a virtual open farm day this year."

This year's event was organized with all four Atlantic provinces, including Prince Edward Island's Agriculture Sector Council, Nova Scotia's Federation of Agriculture, Newfoundland's Federation of Agriculture and the Agricultural Alliance of New Brunswick.

The goal for the event is to connect the public with their local farmers and to showcase the wide range of exceptional farm products across Atlantic Canada. This year's participants included beef, haskap, alpaca, dairy, various produce growers, and many more.

"We were excited to participate in this year's 2020 Virtual Open Farm Day," said Guylaine Gauvin, Crooked River Farm. "People truly appreciated the fact that we showcased in a five-minute video, all the work done in planting our Haskap Orchard which took years in planning. With this format, everyone could see so many more farms in Atlantic Canada. We got excellent feedback and encouragements through social media from people now looking forward to visiting our farm. People, more than ever, want to know where their food comes from. This was a great event to promote food provenance and to support our local farmers!"

Open Farm Day utilized primarily digital advertising such as Facebook and website banners, as well as radio ads. The public was able to locate the participating farm videos on a joint Atlantic Open Farm Day Map that was hosted on each agricultural organization's website and on the joint Atlantic Virtual Open Farm Day Facebook Event Page.

CROSS COUNTRY DIGEST

QUEBEC

Cross-border business increases

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It's actually been more difficult to go to New Brunswick than to the United States.

~ CYRIL VACHON



Cyril Vachon, president of Equipement Capitale, St. Ambroise, is pictured with an Alpha Lazer machine.

— **)**

KAREN DAVIDSON

Cyril Vachon has built an international business, headquartered at the heart of Quebec's seed potato growing region south of Lac St. Jean. That's about two 1/2 hours' drive north of Quebec City. Equipement Capitale custom builds potato, carrot and onion processing equipment for customers in Canada as well as major potato-growing regions in the U.S.

The global pandemic has not slowed orders for his St. Ambroise facility as Vachon can attest.

"We had 45 per cent growth in

business in 2019," says Vachon. "And we've had no reduction in orders this year. Seventy per cent of my clients are packers and they have continued their projects."

Going forward, the movement to automation will only increase because of the hurdles in hiring workers. Vachon's specialty expertise is valued because he employs state-of-the-art lasers to customize processing equipment and he sends highly qualified technical personnel to install and service the systems. He has 53 employees in total.

"It's actually been more difficult to go to New Brunswick than to the United

States," he says. "The word 'quarantine' has cost me a lot. We had visas to travel to the U.S. because agriculture is considered an essential service."

The global pandemic and the subsequent stay-at-home economy has shifted food priorities, putting staples such as storable root vegetables at center of plate. That shift is likely to keep going into the winter of 2021.

Equipment Capitale is well positioned for growth because of the plant re-organization about four years ago. It's a smoke-free facility with no humidity, kept at 20°C temperature. This working environment attracts and

retains highly qualified workers. Both his son, a mechanical engineer, and nephew are involved in the business.

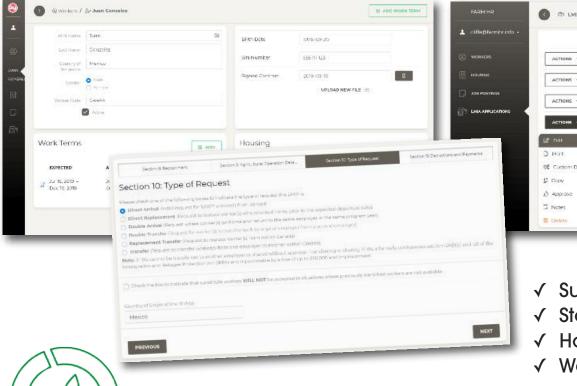
Back in the 1980s, the reputation was built on double box fillers that were needed by seed potato growers in Quebec. Since then, he's provided solutions to McCain's processing facilities and beyond. The list of equipment includes: hoppers, holding tanks, washers, driers and graders.

Today, an example of the latest in equipment is Artificial Intelligence integrated into optical graders for potato, onions and several fruits and vegetables.

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INTERNATIONAL

Fruit Logistica shifts the date and adapts concept

Fruit Logistica will take place in 2021 as a Special Edition trade show and is rescheduling to May 18-20, 2021 in Berlin. With the headline "Meet onsite. Connect online" the adapted concept focuses on business meetings and turn-key exhibition packages to maximize exhibitors' flexibility and business opportunities.

"COVID-19 confronts us with challenges none of us can eliminate. So we've asked ourselves what do our clients need and what are the factors that we can control for them," explains Madlen Miserius, senior product manager at Fruit Logistica. "Our approach is to enable our customers to better manage their risks and further increase their business opportunities."

With the event to be held in May it is more likely that a higher number of buyers from many parts of the world will be able to attend. Digital elements, including meeting functions and broadcasting of the conference program, provide additional solutions to participate and

engage. The adapted concept based on turn-key exhibition packages fundamentally reduces investment and lead time for exhibitors. They can choose a package for three pre-defined stand sizes. Packages include the stand space, stand construction and robust internet

"While Fruit Logistica Special Edition 2021 builds on a clearly reduced total space, it offers the opportunity for a maximum number of registered companies to showcase products onsite," says Miserius. "The FRUIT
LOGIS
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18|19|20 MAY 2021 BERLIN & ONLINE

new format lowers the investment of our customers, allows time for decisions and also reduces the number of staff needed to be at their booth in Berlin. In other words, we provide a simple way to

participate and give the industry much needed opportunities to meet buyers face-to-face.

Source: Fruit Logistica October 12, 2020 news release

Driscoll's strawberries to be grown at indoor vertical farm

Driscoll's, a leading consumer brand in field-grown strawberries, has inked a deal to grow in vertical indoor farms belonging to Plenty Unlimited.

Together, the two companies will work to bring flavourful strawberry varieties to market, leveraging the benefits of a controlled growing environment while also creating opportunity for berry expansion into regions that have historically been difficult to serve.

"It's clear that Plenty's vision and capabilities of pioneering the potential of indoor farming technology makes them the leader in this space," said J. Miles Reiter, Driscoll's chair and CEO. "As one of the few berry companies with a dedicated global R&D program, we believe our proprietary berries, which are focused on flavour, combined with Plenty's technology leadership will create a competitive market edge as we expand to more effectively meet the future consumer."

Plenty will incorporate Driscoll's proprietary genetics and berry expertise into its advanced, indoor farming technology using its plant science expertise. Through this controlled environment, Plenty can consistently deliver great flavours from Driscoll's varieties, while also optimizing for texture and size. The indoor environment will remove the unpredictability of Mother Nature, allowing both companies to meet the future needs of consumers worldwide, including geographical locations that are not hospitable to growing strawberries.

Using data analytics, machine learning and customized lighting, Plenty is able to iterate at unprecedented speed, leveraging the more than 200 years' worth of growing data the platform generates annually.

This advanced agri-food platform has allowed Plenty to show more than 700% yield



improvement in leafy greens in the last 24 months, while maintaining its unique flavour and quality. Plenty's South San Francisco leafy greens farm uses 100% renewable energy, powered by a combination of wind and solar energy.

Driscoll's strawberries will

initially be grown and developed in Plenty's Laramie, Wyoming farm, the largest privately-owned vertical farm research and development center in the world.

Source: Driscoll's/Plenty joint news release October 14, 2020.

Nobel Prize winners for chemistry discovered genetic scissors

Emmanuelle Charpentier and Jennifer A. Doudna have discovered one of gene technology's sharpest tools: the CRISPR/Cas9 genetic scissors. Using these, researchers can change the DNA of animals, plants and microorganisms with extremely high precision.

Researchers need to modify genes in cells if they are to find out about life's inner workings. This used to be time-consuming, difficult and sometimes impossible work. Using the CRISPR/Cas9 genetic scissors, it is now possible to change the code of life over the course of a

few weeks

"There is enormous power in this genetic tool, which affects us all. It has not only revolutionized basic science, but also resulted in innovative crops and will lead to ground-breaking new medical treatments," says Claes Gustafsson, chair of the Nobel Committee for Chemistry

As so often in science, the discovery of these genetic scissors was unexpected. During Emmanuelle Charpentier's studies of Streptococcus pyogenes, one of the bacteria that cause the most harm to

humanity, she discovered a previously unknown molecule, tracrRNA. Her work showed that tracrRNA is part of bacteria's ancient immune system, CRISPR/Cas, that disarms viruses by cleaving their DNA.

Charpentier published her discovery in 2011. The same year, she started working with Jennifer Doudna, an experienced biochemist with vast knowledge of RNA. Together, they succeeded in recreating the bacteria's genetic scissors in a test tube and simplifying the scissors' molecular components



Emmanuelle Charpentier

so they were easier to use.

In an epoch-making experiment, they then reprogrammed the genetic scissors. In their natural form, the scissors recognize DNA from viruses, but Charpentier



Jennifer A. Doudna

and Doudna proved that they could be controlled so that they can cut any DNA molecule at a predetermined site. Where the DNA is cut it is then easy to rewrite the code of life.

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TRADE ISSUES

CPMA task force to address new romaine import requirements

KAREN DAVIDSON

Romaine lettuce may be in short supply as California growers and Canadian importers of romaine lettuce adjust to new rules that sprang into effect with a week's notice. As of October 7, 2020, the Canadian Food Inspection Agency (CFIA) required that exporters provide a proof-of-origin declaration that romaine lettuce not originate from counties in the Salinas Valley or alternatively, provide an accredited laboratory certificate that the lettuce has below-detectable levels of E. coli. The order is effective until December 31, 2020.

CFIA posted on its website that romaine lettuce imported from the United States has been associated with several outbreaks of foodborne E.coli 0157:H7 illnesses in recent years in Canada and the U.S. American food safety investigations and trace-backs have identified a recurring geographical area as the source of the outbreaks. This area comprises California's Salinas Valley, specifically the counties of Santa Cruz, Santa Clara, San Benito and Monterey.

