

CHERRY PICKING

Raise the flag to Canadian Cherry Month



These Québécois farm workers are used to picking British Columbia cherries in the Okanagan Valley for markets as far afield as Europe and Asia. For the first time, the 400 members of the BC Cherry Association are intensifying their focus on domestic markets, launching Canadian Cherry Month from July 15-August 15. Photo courtesy of BC Cherry Association.

KAREN DAVIDSON

Staccato is an intriguing name for a sweet cherry. From a musician's perspective, 'staccato' means to sting the note in a jumpy precise rhythm. But from a grower's perspective, it defines a bounce in sales.

Increased domestic sales are exactly what the BC Cherry Association is hoping with the inaugural launch of Canadian Cherry Month, July 15-August 15, 2023. While the association's international reputation for Okanagan and Creston Valley cherries is well earned from the UK and Europe to China, Japan and most recently, South Korea, there's room to raise awareness outside of British Columbia.

As 2023 production crests 5,500 acres, the risks of being too focussed on overseas markets were laid bare when global logistics were disrupted during the pandemic. BC cherries are the envy of the world so it's only natural they should take pride of place in Canada as well. Raising domestic awareness is but a logical step for the BC Cherry



Staccato cherries

Association.

"We're aware that premium cherries will be needed in the eastern market," says Suhkpaul Bal, chair of the BC Cherry Association based in Kelowna. "We know this is a market accustomed to Washington State cherries."

As a grower of 90 acres of cherries himself and a frequent global traveller, Bal is savvy about how cherry varieties – with differing taste profiles and maturity dates – fit into marketing windows. The Okanagan's northern latitude and varying elevations allow for a harvest window that stretches from early July to September. This year's Asian mid-autumn festival lands on September 29, a date that favours having Canadian cherries land in Shanghai and Seoul in the two-week lead-up to the holiday.

By contrast, the calculus at the heart of domestic sales strategy is to have high-quality cherries ready to ship to eastern Canada from July 15 to August 15. Buy Fresh, Buy Canadian is the tag line for the association's marketing to Canadian retailers.

Continued on page 3

AT PRESS TIME...

Health Canada lifts pause on increases to pesticide Maximum Residue Limits

On June 20, 2023, the Honourable Jean-Yves Duclos, Minister of Health Canada, along with the Honourable Steven Guilbeault, Minister of Environment and Climate Change Canada (ECCC), and the Honourable Marie-Claude Bibeau, Minister of Agriculture and Agri-Food Canada (AAFC), announced next steps toward a sustainable approach to pesticides management in Canada while also giving farmers the tools they need to keep providing reliable access to safe and nutritious food.

Responding to the Spring 2022 consultations on the targeted review of the Pest Control Products Act (PCPA), the announcement highlighted the launch of Health Canada's Notice of Intent which began consultations on proposed amendments to the Pest Control Products Regulations (PCPR). Proposed changes address the need for better and timely access to information regarding pesticide reviews – including with respect to MRL applications for pesticides on imported food products – as well as the consideration of cumulative environmental effects and species at risk during pesticide reviews.

Health Canada has also lifted the pause on increases to pesticide Maximum Residue Limits (MRLs), beginning with less complex proposals. The

pause allowed Health Canada to engage with stakeholders, partners and Indigenous organizations to better understand Canadians' expectations about the pesticide regulatory review process, including the setting of MRLs, and its transparency. Numerous actions have been taken to address key gaps such as increasing transparency of applications and proposed decisions, establishing a solid foundation to better communicate to Canadians about MRLs, and implementing water monitoring to better inform pesticide risk assessments.

Additionally, the Government of Canada is eliminating the use of pesticides for cosmetic purposes on federal lands through amendments to the Greening Government Strategy, led by Treasury Board of Canada Secretariat.

To help make progress on this sustainable approach to pesticides management in Canada and to better understand the impacts of pesticides on the environment, ECCC will generate real-world data through increased research and monitoring on wildlife, air, and water.

These next steps from the Government of Canada are aligned with Canada's commitment to implementing the 2022 Kunming-Montreal Global Biodiversity Framework (GBF), which aims to halt and reverse biodiversity loss. The Framework includes a focus on reducing the overall risk from pesticides by at least half by 2030. There are

many ways to reduce risk that are not correlated to reduction in pesticide use, for example, the timing of application, the effectiveness of a given product, science, and other pest management approaches. As such, the GBF target focuses on the overall impacts and risk management of pesticides and does not command a specific target reduction in pesticide use.

In addition, Health Canada's Pest Management Regulatory Agency (PMRA) has been advancing its Transformation agenda through various initiatives. These include water sampling to inform the development of a framework for a National Water Monitoring Program for pesticides, and the development of a framework for a National Pesticide Use Data Program. Additionally, Health Canada has been increasing the transparency and accessibility of decisions, including posting plain language summaries of key decisions online and disclosing applicants' names as applications enter the review stage for both pre- and post-market. Health Canada has also launched the external Scientific Advisory Committee (SAC) for pest control products and consulted key stakeholders on a transition to a continuous oversight approach and systematic review of emerging science.

The Ontario Fruit & Vegetable Growers' Association (OFVGA) has been following the developments of the PMRA's review since August 2021.

NEWSMAKERS

Alberta's premier **Danielle Smith** announced her new cabinet on June 9, appointing the former minister of agriculture and irrigation, **Nate Horner** (Drumheller-Stettler) to the role of minister of finance and president of Alberta Treasury Board. His successor is **RJ Sigurdson** (Highwood). He grew up working on a 40-acre family farm north of Cochrane. He'll be at the table for the federal-provincial-territorial agriculture ministers' meeting to be held July 18-19 in Fredericton, New Brunswick.



RJ Sigurdson

Caleigh Hallink-Irwin, crop protection manager, is leaving the Fruit and Vegetable Growers of Canada after five years with the Ottawa-based organization. She is moving to CropLife Canada as director of regulatory affairs.

The Ontario Produce Marketing Association (OPMA) announces the appointment of two new board members at its Annual General Meeting held on June 7, 2023. They are **Daniel Baldin** from Longo's and **Steve Roberts** from Vineland Growers' Cooperative, both of whom will serve three-year terms until 2026.

Michael Graydon, CEO of Food, Health & Consumer Products of Canada, has been elected to the board of directors of the Canadian Centre for Food Integrity. Its signature event, Public Trust Summit, is planned for October 17, 2023.

Fire destroyed a storage warehouse and six storage trailers at Wellington Produce Packaging, Mount Forest, Ontario at 3 am, Sunday, June 4. **Adam Hincks**, sales and purchasing, reports the main manufacturing facility was unaffected. Operations and product availability are continuing as normal, with a vow to rebuild.