In response, the Canadian Produce Marketing Association (CPMA) has created a task force with members on both sides of the border, including academics who specialize in sampling and food safety. The association estimated that, in the short term, there could be losses of romaine lettuce sales of about \$11 million per week.

CPMA food safety specialist Jeff Hall says the task force will review the government's actions in both Canada and the United States, assess the sampling and methodology requirements and propose alternative solutions. For its part, the United States complained that there wasn't enough laboratory capacity to meet the new requirements on such short notice.

"We have experienced reductions in the volumes of romaine shipments entering Canada, both as a single commodity and when incorporated into salad mixes," says Hall. "This reduction has been over the short term with the hope that we will see a gradual increase as production moves from the Salinas Valley to southern California and the Yuma growing regions in Arizona."

However, the immediate impact is in the Salinas Valley, where it's prohibitive for romaine growers to ship with respect to costs, labour and the administrative process.

The pain may be short-lived.

The Packer reported U.S. Department of Agriculture statistics from 2019 showing that romaine lettuce shipments from the Salinas Valley declined sharply in November as lettuce production moved to other desert-growing areas.

Hall says that CPMA has been continuously engaged with CFIA and key stakeholders in attempts to soften the blow to industry. "So far, these activities have resulted in only minor successes," says Hall, "Given the lack of consultation and prohibitive timeframes imposed by the CFIA, the resulting confusion was inevitable."

While task force participants have been finalized, CPMA welcomes input from members. Contact: jhall@cpma.ca or 647-409-3570.





OPINION EDITORIAL

Setting the record straight on temporary foreign workers

KEN FORTH and STEFAN LARRASS

Seasonal and temporary workers in the horticulture sector have long been subject to varying degrees of government, media, and activist scrutiny.

This year, though, there has been a brighter spotlight on the use of temporary labour on horticulture operations than ever before thanks to the COVID-19 pandemic, on-farm outbreaks and sadly, three deaths.

Central to that focus is a misleading media and activist narrative about temporary workers and their rights or perceived lack thereof while they are here and working on our farms. It's been written about extensively in print and online media, shared widely on social media, and has been the subject of exposé-style television reporting on programs such as W5.

The misinformation is multi-faceted and focuses on a variety of issues. The biggest, most far-reaching misconception, however, is that temporary workers don't have the same rights as Canadian workers do,

and that their legislative and regulatory protections are inferior to those of local workers.

Tied to that is the belief that temporary foreign workers have nowhere to go to safely complain about employment problems, and that there is a lack of enforcement of worker protections that are in place.

As growers and as a sector, we've tried repeatedly to set the record straight, but when the truth is much less sensational or headline-grabbing, it is hard to get that story out and to get the attention of the influencers and policy makers that need to hear

We realized we needed an external expert opinion to fact check this false narrative and support our position, particularly with respect to government ministries with oversight responsibilities for labour in our sector. This led the Labour Issues Co-ordinating Committee (LICC) to commission an independent legal analysis on the state of employment protections for temporary foreign workers in Ontario.

This analysis concluded, as we have long stated, that "...

Temporary Foreign Workers enjoy the same baseline of minimum employment rights and protections as Resident Workers. In addition,

Temporary Foreign Workers enjoy employment rights and protections that are not legally required for Resident Workers and go above and beyond the rights and protections provided by employment-related legislation."

Specifically:

- Temporary foreign workers have the same rights and protections as Ontario workers under the Employment Standards Act, the Agricultural Employees' Protection Act and the Occupational Health and Safety Act, all of which have applicability to agricultural workers.
- Temporary foreign workers in Ontario are also covered by the **Employment Protections for** Foreign Nationals Act, which protects workers against things such as passport seizure, employer reprisal following an employee complaint or charging workers for costs related to their hiring.
- Workers under both the

Seasonal Agricultural Worker Program (SAWP) and the agriculture stream of the Temporary Foreign Worker program are entitled to the same wages and benefits as Ontario workers.

- Farm employers must ensure their temporary workers have health coverage through OHIP or similar private insurance, and workplace safety insurance through the Workplace Safety and Insurance Board or comparable private insurance.
- SAWP workers have 24-hour access to consular and or liaison services from their home country.
- Farm employers can transfer SAWP workers to another employer but only through an approval process administered by Employment and Social Development Canada / Service Canada.

The Ontario Fruit and Vegetable Growers' Association (OFVGA) has shared the results of this legal opinion with a range of stakeholders, including Ontario Minister of Labour, Training and Skills Development Monte

McNaughton, the Ontario Ministry of Agriculture, Food and Rural Affairs, Ontario Federation of Agriculture, Employment and Social Development Canada, Canadian Horticultural Council and the Canadian Federation of Agriculture.

Together with LICC, we will continue to work hard to ensure the real facts are brought forward and that the grower voice is part of the ongoing discussion around temporary foreign workers in our sector.

OFVGA and other provincial grower associations have also been working with McNaughton's ministry as well as OMAFRA and local public health units over the last few months to develop a strategy focused on keeping temporary foreign workers and local farm workers safe during the COVID-19 pandemic.

Ken Forth is the chair of the Labour Issues Co-ordinating Committee and the OFVGA Labour Section, and president of FARMS. Stefan Larrass is senior policy advisor at the Labour Issues Co-ordinating Committee and OFVGA's labour policy advisor.

WEATHER VANE



These celery harvesters started their morning shift with a fresh set of masks delivered by a supervisor at Hillside Gardens, Bradford, Ontario. They were photographed in early October by

STAFF

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Growers are pandemic gardeners' rock stars



OWEN ROBERTS
U OF GUELPH

No one knows more about effectively and efficiently producing fruit and vegetables than growers who do it for a living.

And with the right approach, that could make you rock stars to a new wave of Canadians – a group being labelled "pandemic gardeners," motivated by fears of food security, affordability and safety.

It's a pretty accurate label. A study by the Agri-Food Analytics Lab at Dalhousie University called Home Food Gardening in Response to the COVID-19 Pandemic released in early October shows that nearly one in five Canadians started growing food at home during the pandemic. More than two-thirds of them say the pandemic influenced their decision.

Calling them pandemic

gardeners fits.

They join a growing cadre of Canadians – more than half, in fact – who say they grow at least one variety of fruit or vegetable in a garden.

Traditionally, gardeners were motivated by drivers such as the personal satisfaction they get from growing something themselves. But to many Canadians today, that satisfaction doesn't depend on having a patch of ground in their backyards. Indeed, it may come from getting their hands dirty in a community garden or on an apartment balcony. And it may have started back in elementary school, thanks to a lesson provided to teachers by their province's Agriculture in the Classroom. The ripple effect of that program can be lifelong.

I've heard rumblings that growers are concerned about the surge of home gardeners, that they might affect profitability. That's understandable. Competition is already fierce enough.

But how about looking at it as an opportunity to promote yourselves as the professionals you are?

New gardeners need advice. One source is other, more experienced amateur gardeners, and depending on the source, it could be pretty good.

The other source is advice from professionals . . . not

professional advice, because new gardeners likely won't pay for it, or at least not more than a nominal sum which may be more of a pain to administer than it's worth.

Rather, offer advice that's linked back to your own products. A blog, video or podcast entitled something like "Here's how I grow a successful crop" promotes trust, familiarity and confidence in your own produce. The touch of benevolence is a bonus.

It's also a good opportunity to educate readers, listeners or viewers about the fruit and vegetable industry. An alarming statistic from the Dalhousie study showed that nearly 43 per cent of those who started growing food during the pandemic said food safety was a factor in their decision to be a home gardener.

Worse, about half of the long-time home gardeners in the study said the food they grow at home is safer than store-bought food.

However, more than 95 per cent of the respondents also said they buy at least some fruits and vegetables at a grocery store (less than two per cent grow all of their own food).

So while they're concerned about food safety, the numbers suggest they're far from hysterical. They haven't abandoned conventional food sources. They can still be



moved by reason, the kind growers can present by telling their story as professionals . . . in fact, the Dalhousie survey found most home gardeners have a higher-education certificate, diploma or degree. They're a demographic that can be motivated by logic and science.

One part of the story that needs to be told is to explain production costs. Affordable food is a huge concern, especially now. The Dalhousie study confirmed it: 85 per cent are concerned that food prices

will rise because of the pandemic. If and when they do, there will be a lot of explanations floating around to try making sense of prices, but I suspect growers will not be quoted much.

Again, there's an opportunity to fill an information niche, build a following . . . and be a rock star among those who respect and admire what you do, and need help trying to do a bit of it themselves.

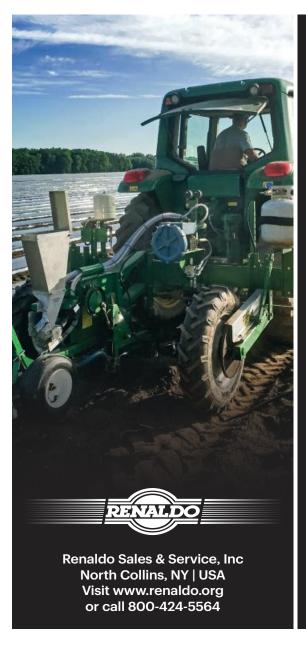
Research funding announced



Ontario is investing \$6.52 million into more than 40 agri-food research projects, some of which are horticulture-focussed.

Through the Ontario Agri-Food Innovation Alliance, a collaboration between the Ontario government and the University of Guelph, some of these projects include:

- Enhancing integrated pest management for leaf diseases in onions
- Improving outcomes for Ontario apple producers though precision agriculture and labour efficiency strategies
- Digital mapping of soil carbon and nutrients in the Great Clay Belt to better understand effects of land conversion on agricultural practices
- Establishing a baseline for provincial soil properties that will support better soil health assessments
- Assessing herbicidal tolerance of cover crops during years with adverse weather
- Improving food rescue and recovery in the province's industrial, commercial and institutional sectors
- Examining the current state of drainage infrastructure in Ontario. "University of Guelph researchers proudly and enthusiastically generate powerful innovations through their world-class research, escalating the competitiveness of Ontario's agri-food sector in the global marketplace," said Malcolm Campbell, Vice-President (Research).



DOWN TO E A R T H TECHNOLOGY

PRECISION AGRICULTURAL PLANTING EQUIPMENT MANUFACTURED IN THE USA

PNEUMATIC METERED SEED PLANTER - Capable of planting 10,000 hills per hour, per row, on plastic mulch covered seed beds. Custom drilled seed plate can achieve one seed per hole with approximately 90% accuracy.

SEMI-AUTOMATIC TRANS-PLANTER - One operator per head required and capable of planting up to 3,600 plants per hour, per row.

Include an automatic leveling system, propane torch which burns a specific size hole in plastic mulch row cover, and a water injection system that dispenses about a quarter cup of water, or liquid fertilizer on each hole. One, two, three and six row configurations are available for flat, or raised beds.

FARM & FOOD CARE

Seasonal agricultural workers tell their stories for social media initiative



KELLY DAYNARD

"This year, we've put our lives at risk to come and feed Canadians."

"We're not leaving the farm this year because we're taking 100 per cent precautions. That's the decision that we made as a group. We've got to take this seriously."

"Thirty-three years ago, my wife and I made a decision that I'd come to Canada to work on this farm. She stayed home to raise our children. We've both worked hard at different locations."

"I've had a baby girl born since I came here this year. I can't wait to meet her when I get home."

"We work hard but it's good work too."

These are just a few quotes from the stories that seasonal agricultural workers shared with me and a photographer recently. Whether they were from Trinidad & Tobago, Jamaica or Mexico, they all came to Ontario under the auspices of the Seasonal Agricultural Worker Program (SAWP).

I've long been fascinated by these guest employees and the critical role they play on Canadian farms. Raised on a cash crop farm, I had had no prior exposure to this sector and yet, as a former newspaper reporter, I've always known that everyone has a story to tell. I joined Farm & Food Care Ontario (FFCO) with a goal of sharing our industry's stories and passion with a non-farming public -- and these workers are no exception.

I first met and interviewed Donald Dyer six years ago. He had been coming to work on a vegetable farm near Hamilton for almost 30 years and expressed both surprise and quiet pride that I was interested in profiling him for the 2014 edition of The Real Dirt on Farming. Coincidentally, the following year, an agricultural journalist colleague, writing for The Furrow magazine, met and interviewed Dyer in his Jamaican home. As part of that interview, Dyer pulled out a copy of his feature in The Real Dirt and proudly showed it to the visiting journalist. It had become a valued part of his Canadian farm story.

Joseph Hackett, a native of Barbados, told me of his pride in being a "Canadian apple grower" on a fruit farm east of Toronto. When here, he's also become active in the local Lions Club and, along with four others from his farm, have been participating annually in the Ride to Conquer Cancer, a 220 km bike ride from Toronto to Niagara. Collectively, at the time of my visit, they had raised more than \$100,000 for cancer research.

In a 2019 project funded by CropLife Canada and supported by the Ontario Apple Growers, we interviewed SAWP employee Livian about his life and work for two feature videos for www.FarmFood360.ca – FFCO's virtual reality website. Those two videos have now been viewed by more than 40,000 visitors to the site.

It's been frustrating to me, over the last few months, that these positive stories aren't the ones that the public had a chance to hear. They haven't been introduced to these employees or heard their passion for their work and their lives – both here and at home. Coverage was often negative, one-sided and didn't convey the truth and positivity that comes in the lasting relationships that are formed between growers and their valued employees.

And so, Farm & Food Care and the Ontario Fruit and Vegetable Growers' Association (OFVGA) have embarked on a joint communications initiative to try to change that. Travelling from vegetable fields in the Holland Marsh to fruit orchards in Chatham/Kent (with



Tomas is pictured at an apple farm in Chatham-Kent, Ontario. Photo by Nancy French

more to come) we have been photographing and interviewing both seasonal agricultural workers and temporary foreign workers to learn – and share – their stories.

In the process, we've met dozens of workers from Barbados, Mexico, Jamaica and Trinidad & Tobago. Some like Trinidad, working in the Holland Marsh, has been coming for decades and he now brings his son Eddie and son-in-law Juan with him. All mentioned their worries that they might not get here this spring when borders closed and emphasized the care that they're taking to protect each other and their farms from the threats of COVID-19 – from having their groceries delivered so they don't have to leave their farms to daily temperature checks, bunk house sanitation protocols, working (and thus being photographed) within their "bubble" groupings and more.

Prince, working on an apple farm in Chatham-Kent, mentioned, with a shake of his head, the disparaging remarks directed his way this spring, even after he'd followed a two-week quarantine. The comments were from locals fearful of COVID being brought into their communities. But then he added that a passerby had stopped one day at the side of the orchard where he was working to thank the team for their work. "That felt good," he said. "We work hard to produce food for Canadians."

Some of their profiles will be included in the new edition of The Real Dirt on Farming due out in November and all will be included in the Faces Behind Food Instagram and Facebook campaign that was launched in 2019. The campaign provides a unique and proactive way of showcasing careers across agriculture – from seasonal agricultural workers to primary producers, researchers, transporters and more. Last year, the project's total reach was 360,000 viewers with traction now growing exponentially week over week. It is also currently being promoted in a network of 450 high-end condo towers in Toronto to an urban audience interested in knowing more about where their food comes from.

It's been a privilege, throughout September and October, to be invited onto the farms to meet these workers and hear their stories. One follow-up email from Ricardo said "Thanks for seeing us as important. We truly appreciate it." In partnership with OFVGA and other Farm and Food Care Ontario (FFCO) members, the project will continue into the spring of 2021 with video components being added next year as well. For more information on this initiative and others by FFCO, visit www.FarmFoodCareON.org or email info@farmfoodcare.org

Kelly Daynard is executive director, Farm & Food Care Ontario.

COMING EVENTS 2020

Nov 2-4	Fall Harvest Meetings on Parliament Hill,
	Ottawa, ON VIRTUAL

- Nov 10-14 Royal Agricultural Winter Fair, Toronto, ON VIRTUAL
- Nov 14 Farm and Food Care Ontario Gala in a Box VIRTUAL.
- Nov 17-19 Alberta Potato Conference and Trade Show, Cambridge Hotel and Conference Centre Red Deer, AB **CANCELLED**
- Nov 18 Potato Growers of Alberta Annual General Meeting, VIRTUAL FOR GROWERS ONLY
- Nov 18 Princed Edward Island Potato Board Annual
 General Meeting, VIRTUAL FOR GROWERS
 ONLY
- Nov 18-20 Asia Fruit Logistica ON VIRTUAL
- Nov 18-20 Arrell Food Summit VIRTUAL
- Nov 19 Wild Blueberry Producers Association of Nova Scotia Annual General Meeting, **VIRTUAL**
- Nov 19 Ontario Produce Marketing Association Awards 7 pm **VIRTUAL**
- Nov 19-21 Interpoma, Bolzano, Italy VIRTUAL
- Nov 22-24 Interpom, Kortrijk, Belgium CHECK WEBSITE
- Dec 1-3 Grow Canada Conference, Westin Hotel, Ottawa, ON CANCELLED
- Dec 2-6 Outstanding Young Farmer National Event,
 Delta Bessborough Hotel, Saskatoon, SK
 CANCELLED
- Dec 3 Ontario Apple Growers Annual General Meeting, VIRTUAL
- Dec 8-10 Great Lakes Expo, DeVos Place, Grand Rapids, MI VIRTUAL
- Dec 10 Global Berry Congress, Rotterdam, Netherlands VIRTUAL
- Dec 10 Fresh Vegetable Growers of Ontario Annual General Meeting, **VIRTUAL**

2021

- Jan 6-7 Ontario Agricultural Conference (SouthWest Agricultural Conference, Guelph and Eastern Ontario Crop Conferences combined)
- Jan 6-7 Potato Expo, Gaylord Texan Hotel, Grapevine, TX LIVE & **VIRTUAL**
- Jan 26-28 Manitoba Potato Production Days, Keystone Centre, Brandon, MB CANCELLED
- Jan 28-30 Pacific Agriculture Show, Abbotsford, BC VIRTUAL
- Jan 28-31 Guelph Organic Conference, Guelph, ON CANCELLED VIRTUAL?
- w/o Feb 8 Mid-Atlantic Fruit & Vegetable Convention, VIRTUAL
- Feb 16 Ontario Fruit & Vegetable Growers' Association Annual General Meeting, **VIRTUAL**
- Feb 16 Ontario Fruit & Vegetable Convention, Scotiabank Convention Centre, Niagara Falls, ON CANCELLED

Maximizing sales this holiday season



PETER CHAPMAN

The fourth quarter is a key selling period for many items in the food industry. Consumers spend money differently; they buy items they do not buy at other times during the year and they are entertaining more. Similar to many other things in 2020 this holiday season will be unique.

In many parts of the country we are facing a second wave of COVID-19 and consumers will shop very differently. We would expect that the shift from food service to retail will continue, resulting in 10-15 per cent more food being sold through retail. Consumers are going to stores where they believe they will get what they need and feel safe. So far this has translated into more sales for conventional stores, smaller neighbourhood stores and rural stores. Online shopping will continue to be strong and even increase if public health officials recommend less time in stores and the risk of community spread is high.

Complete your own sales projection

The first thing suppliers need to do is work through your own sales projections. This will be a very difficult year to forecast sales, given the many changes to the marketplace. Nobody knows exactly what will happen, but your customer will appreciate you thinking through what will happen and they might even get some ideas. Show your customer you have done the work.

Start with your 2019 sales and then begin to factor in the changes. You should consider the following impacts (positive or negative) on your sales:

- 1. Year over year change in last three months
- 2. Ad activity this year and last
- 3. Merchandising activity this year and last year
- 4. Impact of online shopping
- 5. Impact of offine snopping thome more
- 6. Other. This is a big one in 2020. There could be different factors in different categories. Examples could be smaller

family gatherings (learn from Thanksgiving), very few if any holiday parties, etc.

You should have a sales projection for each customer and even each format because it is different by banner as we outlined earlier.