Second Harvest has hired **Graham Hill** as vice president of strategic affairs. He joins the company from Ontario-based food rescue organization Food For Life Canada, where he served as executive director. His role will be to identify opportunities and leading initiatives that prioritize sustainability and growth strategy.

BASF Canada Agricultural Solutions has appointed **Bill Baxter** as director of sales effective July 1, 2023. He was most recently director of commercial excellence for BASF Agricultural Products North America. Baxter will be stationed in Calgary, Alberta.



Bill Baxter

The British Columbia Greenhouse Growers' Association elected its 2023 board of directors on June 8.

Armand Vander Meulen, president and chair, **Eric Schlacht**, vice-president and **Ray**

VanMarrewyk, treasurer, are supported by the following directors: **Jos Moerman**, **Ravi Cheema** and **Ruben Houweling**.

The Fruit & Vegetable Dispute Resolution Corporation (DRC) recently held its annual meeting in Whistler, BC. The elected Board of Directors and President and Chief Executive Officer **Luc Mougeot** set policy, by-laws and trading standards. The Board consists of the President of DRC and 14 directors. **Bret Erickson**, J & D Produce is chair supported by **George Pitsikoulis**, Canadawide Fruit Wholesalers Inc as vice-chair and **Gerardo Mena Prieto**, Frutas San Antonio S.A. de C.V. as vice-chair. Directors are: **Anthony Martin**, financial executive; **Felipe Silva**, ZUR-GROUP S.A.; **Frank Spagnuolo**, Loblaw's Inc.; **Gonzalo Aguilar Guizar**, Grupo Empaque Rogui S.A. de C.V.; **Julian Sarraino**, Fresh Taste Produce Limited; **Mike Stuart**, Florida Fruit & Vegetable Association; **Patrice Marchand**, Metro Richelieu Inc.; **Pierre Dolbec**, Veg Pro International Inc.; **Robert Guenther**, United Fresh Produce Association; Canadian Food Inspection Agency; SAGARPA; USDA.

Hearty congratulations to **Jane Proctor** who is celebrating 25 years with the Canadian Produce Marketing Association. She is vice-president, policy and issue management, based in Ottawa.

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COVER STORY

Raise the flag to Canadian Cherry Month

Continued from page 1

Richard Isaacs, a 30-year-veteran of produce sales, is chair of the association's market access committee, and commercial director for Global Fruit, a company that markets cherries from 2,000 acres. He's convinced that the quality of BC cherries and their Canadian heritage will support a premium retail price.

His optimism will be tested in the fiercely competitive and multicultural Ontario/Québec marketplace. First, debt-laden consumers have been switching to discount banners under the weight of skyrocketing produce prices. Second, Niagara-grown stone fruit comes on stream in mid-July. And last, the Washington State cherry crop is predicted to be up by 60 per cent in 2023, after a poor harvest last year. Despite central Canadian consumers' familiarity with Washington's fat, meaty cherries, Isaacs believes that patriotism will favour the Canadian sweet cherries.

Undoubtedly, a bred-in-Canada, grown-in-Canada story has appeal. Agriculture and Agri-Food Canada's Summerland cherry breeding program dates from 1936. Paying homage to a string of breeding successes, researchers looked to establish a family of memorable names: Santana, Skeena, Sweetheart and Staccato are just a few. Each has a different maturity date with Staccato being an extra-late ripening cherry, luxuriating in the high summer temperatures of BC's interior.

Giving BC's cherry growers a significant leg up is their adoption of state-of-the-art Unitec Cherry-Vision 3.0 optical sorting equipment which not only detects internal defects but also sorts cherries by size and colour. And downstream from their packing rooms, export expertise that understands the cold chain has been invaluable. Overseas success would not have been possible without step-by-step adjustments in temperature control from the orchard right through transport to wholesale importers.

As Isaacs explains, cherries are hand-picked -- sometimes in the dark hours of the morning before



“We’re aware that premium cherries will be needed in the eastern market.”

~ SUKHPAUL BAL

the sun rises -- to avoid temperatures that can soar above 30°C. They are picked into 20-pound plastic crates in the shade and by 11 am, the day's pick is done. The cherries are then whisked into a hydro cooler with temperatures ranging from 5°C to 8°C.

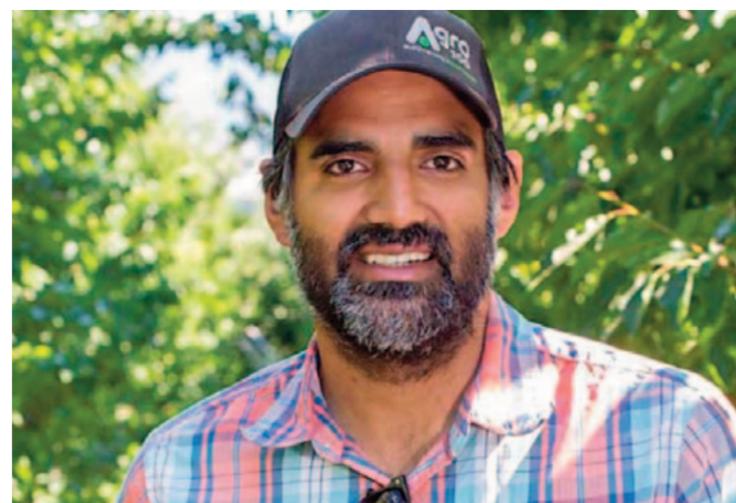
“By maintaining strict temperature control during the packing process, the cherries have a little bit more give and this reduces the risk of bruising that can occur if the fruit is colder

than 5°C.,” explains Isaacs. “After being packed, huge fans suck cold air through the pallets for four to 12 hours until every cherry in every box reaches optimum temperature before being loaded onto trucks.”

The truck temperature must be held at -0.5°C to 0°C, a smidge below freezing. Due to their high sugar content, the cherries can actually withstand pulp temperatures as low as minus 2.2°C before any damage occurs. Using these protocols, BC



The Canadian Cherry Month Retail Toolkit will include ready-to-use images as well as .ai files that can be customized to the retailers' brand guidelines, size requirements, and target audiences. Materials are available in both English and French. For a taste of the campaign, link to this video: <https://rb.gy/ofgbf>



Sukhpaul Bal, president, BC Cherry Association.

cherry growers are accustomed to shipping long distances so they're more than confident that BC cherries will arrive at eastern markets in excellent shape.

The BC Cherry Association's marketing agency is equally confident that retailers will welcome Canadian-grown cherries. Marketing materials matched with social media outreach have been developed for retailers, such as handling and cooling advice to be shared with staff.

Regarding the launch of Canadian Cherry Month this summer, “This will not be a one-year wonder,” vows Isaacs, “We know that consistent messaging will be needed.”

Over a span of decades and geography, dedicated BC cherry growers have persevered to grow their sector to a 2022 farmgate value of \$160 million. They are quite used to the long haul, in every sense of the word.