Talk to your customers

Once you have your sales projection talk to your customers. Share your process and your results to understand if it is in line with their forecasts. Ultimately, they will judge if you did a great job servicing them this holiday season. You both need to agree on the sales forecast so you can do your best to supply the product and they have the best chance of maximizing sales.

Given the changes to the retail environment ask about lead times. They might require more time as things take longer in stores right now. You might also need more time if your production has been slowed by physical distancing or other public health directives. You should also ask about merchandising plans. Do not assume they will repeat what they did last year. They are challenged for labour like every other industry so they might not be able to move as much product in a short period of time.

Once you agree on the sales forecast build a plan within your business to deliver what they are looking for. There are no guarantees, but this is the best chance you have for success.

The right amount of the right product at the right time will be the best opportunity to maximize your sales.

Get in the market during the holiday selling season

Every product has a different key period for sales. Although it is a challenge, you need to see what is happening in the market during these key weeks. In 2020 this means you need to visit stores and websites. With 10-15 per cent of food being sold online and the potential for even more during the second wave you cannot afford to miss these consumers.

When you are in the stores make sure your product is performing the way it should and that there are no issues with flow through the supply chain. You also want to make sure your customers are implementing the programs you had discussed.

Visit your customers' websites and check to ensure your items are there and any links from ads or themes work properly. Consumers take the path of least resistance so if you

are hard to find or links do not work you will probably lose the sale.

If there are issues with online shopping or what you see in the store, take a deep breath. Then take action. Although we focus on our items you have to remember your customers are managing thousands of SKUs and the issue is not likely created on purpose. Inform them of what you see or experienced, ask if they can rectify the situation or if there is someone else you need to talk to and get confirmation the issue will be resolved. This illustrates to your customer that you are interested in maximizing sales. You have a much better chance of getting a response when you are perceived to be fighting for

Follow up

When the dust settles do a brief post-mortem on the season. Start with the forecasts and any other considerations you discussed before the season. Compare the actual results to the forecast and share any good or bad conclusions. We cannot change what happened, but we can learn from it.

Maximize your sales

In-stock position will be a very important metric this holiday season. You can only deliver what is required when



you have the best possible forecast and the ability to produce the product. It will be a challenge but the suppliers and retailers who work together will maximize the opportunity and have a successful conclusion to a difficult year.

If you would like some help with these conversations please give me a call at (902) 489-2900 or send me an email at peter@skufood.com.

WHAT'S IN STORE?

More changes coming to plastic packaging

Recently the Canadian government announced plans to eliminate a number of plastic items from the market. This will impact some in the food industry and everyone in the industry should be prepared for

more change. The government has stated their goal to be zero plastic waste by 2030. They are focused on plastic that is harmful to the environment, difficult to recycle and where there are alternatives.

Producers and processors need to continue to work on initiatives and be prepared for change. Sustainable packaging, assuming it does not increase the price, is still on the mind of consumers and regulators.

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, Nova Scotia 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.



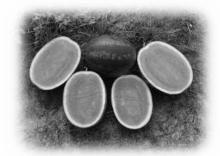
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SEED & ROOTSTOCK

A systems approach to greenhouse propagation

KAREN DAVIDSON

Roelands Plant Farms is a case study in how the pandemic crisis spurred an expansion, not a contraction of its 17-acre Lambton Shores, Ontario facility. Started in 2013, the company is building another four acres to be completed in spring of 2021.

"It's a table system which has some advantages over ebb-and-flood concrete systems," explains Edward Thoren, head grower. "With concrete, it's tough for workers to bend over all day. Plus, with concrete, there's no airflow close to the seedlings."

Traditionally, with ebb-andflood irrigation, the area is flooded for about six to eight minutes, allowing the nutrient solution to be absorbed by the propagation cubes. The excess water is drained back to a storage tank. This new, easy-toclean system is at waist height, ensuring better air flow and nurturing more generative plants.

Roelands Plants Farms offers services in custom grafting scions and rootstock. Multiple rootstocks may be used with the same scion, explains Thoren. Each greenhouse client selects the combination of rootstocks that best suits the operating environment and end retail use. Clients place orders with

companies such as DeRuiter, Rijk Zwaan, Syngenta and Enza Zaden to ensure delivery to a distribution centre in Leamington, Ontario.

As Thoren explains, the rootstock seeds may originate in greenhouses as far away as the Netherlands, France and Peru. Once the rootstocks arrive, it's the job of the propagator to graft them with the appropriate scion and to set in growing trays. In the case of tomatoes, it's about 48-52 days until the first cluster is showing. These seedlings are then delivered to greenhouse clients for their specific planting date.

"Grafting can be quite delicate," says Thoren, citing the challenges of controlling temperatures and humidity in the summer. Last year, the company installed an evaporative cooling system so that indoor temperatures could be maintained at an ideal 21°C for this procedure. In the future, plans are for grow chambers.

This is quite a symphony of activity to orchestrate. As of 2020, some seed lots are virus tested at Ontario laboratories based in Guelph and London. In the case of tomatoes, technicians are looking for signs of bacterial cankers and pepino mosaic virus as well as the Tomato Brown Rugose Fruit Virus (ToBRFV).

"We charge for this virus testing," explains Thoren, "but



L-R: Ryan Jasevicius, Jigar Joshi, Edward Thoren, Jessica Eckel, Adele Aarts, Adrian Roelands and Jodi Roelands

it's peace of mind for everyone in the growing chain."

The greenhouse industry's shift to year-round production and different lighting recipes is also changing the variety

selection. Thoren says that variety selection is based on response to artificial light. What's still constant is consumer demand for beefsteak, cherry tomatoes and

tomatoes-on-the-vine. The busy season for propagators is around the

corner: December, January and February.

Plantables: a business-to-consumer opportunity

In March 2020, as the COVID-19 crisis rolled across Canada, Adrian and Jodi Roelands spotted a need in the consumer market for garden vegetable seedlings. The result was Plantables: your shortcut to green-thumbed glory.

"Our Plantables brand was a new initiative for us, and 2020 certainly took us by surprise," says Jodi Roelands. "We could not have anticipated how many people would turn to home gardening as an outlet during this pandemic, and what it would mean in terms of interest in Plantables. Since traditional garden centres were closed for much of the spring, people had to look elsewhere, and we were there to fill that void. We had to increase our seeding and shipping capacities beyond anything we had projected, but our team met the challenge and are already gearing up for the 2021 gardening season.'

The jump into Plantables was one more reason to apply to the Globe and Mail's 2020 Report on Business ranking of Canada's Top Growing Companies. Roelands Plant Farms placed 314th on the list

of 400. The spot was earned with three-year growth of 107 per cent.

The Globe's Report on Business editor explains that the ranking is a voluntary program. Companies had to complete an in-depth application process in order to qualify.

"It's an honour to be on a list of this type, and I think that the fact that we've been included underscores the strength and growth capacity of the greenhouse sector as a whole," says Adrian Roelands.

In its seventh year, the propagation facility employs approximately 120 people.



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Enza Zaden finds high resistance to tomato virus

Based in Enkhuizen, The Netherlands, leading vegetable breeder Enza Zaden has discovered a gene that provides high resistance to the Tomato Brown Rugose Fruit Virus (ToBRFV).

Sergio de la Fuente van Bentem, plant pathology researcher at Enza Zaden says, "We know there's a lot at stake for our customers. That's why our company has worked very hard to find a solution. Now that we have discovered the answer, we keep on working hard to develop tomato varieties that are highly ToBRFV resistant. We expect to have these ready in the coming years."

The company's researchers believe this gene is like no other currently known in the field, and offers "high resistance" to ToBRFV, also called tobamo after its genus.

With this discovery, the introduction of ToBRFV resistance will potentially secure production for the tomato industry, from large multinationals through to smallholder farmers who all cultivate what is currently the most traded vegetable internationally.

Since ToBRFV was first discovered in Israel in 2014, it has spread to parts of Europe, America, Asia and Africa. It's easily spread via mechanical transmission.

Québec's seed potato growers are bulking up

KAREN DAVIDSON

Québec's seed potato sector is thriving thanks to a handful of progressive growers such as Gaston Bouchard and his son Mathieu. Their family has earned a reputation with 400 acres of quality seed near St. Ambroise, Québec.

They are one of 11 seed growers banded together under Québec Parmentier. Altogether these growers manage 2,000 out of the 5,000 acres of seed potatoes grown in the province, marketing 325,000 cwt of seed annually. Half of the portfolio consists of private varieties which are developed from a unique breeding program. The majority of sales are in Québec and Ontario, but also Atlantic Canada, the northeastern U.S., Latin America and most recently Uruguay.

Like so many farms, the Bouchard story goes back generations. Their acreage has been carved out of the bush since 1915, and Mathieu carries on the land-clearing tradition. Their potatogrowing expertise dates to 1979.

Mathieu is incentivized by the demand for seed potatoes in the remote Saguenay region, northeast of Québec City. The dark crumbly soils are ideal for

seed potatoes, making it easier for harvesting and cleaning. More than that, the region is removed from potential transmission of diseases and aphid vectors of viruses.

"PVY is the main threat," says Mathieu. "We want to get rid of any seed-borne disease."

Fortunately, a dozen family and community members lend a hand for roguing acres of potatoes in the summer, but they're trained to watch for necrotic leaves that might signal potato virus (PVY).

This silent sleeper can remain dormant in seed potatoes. Then after several generations, the viral load can appear as ringspot disease.

Disease control is one critical point for growing seed potatoes, but harvest is particularly important to ensure quality. The Bouchard's monitor the field crew, adjusting the speed and height of harvesters so that potato skins are handled gently.

"We stop the harvest if the conditions aren't right," says Mathieu. "Skin set is so important."

Every seed lot is tested post-harvest for disease in a Québec City laboratory approved by the Canadian Food Inspection Agency.

Under the umbrella of Québec



Gaston (L) and Mathieu Bouchard, St. Ambroise, Québec, check on their seed potatoes in early August 2020.

Parmentier, the seed growers are expanding their market with specific varieties and by size. Whether clients want two-inch or two and 3/8 inch sizing, the order can be filled. B-sized seed is also available if clients don't want to cut

their own seed.

Decades ago, a Sudbury, Ontario potato grower sent a letter of thanks for the quality seed, flawlessly handwritten in French. Don Poulin is still a client today.

High-density pears are a work in progress



Researchers at Washington State University, indeed at several institutions across the United States, are working on high-density pears. Their latest research was highlighted in August 2020 in a webinar called "Pear Rootstocks and Systems Virtual Field Tour Webinar." Link here: https://bit.ly/3khCfl3

The host, Tory Schmidt of the Washington Tree Fruit Research Commission, said that many challenges face pear growers: skyrocketing labour costs, failing crop protection strategies, fruit disorders and more. The search for dwarf rootstocks is important for future sustainability. One of the areas of research is with quince rootstocks that have coldhardiness, vigour and precocity.

The webinar featured pre-recorded orchard tours of rootstock trials lead by Dr. Stefano Musacchi, WSU Endowed Chair for Orchard Systems and Production with a live explanation of the project background and results provided by Dr. Todd Einhorn, MSU Professor of Horticulture.

The webinar also included a pre-recorded segment with Tory, Stefano, and the group from Stemilt at their commercial pear block near Chelan Falls utilizing the bi-axis system. The group from Stemilt included Bryan Mrachek, Area Manager; Jorge

Andrade, Orchard Manager; and Hannah Walters, Research and Development. The prerecorded segments were interspersed with live Q&A sessions with all the speakers.

- Pear Rootstock & Systems Virtual Field Tour Webinar (all-inclusive recording)
- Quince Rootstock on Bartlett Pear Trial Virtual Tour
- Quince Rootstock on Anjou
- Pear Trial Virtual Tour Stemilt Bi-axis Pear Block Virtual Tour



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SEED & ROOTSTOCK

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Rutabaga Appalaches (No 88)
Laurentian type rutabaga, with increased tolerance to cabbage maggot. Bulbs of a larger caliber than York with foliage attached higher for easier cleaning. Does not show any hollow heart. Same beautiful purplish colour as Laurentian. Maturity 85 days.



For more information visit www.norseco.com

OnionBarollo F1
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Intrepid – This is a well adaptable cello-type carrot with great tops and smooth tapered roots. Intrepid averages 10 inches in length and has a bright internal orange colour.



Barolo – This onion has a very vibrant dark-red, shiny exterior colour with attractive dark-red interior rings. It is an early to mid-season, globe-shaped bulb that is strong against root diseases. Barolo will easily store up to four months.

For more information visit www.agrocentre.qc.ca



Skidoo Gold – This is a lovely burnt orange-coloured mid-sized hybrid pumpkin. Its restricted vine produces one to two heavily ribbed fruit. Skidoo Gold is powdery-mildew tolerant and weighs 12 to 15 lbs. Maturity is 90 days.

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Sailfish An early maturing red bell pepper for fresh market, with high quality, blocky smooth fruit. Improved disease resistance.

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Goosebumps II A novelty pumpkin in the mid-size class with warts and bumps. A great addition to every pumpkin assortment. Bump up your sales with this "SUPER FREAK" series variety!

.....

SEED & ROOTSTOCK

New seed varieties for 2021

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Xanadu is a new, 74-75 day bicolor from Crookham. Xanadu is part of the Nirvana series of sweet corn, bringing unique taste and texture. It has elevated seedling vigour, eating quality, and post-harvest shelf life



Yosemite - small pumpkin

Yosemite (RPX 6880) is the other new small pumpkin. The fruit are a deep red/orange colour and are taller than they are wide, with a dark green, 4" long handle.

For more information visit www.ruppseeds.com



Ugly Dumpling – Winter Squash, sweet dumpling While its "dirty brown" exterior may not be what consumers are used to seeing, its true beauty is on the inside. Ugly Dumpling is one of the best tasting winter squash varieties you will ever eat. The unique colouring also makes it a great option for fall decoration.

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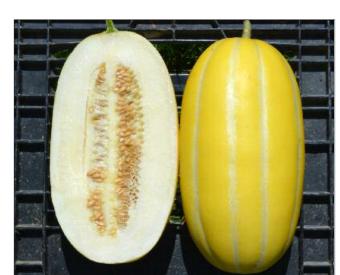


Squash-Tetsukabuto F1 - Japanese type squash. 90~100 days. Round fruits in black or dark green colour, with deep orange interior, 5~6 lb. Firm flesh, nutty and sweet. Mainly used for rootstock for watermelon, melon and cucumber. Pollinators are required to grow squash. Five plants of Tetsukabuto need one plant of pollinator.



Cabbage-Summer Dish F1 - Flat type. 60~70 days from transplanting. Early heading, uniform, flat /oblate head, excellent shape and is 4~5 lbs. Tolerant to heat and bursting. Crispy and sweet taste. Good for spring, summer and fall planting in Canada / Northern U.S. Sensitive to Black Rot. It is not good for planting in warm and humid areas or seasons.

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Oriental Melon-Golden Giant F1 - Korean type. Early maturity. Oblong fruits in yellow colour with white stripes when ripe. Thin skin. Avg. 2.5 lbs. White flesh is crispy, sweet, with brix 14~16. 3~4 fruits per plant. Disease resistant.

SEEDWAY



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Xanadu – 75 Day Bicolor SH2 Sweetcorn - Fantastic eating quality. A crisp bite into high sugars! This also has excellent seed quality and vigor from the sh2i gene. Large ears on a plant with a good disease package. HR: Ps (Rp1GFJ) IR: Et

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Oneida – 102 Day Yellow Long Day Storage Onion - Early yellow storage onion. Thin neck and good skin retention. Medium to long storage potential. High quality combined with high yield potential.

SEED & ROOTSTOCK

A taste of the best sellers at farm markets





Smiles were few and far between this year, but ask Kevin Howe and he'll crack a modest grin over sales at the Howe Family Farms Markets in Aylmer and Highbury, Ontario.

"It was a grind," says Howe as he surveys the end of the 2020 growing season. "We didn't have enough pickers for strawberries so it was a rough start. But anything we could produce for the two farm markets moved quickly."

A bumper crop of watermelon helped, and he reports a best-ever pumpkin crop. Howe sent dozens of bins of mixed varieties of pumpkins to the U.S. and Canada. With that success fresh on his mind, he's already perusing seed catalogues to make early orders.

Stokes Seeds and Seedway are credited with supplying seed for some popular ornamental pumpkin sellers: Crystal Star, Fairytale, Porcelain Doll, Blue Doll and Specter.

What Howe has discovered is that pumpkin sales increase when they're marketed in a "variety pack." His client's packaging company has designed high-graphic, wood-panelled cardboard bins that will hold volleyball- to





basketball-sized pumpkins. Retailers find that consumers will buy more than one variety from this bin versus one variety from a stand-alone SKU.

His pumpkins are prized by retailers for how pristine they are. It all starts with planting of no-till rye in the fall, so that when he plants pumpkin seeds the following spring, they will be growing on a fibrous mat. Throughout the season, the swelling pumpkin develops a scar-free skin, protected from dirt and more importantly, any mud from fall rains. This practice is good soil stewardship but it's also labour-saving.

During the last five years, Howe has noticed some

pumpkins which weren't true to type but exhibited highly marketable characteristics. So he's saved seeds and developed inbred lines for about five varieties. One is a creamsicleorange, mottled pumpkin as well as a blue-toned one. Another is a warty goblin pumpkin that's yellow with a green stripe.

"These are extremely unique ornamental pumpkins," says Howe.

The family's specialty niche in cucurbits goes beyond pumpkins to include melons.

The canary melon has been a staple in past market years featuring a firm rind and highbrix flesh.

"This melon takes longer to mature - about 120 days - than a honeydew melon, but we like it better because the skin doesn't crack. We stay away from honeydew varieties for food safety reasons."

While unfamiliar to some consumers, the canary melon has a high brix of 17, great eating quality and long shelf

A watch-out. This canary melon was extremely attractive to the deer population in a nearby conservation area, so hedge your bets on where you plant.

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SEED & ROOTSTOCK

Beat you to the seed catalogue

KAREN DAVIDSON

If you're looking to buy seeds to grow kohlrabi for next year, good luck. Robert Markiewicz priced them at \$11 for 100 seeds.

"There's no profit in that," says the owner of Kujawy Farms, a 15-acre market garden based in the Holland Marsh, north of Toronto's urban shadow.

He's a good bellwether of the changes in consumer behaviour. With an assortment of vegetables sold at the Mississauga and Milton farmers' markets, he's noticed some trends in 2020.

Cucumbers, for example, sold out because everyone was pickling. An astute vendor such as Markiewicz had the right kind of dill for this savoury end use. Mammoth dill grows up to six feet, producing lush airy foliage and giant flowers with seed umbels. It's the seeds that flavour the pickling liquid.

Root vegetables sold well because of their storability. He'll be planting more Yukon Gold potatoes next year as well as parsley root, celery root and carrots.

Although time-consuming to prepare, beets are enjoying a moment at farmers' markets. Markiewicz offers a twist to the beet staple with the Cylindra variety, named for its long, cylindrical roots of six to eight inches. Besides their attractive maroon skin, they have a sweet flavour. The beet tops are said to be sweeter than common round beets. Heirloom beets, the Detroit dark red variety, as well as golden beets and rainbow beets, are also winners for their Instagram appeal.

Heirloom tomatoes also fall into that picture-perfect category. With a Polish heritage, it's no surprise that Markiewicz offers an heirloom variety from his home country. The Raspberry tomato, blushing with pink colour, is a beefsteak tomato that adds a new dimension to a BLT sandwich.

Somewhat surprising was the leafy greens category.

"Lettuce did not sell as well this past year," says Markiewicz, explaining that consumers were wary of whether it had been touched by other hands.

Kale, on the other hand, still held its fans. Winterbor kale, with its ruffled leaves, is his favourite variety for its vigorous production in early spring and late fall.

Farmers' markets were popular in 2020 because they were an outdoors, family-



oriented destination. In Milton, Ontario, for example, the Main Street event – usually filled

with jostling citizens -- pivoted to the spacious grounds of Country Heritage Park. With



century-old barns in the background, it all seemed the appropriate antidote to the

coronavirus crisis.