The red dawn of BC sweet cherries

Jealous Fruits is the biggest single grower of sweet cherries in British Columbia with more than a thousand acres under cultivation. That's a hefty share of BC's 5,500 acre total.

“Our 2023 crop is expected to see a significant increase in production with a projected growth of 30 to 35 per cent compared to 2022,” reports Julie McLachlan, director of sales and

marketing, Jealous Fruits.

“Our August flagship variety is Staccato,” she says. “Expect nothing short of perfection when it comes to flavour and texture.”

The Grower is “Digging Deeper” with Sukhpaul Bal, president of the BC Cherry Association, and Richard Isaacs, chair of the BC Cherry Association market access committee. Based in Kelowna, British Columbia, they share the background of how the first Canadian Cherry Month was conceived. This podcast is sponsored by Cohort Wholesale.



CROSS COUNTRY DIGEST

CANADA

Canadian potato growers now look to the weather story

Marshall Smallman @msmallman1 · Jul 11, 2022
 Spray season is well underway



As of June 1, 2023, total Canadian Potato Storage Holdings are reported to be down 3.3 per cent over 2022 numbers for the same period, and higher than the three-year average.

“As inventory winds down, many shippers across Canada are keeping an eye on stocks and metering out the old crop to ensure they can meet commitments through to new crop,” reports Victoria Stamper, general manager, United Potato Growers of Canada.

There were a record 14.4 million cwt of potatoes shipped from storage in May 2023, an increase of 13 per cent over April shipments and just 4.4 per cent higher than in May 2022.

“We saw fresh and processing

disappearance slightly lower this month but seed disappearance almost doubled, not surprisingly as planting began in earnest in May,” Stamper says.

Québec and Manitoba saw slight increases in Fresh shipments while all other provinces’ movement in this sector was down, with the opposite in Processing as all provinces showed increased shipments of potatoes in the sector for May except Québec and Manitoba. Most of the seed potatoes in the west had been shipped in April whereas the majority of seed movement in the east happened in the month of May, with 94 per cent of December seed holding shipped as of the end of May.

Planting is now complete in all

Canadian Potato Storage Holdings (All Sectors) by Province June 1, 2023
 Infohort: AAFC (000 cwt)
 *Note: Saskatchewan data not available

Province	2019-20	2020-21	2021-22	2022-23	Apr 23 vs. Apr 22	3-yr. Average
Prince Edward Island	5,202	4,274	6,378	6,074	-4.8%	5,284
New Brunswick	2,791	1,306	2,606	2,436	-6.5%	2,234
Quebec	1,716	1,470	2,926	1,881	-35.7%	2,037
Ontario	642	996	1,322	989	-25.2%	987
Eastern Canada	10,351	8,045	13,232	11,381	-14.0%	10,543
Manitoba	3,919	4,458	3,280	2,816	-14.1%	3,886
Alberta	5,626	2,280	2,256	3,965	75.8%	3,387
British Columbia	84	120	27	9	-66.7%	77
Western Canada	9,629	6,858	5,563	6,790	22.1%	7,350
Total Canada	19,980	14,903	18,795	18,171	-3.3%	17,892

Chart source: <https://agriculture.canada.ca/en/sector/horticulture/market-information-infohort/storage-reports/potato>

provinces across Canada, with even some of the early Warba crop in British Columbia harvested and in stores. The weather through planting was very good in all areas of the country, particularly compared to the cold, wet spring of 2022, with most provinces reporting potatoes in the ground “on schedule.”

Across most of Canada, it did get very hot and dry after planting, hence the forest fires raging across the country. However to update as of June 19, Québec, Ontario, Prince Edward Island and New Brunswick have received some timely rains and temperatures throughout June have not been as high as usual

through the east. Yet Manitoba and western prairies have had unseasonably higher temperatures, impacting crop growth early on.

Although official acreage data will not be released until mid-July 2023, planting intentions are predicted to remain flat as reported by most provinces with total acreage in Canada rising only a few per cent. Although pricing in fuel and fertilizer have “stabilized” compared to the sharp increases seen last year, overall input costs to potato farmers remain at least 20 per cent higher than pre-pandemic levels, and other barriers to entry such as water and irrigation

availability, land costs and rising interest rates, as well as a tight seed market continue to restrict expansion.

Despite the flat acreage, if yields are good and return to trend line in certain areas, potato production could still reach record levels in Canada.

With regard to the market, global demand for frozen fries continues to fuel expansion of processing plants and therefore the need for processing potatoes, and predicted shortages in the European crop offer potential export opportunities for North America.

Source: United Potato Growers of Canada

Employment Opportunity Commercial Sales Manager

Vesey's Seeds Ltd., Canada's largest Mail Order Gardening business, is seeking a Commercial Sales Manager to join their team in York, Prince Edward Island. With a rich history of over 80 years in the industry, Vesey's Seeds is known for its commitment to customer and employee loyalty.

In this role, the Commercial Sales Manager will lead a small team in managing the commercial sales division. Responsibilities include pricing orders, communicating with customers and growers, identifying new sales opportunities, ensuring customer satisfaction, managing orders and invoicing, preparing reports, representing the company at events, and providing support for the smooth functioning of the department. Vesey's Seeds offers competitive wages (\$55,000-\$70,000 annually plus bonus), a full-time schedule, casual dress code, health care package, paid time off, pension plan, and opportunities for growth and promotion.

To be considered for this position, candidates should have a university degree in Agriculture with coursework in business administration and sales experience. Strong interpersonal and communication skills, organizational abilities, problem-solving capabilities, and leadership qualities are essential.

Join Vesey's Seeds Ltd. and contribute to their mission of delivering top-quality products and exceptional customer service. Interested candidates are encouraged to apply by submitting their resume and cover letter to work@veseys.com. Only qualified applicants will be contacted for an interview.



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PRINCE EDWARD ISLAND

New employee at the PEI Potato Board



Rebecca MacSwain joined the PEI Potato Board on June 13th, 2023, in the position of seed specialist. She is also a Master of Business Administration student at UPEI. Most recently, she was with Vesey's Seeds.

CROSS COUNTRY DIGEST

NOVA SCOTIA

Prestige Brut Estate 2017 wins Gold at Decanter World Wine Awards

L'Acadie Vineyards, the first winery to release traditional method sparkling in Nova Scotia, was awarded a prestigious top award by Decanter World Wine Awards in London in early June. Prestige Brut Estate 2017 captured Gold and 95 points, the first- ever gold for Nova Scotia and one of only four golds for sparkling in Canada.

Decanter World Wine Awards is the world's largest international wine competition held in London, England every April. More than 18,250 wines from 57 countries were evaluated by an influential troupe of 236 wine experts, including 53 Masters of Wine and 16 Master Sommeliers from 30 nations.