RAISING THE BAR

While its "dirty brown" exterior may not be what consumers are used to seeing, its true beauty is on the inside. **Ugly Dumpling** is one of the best tasting winter squash varieties you will ever eat. This new **Rupp** exclusive is also a great option for fall decoration.



Xanadu is part of the Nirvana series from **Crookham** and incorporates a stronger plant, higher ear placement and improved disease resistance while maintaining exceptional eating quality and consumer appeal.

Cadence XR is a full season, (78 day), high eating quality sweet corn hybrid with ideal ear size for roadside markets. This IFSI variety has an attractive husk package with good flag leaves which will make a nice presentation at your stand.

Tarpon is a main-season bell pepper hybrid, from **Seminis**, with X10R® technology and intermediate resistance to phytophthora blight. It has a compact plant and produces dark green, smooth blocky fruit.

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SEED & ROOTSTOCK

Australians offer update on grape viruses



Grapevine leafroll disease



Grapevine leafroll disease

WENDY McFADDEN-SMITH

A panel-style webinar will be presented on October 29 by the

Australian Wine Research Institute (AWRI) and the Yarra Valley Wine Growers Association. The agenda will cover a range of topics related to vineyard viruses, in both Australia and New Zealand, as well as the experiences of Yarra Valley growers when considering replanting vineyards.

With the difference in time zones, this means the webinar will be held at 11:00 pm. However, if you're not a night owl, the webinar recording will be available on the AWRI YouTube channel to anyone who registers.

Dr. Fiona Constable will present an overview of viruses and virus-like diseases with tips for their management. Dr. Vaughn Bell will present the New Zealand perspective with a focus on insect transmission of grapevine leafroll diseases. Rob Sutherland will cover issues encountered in Yarra Valley when replanting vineyards that have remnant virus-positive rootstock or vines.

It is important to note that the mealybug species present in Australia and New Zealand are different than the ones here in Ontario in that their mealybugs move down to the roots while ours stays above ground so do not stay in the root remnants. Please take this into account when watching the Sutherland presentation.

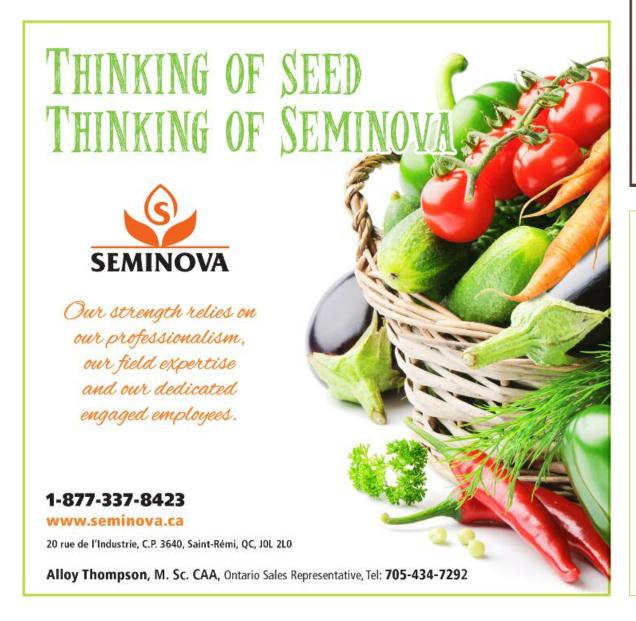
Summary: The following content will be covered in this session.

Replanting vineyards with existing and remnant viruspositive material – Rob Sutherland (De Bortoli Wines, Yarra Valley) Virus and virus-like disease of Australian grapevines and their management – Dr Fiona Constable (Department of Jobs, Precincts and Regions, Victoria)

Insect transmission of grapevine leafroll disease: the New Zealand experience and response – Dr Vaughn Bell (The New Zealand Institute for Plant and Food Research Limited) Wendy McFadden-Smith is the tender fruit and grape IPM specialist for the Ontario Ministry of Agriculture, Food and Rural Affairs.

Editor's note: The Oregon Wine Research Institute is also conducting an in-depth webinar series on grape red blotch virus. Sessions are scheduled for October 20, 27, November 3, 17, 24, December 1, 8 and 15. For signup, link here: https://bit.ly/3jhe2dk

























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Neopestalotiopsis in strawberry production

KATIE GOLDENHAR

An emerging disease has caught the eye of growers, researchers, consultants and extension specialists in recent years. Researchers in Florida have identified a new fungal pathogen in the Neopestalotiopsis genus as causing severe disease outbreaks in Florida strawberry fields. Additionally, reports from New Jersey and Mexico have identified this disease, causing severe leaf blighting on strawberries resulting in dieback of up to 50%. All strawberry growers should be on the lookout for this new disease.

Pathogens in the Neopestalotiopsis genus are not necessarily new to strawberry production, as the closely related pathogen, Neopestalotiopsis rosea, has been identified on strawberry crowns and roots in many strawberry production regions. This pathogen has previously been identified as Pestalotiopsis spp. but has recently been reclassified as Neopestalotiopsis spp.. Reports of this pathogen often considered it weak or secondary as it was found mainly in plant under stress (poor growing conditions, other pests, physical damage, etc.). In Florida, the recent severe outbreaks on leaves and fruit are believed to be caused by a new species in the Neopestalotiopsis genus. These new outbreaks in Florida, New Jersey and Mexico show severe leaf blighting and fruit rot and are causing economic loss.

What to look for

Neopestalotiopsis species can infect all parts of the strawberry plant - fruit, leaves, petioles, crown and roots. On leaves, look for small leaf spots with a light centre and slightly darker border that expands and becomes irregular in shape (Figure 1a). Under ideal conditions, dark black structures of the fungus can be seen on the upper leaf. Fruit lesions are initially small (2-4mm), light brown and irregular (Figure 1b). Lesions can grow and form a black coating which are black fruiting bodies of the fungus (Figure 1c). Eventually, the whole fruit

may be rotted and mummified. Crown and root rot symptoms are similar to what would be seen from *Colletotrichum or Phytophthora* species.

The leaf blighting phase of this disease has been often confused with common leaf spot (Mycosphaerella fragariae), the difference is common leaf spot will have a tan centre with a darker/purple outer zone (Figure 2a). Another commonly confused disease is leaf scorch (Diplocarpon earlianum) but leaf scorch lesions are smaller and are mainly dark without a tan centre (Figure 2b). Phomopsis leaf blight (Phomopsis obscurans) can be often confused especially when the lesions are larger, but Phomopsis lesions are more reddish-purple lesions with dark outer zone (Figure 2c). Of these diseases, only the new Neopestalotiopsis sp. can also cause fruit rot if infection is severe. Sending samples to a plant pathology diagnostic lab can confirm which pathogen is causing leaf spots.

Biology and management

For disease to occur, the environment needs to also be favourable for infection from the pathogen. Neopestalotiopsis sp. prefers warm and humid conditions, like anthracnose. Ideal temperature for growth is 25°C, but temperatures that range from 15-30°C are still favourable for growth and sporulation. Moisture from high humidity and rain are favourable for infection. Spores from Neopestalotiopsis spp. are primarily spread via water splashing from overhead irrigation and rain and working when plants are wet. If this disease becomes an issue in northern regions, there is still more research needed on survival and epidemiology as it may be able to overwinter in cold temperatures.

In Florida, management strategies are being researched including cultivars and fungicides. Preliminary studies on cultivars have shown little to no host resistance in current commercial cultivars. No fungicides are registered in Canada for this disease. In Florida, fungicide efficacy studies on fruit and leaf

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Figure 1. a) leaf blighting symptoms. b) early symptoms of fruit rot and c) late symptoms caused by *Neopestalotiopsis sp.*. Photos courtesy of Dr. Natalia Peres, University of Florida







Figure 2. a) common leaf spot, b) leaf scorch, c) Phomopsis leaf blight

infection show partial suppression from few products. Further trials are on-going to test fungicide products. More research is needed to understand the pathogen and integrated management strategies for this disease.

If you suspect a disease caused by *Neopestalotiopsis sp.* in your field, you can contact Erica Pate (Erica.pate@ ontario.ca; 519-410-0624) or Katie

Goldenhar (katie. goldenhar@ontario.ca; 519-835-5792).

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Katie Goldenhar is OMAFRA pathologist – horticulture.





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Hello, goodbye -- berry pesticide update

ERICA PATE

We are currently working on updating Publication 360, and there are a number of changes growers will find in the next revision of Pub 360B, Berries, including new products, changes from re-evaluations, and products that have been removed. There are a few important changes to highlight now as some products may still be useful in certain situations or timeframes:

Imidacloprid and Thiamethoxam Re-evaluation: Changes to the Admire and Alias labels resulting from the Imidacloprid re-evaluation include a phase-out of soil applications and changes to foliar applications. Soil applications are cancelled, however due to a lack of alternatives, growers have until April 11, 2022 to use soil applications of these insecticides for European chafer and Japanese beetle larvae control on bushberries and caneberries, and for European chafer larvae strawberries.

Foliar applications are limited to post-bloom applications and renovation is required following harvest on all berry crops. Raspberry growers producing in a biennial system or fall-bearing raspberry growers can continue to use Admire and Alias for leafhoppers, raspberry cane borer and red-necked cane borer control in post-bloom applications. Only growers with these systems where the plants are mowed down after harvest and before the next season's bloom can continue to use foliar applications of Admire or Alias. Because of the limited uses Admire and Alias, they will not be listed in Pub 360B. For more details on these applications refer to the labels.

Foliar applications on strawberries are limited to postbloom applications for aphid control and leafhopper suppression. Due to a lack of alternatives growers also have until April 11, 2022 to use foliar applications for leafhopper suppression pre-bloom.

Admire has been removed from the blueberry calendar for foliar applications.

Actara has also been cancelled and is currently under a phase-out period. Growers can use Actara to control brown marmorated stink bug on

bushberries and for black vine weevil control on strawberries until April 11, 2022.

Another change to note: Quintec has been removed from Pub 360B- Berries following the re-evaluation. The last date of use for growers to use Quintec on strawberries for powdery mildew control is June 29, 2021.

New products growers will find in Pub 360 B include:

- PropulseTM (3+7), Fungtion (3+11), Miravis® Prime (7+12) fungicides on bushberries
- Luna SensationTM (7+11), Miravis® Prime (7+12) fungicides on strawberries
- Danitol® (3) insecticide on bushberries
- HarvantaTM (28) insecticide on berry crops
- Milstop® and Sirocco (NC) for powdery mildew on strawberries
- Property® (50) for powdery mildew control on berry crops While every effort has been made to ensure that the information regarding the last date of use is accurate and up-to-date, it is the responsibility of the user to confirm with the registrants of pest control products that the dates are correct.



Admire and Alias are used to control white grub larva like this one.

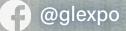
If this disease becomes an issue in northern regions, there is still more research needed.



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BITS & BITES

Ontario Food Terminal Act to be updated

The Toronto Wholesale Produce Association (TWPA), representing the 21 wholesalers of fruits and vegetables at the Ontario Food Terminal, supports the Ontario government's proposed legislation that will help modernize the Ontario Food Terminal.

If enacted into law, the changes to be introduced under the Main Street Recovery Act, 2020 would: increase the maximum size of the Ontario Food Terminal Board from seven to 13 members; expand the definition of agricultural products that can be sold at the Terminal; expand the objectives of the OFTB to include the promotion of local food; and ensure that the Minister of Agriculture, Food and Rural Affairs remains involved in the appointment of the OFTB's general manager.

"Last year, the Ontario government committed to keeping the Ontario Food Terminal at its current location, and to modernizing the Terminal," said TWPA president Fred Koornneef. "We were delighted to see the Government subsequently declare the Ontario Food Terminal a Provincially-Significant Employment Zone, and today we are pleased to see the government make some important changes to the Act governing the Terminal, especially with regard to the governance of the Ontario Food Terminal Board."

"It is fundamentally important that the provincially-appointed Ontario Food Terminal Board has the knowledge and experience to ensure that the Terminal remains a success for



generations to come, and we look forward to continuing to work with Minister Hardeman and the Government on a broad array of efforts to modernize this important provincial asset," Koornneef added. "I want to thank Minister Hardeman in particular for his leadership on this matter."

"Our government is committed to the long-term

success of the Ontario Food Terminal. As Canada's largest wholesale produce market, we recognize its vital importance to our farmers, distributors, consumers and agri-food sector, as well as our province's food supply," said Ernie Hardeman, Ontario Minister of Agriculture, Food and Rural Affairs. "These proposed changes will help promote the sale of more nutritious, high-quality local food at the Terminal while improving its governance to ensure it further meets the needs of employees and our agriculture sector."

Source: Toronto Wholesale Produce Association October 7, 2020 news release

Bayer CropScience renews support for AgScape

Bayer CropScience has renewed its \$10,000 pledge for AgScape, the agriculture in the classroom program for Ontario's two million students.

Bayer's investment allows AgScape to continue its flagship Teacher Ambassador Program. Trained in agriculture and food, certified teachers deliver lessons on a wide range of topics in schools across Ontario. This past year was one of the program's most successful yet, reaching 11,976 students through the delivery of 481 lessons. Bayer's support of this program has allowed AgScape to pivot to virtual delivery for the 2020/2021 school year, ensuring that teachers continue to have

access to book virtual lessons throughout the pandemic.

"AgScape is grateful for Bayer's long-time investment in agriculture and food education," shared Taylor Selig, development manager at AgScape. "Through their support, we ensure that students and teachers across the province are empowered with the tools and knowledge necessary to make informed decisions about the agri-food industry, including, the foods that they eat, the practices involved in their production, and the career opportunities available within the sector."

An important improvement made possible by Bayer's

patronage in AgScape has allowed the enhancement of the digital resource database outreach to educators. This will have a significant impact on the ease in which Ontario teachers are able to access the extensive

library of fact-based resources on agriculture and food. In addition to being a corporate member, Bayer has also been an integral supporter of the Business of Food initiative. Further details about that support, and an update on the success of that program in 2020 will be shared later this year.

Source: Bayer CropScience October 22, 2020 news release



Canadian company launches new labelling technology line

Given the challenges that growers have faced this year in accessing labour for field/grove/ orchard work or in packing houses, the demand for automation is rising.

"The concern we hear from growers is around minimizing labour," says Sam Sleiman of LABELPAC, Windsor, Ontario. "Wherever they can do without manual labour is where they want to automate. They're scrambling for better technology that's affordable and that works."

To meet those demands, LABELPAC is introducing new technologies in December 2020 to label fresh produce that the company designs and manufactures in-house. The new products include Smart in-Tray MOTO-HEAD Vision label applicators (a high-speed labeling system that can identify various tray patterns and sizes of produce and that can communicate with various PTI compliance lines); the MOTO-HEAD FX series (a fixed in-tray label applicator that takes up a small footprint in challenging spaces and can also be integrated into packing lines); and the MOTOHEAD XL Large label applicator (designed to apply labels up to 3" x 2" at high speeds—it's mainly used for large watermelon and other fruit and can be used on a wide range of conveyor and grading lines).

"Typically, a lot of watermelon growers are applying these labels by hand but with this, they can do it automatically at high speeds on various conveyors, packing lines or grading lines," adds Sleiman. Sleiman says there are other needs such as robotic solutions used in packing lines.

"Capabilities with our team of engineers are unlimited," says Sleiman. "We can automate nearly any imaginable request our customers may have. With our new MOTOHEAD Vision systems, and our various PLU labeling solutions, we can provide all this in-house and locally."

For more information, go here: www.labelpac.com



CROP PROTECTION

Cimegra insecticide registered to control wireworms in potatoes

KAREN DAVIDSON

The robust research and development pipeline of BASF Ag Solutions has produced a game-changing insecticide for the control of wireworms in potatoes. The crop protection company is launching Cimegra, which contains the active ingredient broflanilide. With a novel mode of action, it's the first IRAC Group 30 available in Canada.

"It's not often that we can introduce a new mode of action," says Anne McRae, technical service specialist-horticulture for BASF Ag Solutions. "We have tested the product with several species of wireworm in both western and eastern Canada. Our research trials during the last five years shows that it controls nine of the major species, across different soil types and geographies."

The active ingredient, broflanilide, targets all wireworm larval stages which helps suppress and control potential seasonal recovery of wireworm populations. While prior solutions intoxicated wireworms, leaving potential for their recovery, broflanilide binds to the wireworm's central nervous system causing hyperactivity of nerves and muscles, which ultimately eliminates the pest altogether.

This insecticide is applied in-furrow. McRae says that the product is compatible with most commonly used fungicides and insecticides, including biofungicides. "It's an excellent tank-mix partner," she says.

"Cimegra insecticide has demonstrated great performance and can be easily incorporated into an integrated pest management strategy," says Allison Friesen, technical market specialist, insecticides and seed treatment, BASF Agricultural Solutions Canada. "It offers a unique mode of action that delivers lasting efficacy with no known resistance, making it an excellent new tool for the management of wireworms."

Wireworm damage can be severe as growers in southern Alberta and Prince Edward Island can attest. The persistence of this pest is such





that it can remain in the soil from three to five years, even up to seven years, says McRae. That's why it's such a difficult pest to control.

For those growers who export potatoes, the MRLs for North America should be

available before 2021 spring planting.

For more information, visit www.agsolutions.ca/horticulture

Nichino selects Cohort Wholesale to commercialize new fungicide in Canada

Nichino America and Cohort Wholesale have agreed that Cohort Wholesale will distribute the new Gatten fungicide in Canada. Gatten is a powdery mildew fungicide proposed for use in cherries, cucurbits and grapes.

Flutianil, Gatten's active ingredient, works by inhibiting the formation of the haustorium which is the structure the fungus uses to extract water and nutrients from plant cells. It also inhibits secondary hyphal extension, stopping growth of existing infections. Additionally, Gatten has translaminar movement which provides protection to both sides of the leaf and improves control,

especially when foliage is dense.

Gatten data has been submitted to the Pest Management Regulatory Agency (PMRA) for registration which is anticipated in time for the 2022 growing season. To support the introduction of Gatten to Canada, Cohort Wholesale established local research-scale efficacy demonstration trials in 2020 in key cherry- and grape-growing regions of the country and is planning additional market development activities for 2021.

Nichino America, based in Wilmington, Delaware is a wholly owned subsidiary of Nihon Nohyaku Co. Ltd. Based in Japan, it was



Japan's first and oldest agrochemical manufacturing company. For more information, go to: www.Nichino.net.

Cohort Wholesale, based in Ancaster, Ontario, aspires to be a trusted Canadian wholesaler of preferred-position outdoor fruit and vegetable crop protection products, working with the established retail channel to service all key markets, creating demand for and maximizing the in-field performance of suppliers' products to help farmers grow the best crops.

Source: Nichino America and Cohort Wholesale October 26,2020 news release

Nichino America establishes a subsidiary in Mexico

Nichino America Inc has formed a new subsidiary, Nichino Mexico de S. de R.L. de C.V., to manage and promote the crop protection business in Mexico.

Based in Wilmington, Delaware, the company has established Nichino Mexico to provide improved service and accelerate the introduction of novel technologies into the Mexican market.

"Nichino America is excited about the establishment of Nichino Mexico as it will allow our organization to better serve the Mexican market at a deeper level," says Jeffrey Johnson, president of Nichino America. "The product portfolio provided by Nichino Mexico will provide agricultural suppliers, distributors, and growers in Mexico excellent crop protection options to

control some of their most troublesome pests. Additionally, the establishment of this subsidiary strengthens the position of our parent company, Nihon Nohyaku, as a global agrochemical company," adds Johnson.