“Canada is a cool climate region that knows a thing or two about the benefits of hybrid grape varieties, and for the first time a single varietal L'Acadie Blanc, a hybrid crossing of Cascade and Seyve-Villard, was awarded a Gold medal in its rendition as a sparkling wine for L'Acadie Vineyards, Prestige Brut 2017 from Gaspereau Valley in Nova Scotia. A noteworthy first-ever Gold for the region too,” said Olivia Mason, Decanter June 7, 2023.

The judges described the wine: “Pretty and attractive, with white fruit, honey melon, chalky green apple and lifted floral aromatics lead through to a palate of vibrant acidity, citrus curd and a

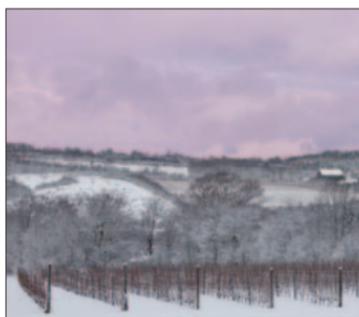
fine, saline finish.”

Bruce Ewert, co-owner and winemaker at L'Acadie Vineyards said, “We bought our 30 acres of paradise in Gaspereau back in 2004 inspired by the potential for sparkling wine with its soil and location. It is very exciting to earn international awards for our organic vegan sparkling wines that are rooted over a metre deep into rocky well- drained living soils.”



NOVA SCOTIA

Grape damage to be surveyed post polar vortex



Nova Scotia vineyards experienced the full brunt of a polar vortex on February 4 and 5, 2023, with bud-damaging temperatures as cold as -25°C.

“We are still assessing the impact of the polar vortex event but preliminary bud viability analysis is indicating about 65 per cent bud loss in our L'Acadie blocks,” wrote Bruce Ewert, L'Acadie Vineyards, Gaspereau, Nova Scotia at the time of the event.

Fast forward several months.

Perennia's Viticulture Team is working to assess the effects of the polar vortex on the grape and wine industry in Nova Scotia. Injury has been reported across the entire province; however, the magnitude of the injury is not the same at all locations and is not the same for all cultivars. For this reason, it is very important to collect data on the impact on vineyard operations and practices that have or anticipate being undertaken beyond normal practices to recover, renew or even replant vineyards that have been damaged.

Most growers have indicated in general terms that not all cultivars and not all blocks have been affected to the same degree. For this reason, block and cultivar specific data needs to be collected by vineyard owners/managers to document increased costs and efforts (labour) for each block.

Source: Perennia grape blog May 26, 2023

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CROSS COUNTRY DIGEST

PRINCE EDWARD ISLAND

Beyond insecticide: How wireworm behaviour gives clues to managing their population

Wireworms are a common potato plant predator, living in soil and feeding on roots. They are notoriously difficult to control, and populations are increasing in farm fields across Canada causing major economic losses to farmers each year.

Dr. Christine Noronha, a Charlottetown-based entomologist with Agriculture and Agri-Food Canada (AAFC), wants to make wireworms squirm and even scam. For years, Dr. Noronha has been studying the behaviours of wireworms to see how they move around in soil and burrow in the winter. Knowing these key behaviours have helped her team develop management strategies for farmers to reduce populations feeding on potato crops, beyond just spraying insecticide.

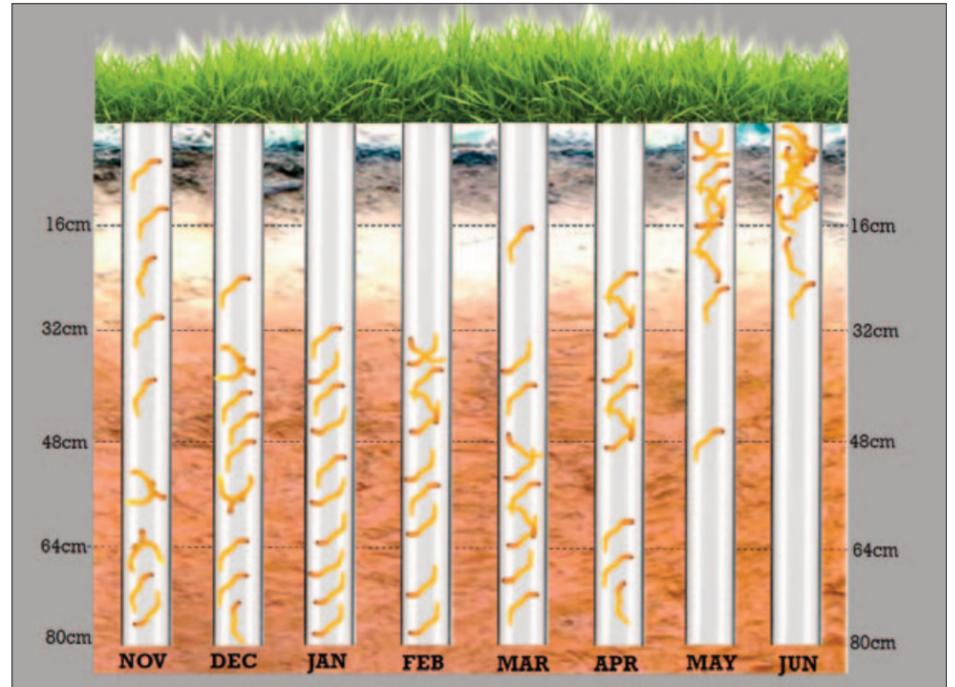
“Many insecticides we’ve studied are inefficient at controlling wireworm populations to reduce damage to potatoes, and farmers have requested more alternative management strategies that help suppress these pests,” says Dr. Noronha.

These strategies include spring plowing, the use of rotational crops, and finding the optimal timing of insecticide application and baiting. She recommends not planting in a field that was in continuous sod for many years. Buckwheat or brown mustard can act as a bio-fumigant, so planting these crops at least one or two seasons prior to planting potatoes will reduce wireworm populations. These crops can be mowed,

incorporated into the soil, or harvested – all options will provide wireworm control. If harvested, they can be used as a secondary cash crop for farmers.

Dr. Noronha has also investigated how wireworms move in search of food sources and how deep they travel into the soil for warmth in the winter. This work, which took place at the AAFC Harrington Research Farm on Prince Edward Island, utilized underground vertical tubes filled with soil. She discovered that wireworms could travel long distances in search of potato roots and pinpointed how wireworms move throughout the year, including when they resurface, which is precisely the right time to monitor the population in the field. Dr. Noronha recommends that the best time to bait for wireworms is in May and June, and from mid-September to mid-October. These periods are when the wireworms are most actively foraging for food.

In a recently concluded study to see how wireworms survive under sub-zero temperatures, Dr. Noronha placed wireworms in a freezing chamber at the Charlottetown Research and Development Centre. As it turns out, wireworms are resilient little pests. On average, they can survive temperatures from -7 to -12° Celsius. One wireworm even survived up to -20° Celsius! Typically, soil temperatures on Prince Edward Island do not dip below -7° Celsius, and that’s in a very cold winter.