Source: Nichino America October 22, 2020 news release

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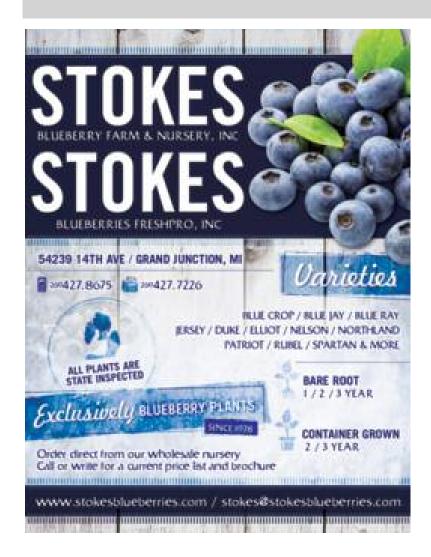


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CROP PROTECTION

Report from the 3rd Global Minor Use Priority Setting Exercise

JIM CHAPUT

As many of you are keenly aware, the COVID-19 outbreak has changed the way we both see the world and how we operate on a week-to-week and month-to-month basis. The global minor use priority-setting exercise, originally scheduled for face-to-face meetings in Minneapolis, Minnesota were replaced by a virtual process.

The primary aims of the global minor use priority-setting process are to identify globally significant crop-pest problems, find registerable solutions to those problems and where necessary seek harmonized maximum residue limits to facilitate trade. The Minor Use Foundation (www.minorusefoundation.org) in collaboration with US IR-4, Canada's PMC, USDA FAS and representatives from numerous countries including Colombia, Australia and Germany facilitated this 3rd global minor use priority setting exercise virtually over the course of several months from January to October 2020 with the collaboration of national and international grower and crop specialist stakeholders.

In December 2019, the first notice of the 3rd global minor use priority-setting exercise was sent out. In January 2020, the preliminary conference calls brought together a wide range of participants from across the globe including university and government researchers, crop extension specialists, commodity specialists, registrants, regulatory agency representatives, growers and grower organization representatives, export companies and other stakeholders.

In stage one, nominations for global crop-pest priorities were to be identified by April 1, 2020. In stage two, countries received the global database of priorities and were asked to rank them from one to five, choosing up to 35 per country or region (i.e. EU, Latin America, etc.). This step in the process was due July 1, 2020 and 56 countries participated identifying more than 4,100 global crop pest priorities. The global minor use database (developed by Mario Wick, Germany) then



analysed in detail using a robust set of formulae the submitted priorities and narrowed the choices down to the top 15 in each of the following categories: greenhouse-grown crops, temperate region crops, and tropical region crops. This left a total of 45 global priorities to proceed to stage three: merit analysis.

In July 2020 a call went out to the proponents of the top 45 crop-pest priorities to form an interim working group from the representative countries that put forward the priority. Their task was to run a detailed merit analysis and assign appropriate delegates to attend the GMU PS III virtual meeting. These merit analyses were due in early September 2020 and the merit analysis team leads presented their findings to the organizing committee. Canada led the merit analysis for downy mildew of hops.

The process culminated in a global, virtual meeting on Sept. 21 and 22, 2020 where the final ranking of projects was undertaken.

The discussions, collaborations and decisions made at these meetings demonstrated the critical needs producers around the world have and how a collaborative effort can work to address them even in times of pandemic. Growers, researchers, registrants, crop specialists, country representatives and other stakeholders worked to reach consensus and negotiate needs. Despite the restrictions and limitations, the process was

Crop/Crop Group	Pest(s)	Day 1 Final Ranking	Day 2 Final Ranking			
GREENHOUSE-GROWN CROP PRIORITIES						
GH Tomatoes	Tuta absoluta	1	1			
GH ornamentals	Thrips	2	2			
GH Tomatoes	Russet mites	3	3			
TEMPERATE REGION CROP PRIORITIES						
Raspberries	Spotted wing drosophila	1	1			
Dry bulb onion	Downy mildew	2	3			
Blueberries	Spotted wing drosophila	3	5			
Hops	Downy mildew	4	4			
Strawberries	Spotted wing drosophila	5	7			
Cherries	Spotted wing drosophila	6	6			
Tomatoes	Leaf miners	7	9			
Green onions	Downy mildew	8	2			
Blackberries	Spotted wing drosophila	9	8			
	TROPICAL REGION	CROP PRIORITIES				
Avocado	Phytophthora	1	2			
Pineapple	Phytophthora	2	3			
Mango	Anthracnose	3	1			
Aubergine	Thrips	4	5			
Tomatoes	Leaf miners	5	4			
Mango	Fruit flies	6	7			
Bananas	Weevil	7	6			
Cocoa	Phytophthora	8	8			
Coffee	Beetles	9	9			
Mango	Bacteria	10	10			



Downy mildew on hops. Photo courtesy of OMAFRA.

completed and now the next step is for the minor use foundation to review the global rankings that were agreed upon and initiate funding proposals to address the data requirements of the most critically needed global minor use priorities.

The following table

summarizes the top 10 priorities (a maximum of 15 could be chosen) identified in each of greenhouse-grown crops, temperate crops and tropical crops. These projects will be reviewed by the minor use foundation in October 2020, and where funding is available, the

data requirements will be generated.

For more information visit www.minorusefoundation.org

BioPriority

Jim Chaput is minor use coordinator, OMAFRA.



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CROP PROTECTION

Velum Prime nematicide/ fungicide label expanded



Velum Prime is now labelled for suppression of nematodes in ginseng.

The Pest Management Regulatory Agency (PMRA) recently announced the approval of minor use label expansion registrations for Velum Prime nematicide/ fungicide for the suppression of nematodes on ginseng, caneberries, pome fruit and stone fruit in Canada. Velum Prime nematicide/fungicide was already labeled for use against nematodes on several crops in Canada.

These minor use proposals were submitted by Agriculture & Agri-Food Canada, Pest Management Centre 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 Velum Prime nematicide/fungicide.

Velum Prime nematicide/ fungicide is toxic to birds, aquatic organisms and nontarget terrestrial plants. This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in

Crop(s)	Target	Rate (mL/ha)	Application Information	PHI
Pome fruit, crop group 11- 09 Stone fruit, crop group 12- 09 Caneberries, crop subgroup 13-07A	Soil-dwelling, root-feeding nematodes	500	Apply specified dosage by chemigation into root-zone through low-pressure drip, trickle, microsprinkler or equivalent equipment. Minimum 30-day interval between soil applications for pome and stone fruit. Minimum 7-day interval between soil applications for caneberries. Do not apply more than 500 g fluopyram/ha per year, regardless of formulation or method of application (soil or foliar).	7 days (pome fruit) 0 days (stone fruit, caneberries)
Ginseng	Soil-dwelling, root-feeding nematodes	500	Soil Applications using ground equipment: Apply by field sprayer at a high water volume (2,000 to 4,000 L/ha) to ensure the product moves into the straw. Application should be followed by rainfall or overhead irrigation to move the product into the root zone. For best results, apply at seeding in fall and before or during seed germination in spring of the seedling year. Do not apply more than 500 g fluopyram/ha per year, regardless of formulation or method of application (soil or foliar).	7 days

groundwater contamination. Do not contaminate off-target areas or aquatic habitats when spraying or when cleaning and rinsing spray equipment or containers.

Follow all other precautions,

restrictions and directions for use on the Velum Prime nematicide/fungicide label carefully.

For a copy of the new minor use label contact your local crop specialist, regional supply outlet

or visit the PMRA label site.

Jim Chaput is minor use coordinator, OMAFRA.

Beleaf insecticide for suppression of tarnished plant bug



The Pest Management Regulatory Agency (PMRA) recently announced the approval of minor use label expansion registrations for Beleaf insecticide for the suppression of tarnished plant bug (TPB) on leafy greens, crop subgroup 4-13A and leaf petiole vegetables, crop subgroup 22B and an increased rate for aphids on stone fruit, crop group 12-09 in Canada. Beleaf insecticide was already labeled for use against insects on many crops in Canada.

These minor use proposals were submitted by Agriculture & Agri-Food Canada, Pest Management Centre 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 Beleaf insecticide.

Beleaf insecticide is toxic to certain beneficial insects and non-target terrestrial plants. Do not contaminate off-target areas or aquatic habitats when spraying or when cleaning and rinsing spray equipment or containers.

Crop(s)	Additional Target Pests	Rate (kg/ha)	Application Information	PHI
Leafy greens, crop subgroup 4-13A*	Tarnished plant bug (suppression)	0.20 (3 applications)	Apply when tarnished plant bugs first appear in the field and before populations reach high levels. Scout fields and reapply if necessary.	0 days
Leaf petiole vegetables, crop subgroup 22B*		0.30 (2 applications)	Allow a minimum of 7 days between applications.	
			Do not apply more than 3 applications per year.	
Stone fruit, crop group 12- 09 (apricots, cherries, nectarines, peaches, plums,	Tarnished plant bug (suppression)	0.12 - 0.2	Apply before populations reach economic thresholds or as populations begin to increase but before damaging populations become established. Scout fields and reapply if necessary.	14 days
plumcots) Aphids (increased rate)			Allow a minimum of 7 days between applications.	
			Do not apply more than 3 applications per year.	

Updates to the label for Brassica leafy greens subgroup, 4-13B, Head and stem Brassica crop group 5-13 and celtuce, fennel and kohlrabi were also part of this label update.

*Chervil, fresh leaves; Chipilin; Chrysanthemum, garland; Cilantro, fresh leaves; Corn salad; Cosmos; Dandelion; Dang-gwi; Dillweed, fresh leaves; Dock; Dol-nam-mul; Ebolo; Endive; Escarole; Famefower; Feather cockscomb; Good King Henry; Huazontle; Jute leaves; Lettuce, bitter; Lettuce (head and leaf); Orach; Parsley, fresh leaves; Plantain buckhorn; Primrose, English; Purslane, garden; Purslane, winter; Radicchio (Red Chicory); Spinach; Spinach, Malabar; Spinach, New Zealand; Spinach, tree; Swiss Chard; Tanier Spinach; Violet, Chinese *CG22B: Cardoon; Celery; Celery, Chinese; Fuki; Rhubarb; Udo; Zuiki as well as Culitvars, Varieties and hybrids of these commodities

Follow all other precautions, restrictions and directions for use on the Beleaf 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.

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