Even worse, wireworms spend the winter protected deep in the soil and can live without food for months. With winter temperatures on the rise, Dr. Noronha expects wireworm populations to remain high, so the more management tools available to farmers, the better. In winter, many Canadians dream of milder temperatures. However, potato producers just might welcome colder weather if it means more successful wireworm control.

To help farmers in the fight against

wireworms, Dr. Noronha and her team will be launching a series of presentation videos on different topics related to wireworm management including their behaviours, trapping, control methods, and more. Dr. Noronha hopes these digital learning guides will be available by the end of 2023.

Source: Agriculture and Agri-Food Canada

CANADA

Pressures continue on agricultural land use

The Canadian Agri-Food Policy Institute (CAPI) has published the Competing Pressures on Land Use in Canadian Agriculture Report. It looks at the challenges Canada faces in managing, preserving and optimizing agricultural lands.

“Canada is associated with abundant land, but a relatively small share of it is suitable for food production,” said Tyler McCann, managing director of CAPI. “That land is at the intersection of the need to meet growing local, national and global demand, while taking action on climate change, biodiversity and other environmental issues and navigating increasingly volatile economic realities. This report shows that the land we think of as

abundant is actually facing pressures from all angles.”

By looking at examples from around the world, this report looks at meeting those pressures through the intensification and extensification of agricultural land. Intensification involves boosting productivity from the same area of land, while extensification increases production by expanding the land used for agriculture.

“This report zooms out and covers agricultural land use from both a Canadian and international context,” said Margaret Zafiriou, report author and research associate at CAPI. “By learning from international experiences and case studies, we can find avenues for Canada to



Holland Marsh. Photo by Glenn Lowson.

meet the agricultural land use challenges of today and tomorrow.”

Quick Facts

- In 2020, Canada was the 8th largest country in terms of cropland area
- Farmland area fell from 64.2 M ha in 2016 to 62.2 M ha in 2021. Land in crops increased over the last decade, but tame and seeded pasture declined from 5.5 M ha in 2011 to 4.8 M ha in 2021.
- Population growth, changing diets, rising prices and extreme weather are contributing to increased commodity prices, leading to higher land values and

pressures on land conversion.

- Policies and programs, including land zoning and payments for protection of sensitive systems are increasingly required to manage the pressures on agricultural lands.

For the full report, link here: <https://capi-icpa.ca/explore/resources/competing-pressures-on-land-use-in-canadian-agriculture-to-intensify-or-not-to-intensify-that-is-the-question/>

Source: Canadian Agri-Food Policy Institute June 8, 2023 news release

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GREENHOUSE GROWER

Greenhouse vegetable sector to propose business model for its own marketing commission

British Columbia’s greenhouse vegetable sector has evolved so much in size, production and marketing practices that it has little in common with field vegetable growers. Its 2022 farmgate value was \$328.5 million. That’s why the BC Greenhouse Growers’ Association (BCGGA) helmed by pepper grower Armand Vander Meulen, is suggesting a different governance mechanism that would remove it from the umbrella of the BC Vegetable Marketing Commission (BCVMC).

To date, the Commission operates with nine commissioners, three of whom are greenhouse growers, specifically Armand Vander Meulen, John Newell and Michael Minerva. As Linda Delli Santi, BCGGA executive director, explains, “The strategic plan has brought this issue forward to be a focus for 2023. It’s not a case of any dissatisfactory working relationship but an issue of being in charge of our own destiny.”

To date, the role of the BCVMC is to regulate the orders of provincial legislation for certain storage,

processing and greenhouse vegetables.

The BCVMC website explains: Centralized, coordinated marketing of regulated product is achieved by requiring producers to market regulated product grown by them through marketing agencies designated by the Commission (“Designated Agencies”). Agencies harness the collective marketing power of producers and are the means by which the Commission achieves its main policy objective of maximizing producer returns.

The cost of operating a separate commission is yet to be researched. Currently, the annual levy is 15 cents/square meter, earmarked for BCGGA research and industry development. An additional levy goes towards BCVMC operating expenses. Delli Santi says that next steps are to consult with the provincial agriculture minister Pam Alexis and to investigate a cost-effective business model.



BC greenhouse tomatoes had a 2022 farmgate value of \$97.2 million.

Biobest Academy launches e-learning platform at GreenTech Amsterdam

“Making Integrated Pest Management (IPM) programmes successful requires a much deeper understanding of the crop, the pest or disease and the solution, compared to conventional crop protection methods,” explains Biobest Academy manager, Neal Ward.

“An empowering resource for customers, distributors, and colleagues, the Biobest Academy is designed to be used by those new to IPM, right through to experienced practitioners.”

“Our initial focus was to build a valuable, easily accessible resource for our own technical teams, helping ensure we give the very best advice to growers. We’ve now progressed to the next stage; at GreenTech we have launched the Biobest Academy to external audiences, empowering distributors, growers and anyone interested in sustainable IPM practices.”

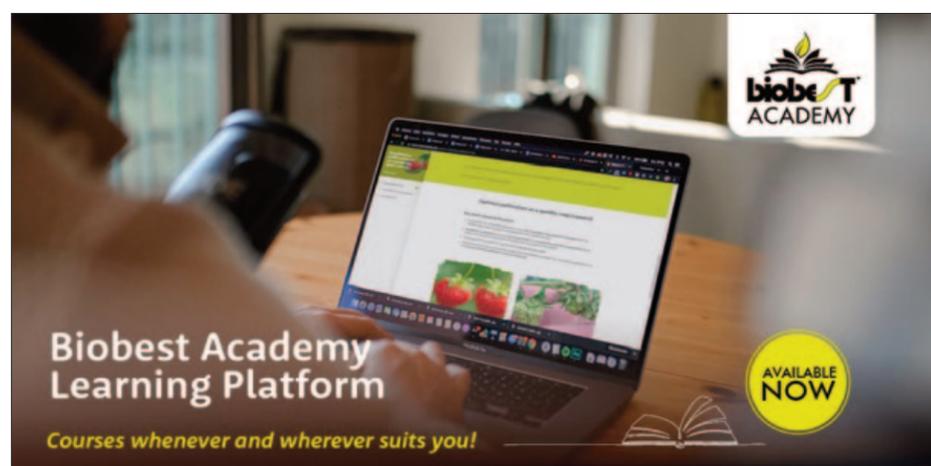
Easy to navigate, the e-learning platform features 30 modular courses covering everything from the general concepts and principles of IPM, bumblebee pollination and crop scouting, right

through to advance modules aimed at technical managers and consultants.

“Whether it is learning to identify key pests and diseases in your crop, understanding the complex biology of aphid hyperparasitism, or getting to grips with cutting-edge cannabis growing techniques, the Biobest Academy has a course for you,” says Ward. “The interactive e-learning modules give our students a varied and engaging learning experience, giving them the knowledge they need to make more informed decisions and, ultimately, use IPM to grow a better crop.”

“It’s taken three years to compile the central knowledge repository with material contributed by subject matter experts within our international team of IPM and pollination specialists as well as R&D and product managers.”

With a modular format, users can tailor their learning experience to suit their needs. Courses end with a short exam, and learners gain a certificate on passing. In the UK the courses qualify for BASIS professional development points,



something Biobest will expand to other countries in the future. All courses are delivered in English, and some are also available in Dutch, with French and Spanish versions due soon. A selection of the basic courses is free.

“IPM doesn’t stand still,” says Ward. “While new pest and disease threats are constantly appearing in crops, there is also a steady stream of sustainable new Biobest

solutions. As such, the Academy will continue to evolve, with new content added and existing content regularly reviewed, keeping users at the forefront of the latest IPM developments.”

Support for Biobest Academy in Canada and Eastern United States is provided by Plant Products. To improve your IPM knowledge and understanding, visit PlantProducts.com.

CHAIR'S PERSPECTIVE

Foodland Ontario a cornerstone of fresh produce marketing



SHAWN BRENN

The buy-local movement has been gaining momentum for years, a phenomenon that grew particularly strongly during the COVID years when the popularity of local food surged. As fruit and vegetable growers, we've long been fortunate to be supported by the well-known and well-liked Foodland Ontario program.

Consumers are looking for accurate, reliable information about where their food comes from – and Foodland Ontario is a trusted brand and source of that information. It's an initiative that was launched by the Ontario

Ministry of Agriculture, Food & Rural Affairs (OMAFRA) more than 40 years ago as a partnership with producers to champion, promote and support the consumption of fresh Ontario produce and processed agricultural foods.

TV commercials, radio spots, print ads and in-store signage and promotions put locally grown produce front and centre in consumers' minds – and their popular tagline, "Good things grow in Ontario", was easily and widely recognized.

Together, growers, government and retailers use the easily identifiable Foodland Ontario logo to encourage consumers to find and buy locally grown food.

Another important aspect of Foodland Ontario's programming has always been the strength of their recipes. It's one thing for consumers to know what's in season, but they also need ideas on how to prepare and enjoy those products. Foodland's recipes always provide easy and tasty meal ideas accompanied by beautiful photography that inspire foodies of all skill levels and are a helpful marketing tool

for our sector.

It's no secret that fruit and vegetable growers compete in a global marketplace. It makes margins tight and competition against imported product tough, so it's more important than ever to make consumers aware of what farmers right here at home are able to grow – and how eating local benefits our farm businesses, our economy, our health, and our environment.

Consumers have gotten used to having access to fresh produce – asparagus and strawberries for example – all year long, so the concept of seasonality is no longer as widely understood as it used to be. This is where Foodland Ontario has always played a key role in helping drive awareness to which local products are available in stores and farm markets at what time of the year. As we all become more conscious of our environmental footprint and of the importance of reducing food waste, this type of ongoing promotion and education will continue to be very valuable.

There is also the potential to expand beyond the current "buy local" messaging of Foodland

Ontario to address where food comes from by profiling growers and their diverse worker teams, the pride they take in growing our food, and showcasing the innovation of modern fruit and vegetable production.

It also opens up opportunities to focus on other issues that matter to Ontarians, such as jobs, the economy, food security, and increased environmental sustainability, and addressing those priorities through a lens of local food and fruit and vegetable production.

Last fall, the provincial government launched its Grow Ontario strategy to increase the production, consumption and manufacturing of Ontario food as well as to boost our annual agri-food exports. The strategy contains some very specific goals, including increasing both the consumption and production of food grown and prepared in Ontario by 30 per cent, increasing Ontario's food and beverage manufacturing GDP by 10 per cent and boosting our province's agri-food exports eight per cent annually by 2032.

Achieving these growth goals

will bring benefit to the edible horticulture sector, to Ontarians and to our provincial economy as a whole – and Foodland Ontario is one way the government can continue to support growers and food businesses in meeting those milestones.

Our sector has long appreciated the Ontario government's ongoing commitment to the Foodland Ontario brand. Continued government investments in the brand and its activities play an important role in the fruit and vegetable marketing activities of the OFVGA's member organizations, and we welcome and value opportunities to work collaboratively with OMAFRA to ensure Foodland activities are effective and meet the intended goals for the program.

For growers, the Foodland Ontario program helps ensure market opportunities aren't lost, that our local food brand remains strong, and that we can collectively continue to grow good things in Ontario.

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

WEATHER VANE



Migrant workers have families, talents and passions beyond their daily lives in Canada. Recognizing their commitment, the Ontario Greenhouse Vegetable Growers (OGVG) sponsored the Greenhouse Cup soccer competition in Leamington last year. Its successful launch led to the 2023 edition. The Migrant Worker Community Program and OGVG hosted the May 28 and June 4 event, attracting 240 entrants. Congratulations to the winning Sunrite team, wearing white shirts! Photo courtesy of Ontario Greenhouse Vegetable Growers.

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THE URBAN COWBOY

Three-month outlook: heat and more rain



OWEN ROBERTS

extremely dangerous.

El Niño's been around for centuries, perhaps as far back as the 1600s. But like other aspects of present-day climate change, it wasn't really part of the vernacular until extreme weather started regularly taking hold. I first encountered the phrase in the newsroom in the mid-1980s, when writing about drought in western Canada. It sounded a bit like a hoax, blaming something that happened in the Pacific Ocean for parched wheat fields in Alberta. Turns out it wasn't.

So what now? At the macro level, Canada still seems confused

about what to do about climate change. A report in June from the country's largest daily newspaper said that some of the \$200 billion committed to climate solutions since 2015 is sitting in federal coffers, not finding its way to labs and fields and wherever else it could be making a difference.

But while Ottawa dithers and bureaucrats check weather forecasts to see if it's going to rain at the cottage this weekend, growers and others operating at the micro level have a different perspective -- their livelihoods are affected by weather, and it's taken another turn for the worst.

The agri-food sector must now develop a forecast of its own: that is, how this latest global climate bombshell is going to affect harvests.

Those controlling climate change funds may be unaware of the many ways unpredictable weather is taking a bigger toll than ever on farming. For example, growers are always looking to the future for labour, and reliable labour is scarce. Past production data is a factor determining when that labour is needed the most. But if growers are significantly early or late with their predictions due to wild

swings in weather, and labour is either not available or idle, profitability takes a big hit.

Like most problems, research can help. Weather predictions are becoming more sophisticated, but climate change adds a huge variable. Precise, science-based predictions won't solve global warming, but for growers, they're a key component of climate management.

Owen Roberts is a past-president of the International Federation of Agricultural Journalists and a communications instructor at the University of Illinois.

The weather stew we've experienced this spring looks like it's going to continue throwing curveballs to growers throughout the summer and maybe into the fall.

In May, the U.S. National Oceanic and Atmospheric Administration released its three-month weather outlook for June-August.

It doesn't officially cover Canada. But the precipitation arc that extends over the northeast that includes most of south-western Ontario shows a 33 per cent likelihood of more rain than usual.

Conversely, it also suggests drier weather in southern B.C.

Meanwhile, chances are significantly higher that summer temperatures will be hotter in central Ontario, as well as in eastern Canada and western Canada.

The temperature outlook for the U.S.— which can certainly impact Canadian growers' marketing approaches -- is much more extreme. Projections call for a 33-80 per cent likelihood of warmer weather through a huge belt that includes much of the western U.S. (including California) and the east coast.

For the most part though, those temperatures won't be accompanied by greater precipitation, except in the Midwest. That means drought is not out of the question -- as if it ever is anymore, given the unpredictability of climate change.

This forecast is being attributed to El Niño, a unique weather pattern associated with warm ocean water that develops near the equator in the Pacific Ocean every two- to seven years.

This particular El Niño might bring us a warmer winter. But there's a cost.

The United Nations' weather agency, the World Meteorological Organization, says this El Niño is contributing to a 66 per cent likelihood that between now and 2027, the globe will have a year that averages 1.5 degrees Celsius warmer than the mid 19th century. That temperature change is a specific climate marker that the agency and other experts watch with a wary eye, a plateau that's considered

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MORE COLD STORAGE

Vineland Growers' Co-operative eyes future growth



Prospects for the Ontario tender fruit crop are promising says Steven Roberts, director of produce sales. Volumes are expected to be up for peaches (+8%), apricots (+100%) and nectarines (+12%). Photo by Marcella DiLonardo.



Karlie Haining, Canadian Fruit Tree Nursery Co-operative, grafts nursery stock for grapes. Photo by Marcella DiLonardo.



This history-making moment was captured sometime in the 1930s.



The sprawling headquarters is a comfortable working space for 46 full-time employees.

KAREN DAVIDSON

At 110 years of age, the Vineland Growers' Co-operative Ltd is striding into the future with a new headquarters and consolidated distribution centre near Jordan Station, Ontario. The vision is for the 22-acre site to accommodate more growth.

"The plans have been in the works since 2016," says Mike Ecker, president, Vineland Growers' Co-operative Ltd, "because our market share continues to increase and we need to become more efficient in our distribution. We were renting extra storage space to handle the business."

By far, this is Canada's largest co-operative of tender fruit, marketing and distributing about 70 per cent of Ontario's production of fresh apricots, cherries, grapes, nectarines, peaches, pears and plums valued at \$72.7 million in 2022. When fresh grapes are added (\$6.2M), the farmgate value is just shy of \$80 million. With another state-of-the-art site in Virgil, growers in the western part of the Niagara peninsula are well served. Their fruits are shipped as far west as British Columbia's border and east into Québec and Atlantic Canada.

To accommodate current and future growth, the new Jordan Station facility has 21 shipping doors for refrigerated trucks to pick up their cargoes for delivery to major grocers. With these additional efficiencies, grower fruit can be harvested in the morning, cooled, delivered to the co-operative by 5 pm, then consolidated for the trucker's departure by 10 pm. Turn-around time often used to take until midnight, so at least two hours have been shaved off.

Quality assurance personnel check every load, making sure they are rotating inventory in a timely fashion. Warehousing for packaging is on-site. The co-operative also operates a retail outlet for orchard and crop protection products.

In July 2018, the board astutely incorporated the Canadian Fruit Tree Nursery Co-operative. "This represents the last piece of the supply chain," explains Ecker. "We want to control the varieties to be planted and not depend on the United States for nursery stock. We're really happy to have all these efficiencies in the supply chain."

The building plans have come to fruition in the nick of time. In 2022, the co-operative recorded 16 per cent growth in sales. As Ecker explains, it's because consumers are demanding local fruit and growers are meeting that appetite with improved genetics and production techniques.

"We're seeing fewer number two grades, fewer culls," he says. Crop load management, irrigation and orchard practices mean that more desirable fruit is harvested per acre.

Phil Tregunno, board chair, comments on how the co-operative has expanded past its Niagara roots to include marketing alliances with other production areas. Berries and apples grown in Norfolk County are one example.

"Our success is a reflection of the Vineland Growers' Co-operative employees and a board of directors that is focussed on growth to benefit all our stake-

holders," says Tregunno. "We're expecting a very big year, with early-ripening nectarine varieties likely to be ready between July 10 and 15."

The 10-member board now deliberates in a light-filled boardroom, looking out to orchards in various crop stages. The expansive view is the best possible inspiration. And here's the evidence. Two weeks before the grand opening on June 22, they concluded the purchase of an additional two acres adjacent to the Virgil site.

COMING EVENTS 2023

- | | |
|-------------|--|
| July 5 | Potato Growers of Alberta Grand Opening Head Office, Taber, AB |
| July 6 | Potato Growers of Alberta Golf Tournament, Taber, AB |
| July 19-21 | Federal-Provincial-Territorial Agriculture Ministers' Meeting, Fredericton, NB |
| July 23-25 | International Fruit Tree Association Summer Study Tour, Nova Scotia www.ifruitree.org |
| July 23-27 | Potato Association of America 107th Annual Meeting, Delta Hotel, Charlottetown, PE |
| August 5 | Food Day Canada |
| August 9 | Nova Scotia Fruit Growers' Association Summer Orchard Tour, www.nsfga.com |
| Aug 17-18 | U.S. Apple Outlook Conference, Ritz-Carlton Hotel, Chicago, IL |
| August 23 | Ontario Potato Research Open House, Elora Research Station, Elora, ON |
| August 24 | Ontario Potato Field Day, HJV Equipment, Alliston, ON |
| Sept 6-8 | Asia Fruit Logistica, Hong Kong |
| Sept 20 | Ontario Produce Marketing Association Annual Golf Tournament, Lionhead Golf & Country Club, Brampton, ON |
| Oct 2-8 | Ontario's Agriculture Week |
| Oct 4-5 | Canadian Greenhouse Conference, Niagara Falls, ON |
| Oct 17-18 | Canadian Centre for Food Integrity Public Trust Summit, Westin Airport Hotel, Toronto, ON |
| Oct 19-21 | PMA Fresh Summit Convention & Expo, Anaheim, CA |
| Nov 3-12 | Royal Agricultural Winter Fair, Toronto, ON |
| Nov 14 | Arrell Food Summit, Toronto, ON |
| Nov 20-22 | Potato Growers of Alberta Conference & Trade Show, Grey Eagle Resort & Casino, Calgary, AB |
| 2024 | |
| Jan 10-11 | Potato Expo. Austin, Texas |

RETAIL NAVIGATOR

The goods on specialty retailers



PETER CHAPMAN

On this July 1, 2023, Canada's fireworks will celebrate a new milestone: a population of 40 million. About 30 per cent of Canada's citizens are immigrants.

It's small wonder that grocers are reaching out to niche markets in metropolitan areas. Arz Fine Foods is one example with two stores in the Greater Toronto Area, positioned as the essence of Mediterranean gourmet. In 1989, Lebanese brothers Armand and Hovic Boyadjian started with a bakery, partly to support customers who had fled conflict zones. They have expanded to include a sizeable produce department, including a long aisle of specialty cucumbers.

"Canada is so good," Armand Boyadjian told Grocery Business Magazine in its January/February 2022 edition. "It's a beautiful place, bringing all those immigrants from abroad. And this is what makes the food industry more exciting because immigrants bring different foods and recipes to a new country."

HMart stores, targeted to South Korean, Japanese and Asian customers, is a regional chain with 17 stores in British Columbia, Alberta and Ontario. H stands for han-ah-reum, a Korean phrase that roughly translates to "one arm full of groceries."

Urban Fare, a banner started in 1999 under the Overwaitea Food Group, has seven locations: four in downtown Vancouver, one at UBC Point Grey Campus, one in Kelowna and one built in Calgary as recently as 2019. It offers upmarket, organic foods that appeal to densely populated urban neighbourhoods.

Why do I spotlight these three niche stores? I recently visited the HMart store in Edmonton and want to highlight the opportunities that these players offer to Canadian growers. Let's face it. Our Canadian retail landscape is dominated by five large chains who compete from coast to coast. Consolidation in the food industry is a challenge -- there are not many doors to knock on. So it's exciting to see regional chains offering a great shopping experience that's beyond the 'international' aisle at the big five.



Arz Fine Foods, Mississauga, Ontario



HMart, Edmonton, Alberta



Urban Fare, Vancouver, British Columbia

Working with specialty retailers

Working with specialty retailers is different, not better or worse but different. You do have to respect their position in the market. They are successful when they do a great job servicing their niche in the market and suppliers have to understand and support their value proposition. This can be many things including product size, variety and packaging.

If you want to develop relationships with these retailers, recognizing how they are unique is a good place to start. Walk the store to understand what they are looking for and assess if you have the capabilities to serve their market. They are often more knowledgeable than the large retailers. They know their consumer well and how they can attract them into their stores.

It is possible these stores have more autonomy so their store managers can be a good place to start. If they are not the decision maker, they probably can put you in touch with the right people.

These retailers might have a less complicated supply chain than the big stores, meaning they can react faster as produce comes to market and they can manage smaller volumes. Your communication might be less formal and more direct with stores. Understand this can lead to more work on the supplier side.

That's because logistics with specialty retailers will mean that volumes are probably smaller and if they differentiate with their quality, deliveries might be more frequent to multiple locations.

When you are considering this segment of the market, compare their pricing to the large retailers for your products. These stores probably have a higher gross margin than the large retailers, because volume is lower. If the retail price is close, you know they are paying a similar price to the big retailers. If the retail price is higher, do not assume you will get paid more.

The marketplace is changing

The demographics of consumers are changing rapidly with immigration, creating opportunities because they want products that remind them of their homelands. Yes, retailers are responding, but often specialty retailers lead the way in their niches. This is an exciting opportunity for you to produce

some new products or a different size in different packaging.

Twenty years ago, hummus – a purée of cooked chickpeas, tahini sesame paste and lemon juice – was a specialty item. Today, it's mainstream. That's because stores such as Urban Fare, Arz Fine Foods and HMart introduced it to consumers. As a discerning supplier, you can be on top of these trends too.

Peter Chapman is a retail consultant, professional speaker and the author of A la Cart-a suppliers' guide to retailer's priorities. Peter is based in Halifax, N.S. where he is the principal at SKUFood. Peter works with producers and processors to help them get their products on the shelf and into the shopping cart.



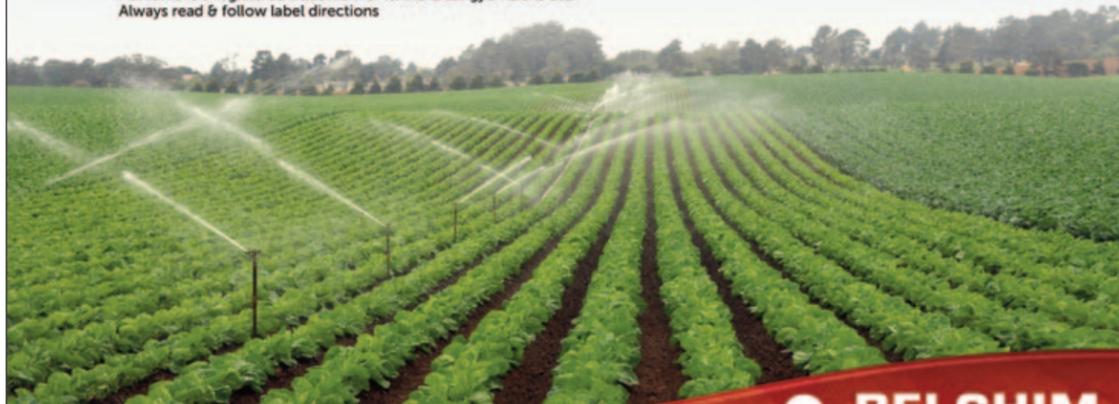



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FOCUS: HUMAN RESOURCE MANAGEMENT

Soft skills matter for hard-driven teams

KAREN DAVIDSON

When Shawn McGowan joined Schuyler Farms Ltd. and The Norfolk Fruit Growers' Association (NFGA) two years ago, he brought a skill set that would be foreign to most farmers. His résumé documented 20 years of experience in corporate Toronto, a logistics company and a family-owned business. What drew him to Simcoe, Ontario was the potential of the area and opportunity to be human resources manager for two companies that have more than 400 temporary foreign workers and management staff of 10 combined.

"I responded to a Facebook posting," McGowan recalls. "I was excited to join a team that was already in the process of building up human resources expertise and a culture of behaviour that holds true to its vision statement."

His facilitator credentials helped the team discern its core values: humble, driven and solutions-oriented. The day-in, day-out working environment should reflect these values in terms of how each person is treated and how the team approaches communications and projects. The roll-out to employees who were skeptical, at first, included a session on what those words mean to each person. And then posters were displayed in key areas of the farm as friendly reminders of internal self-awareness and exterior realities. This has resulted in a better team culture and environment to work in.

Humble: Team players who are respectful of others and the job at hand



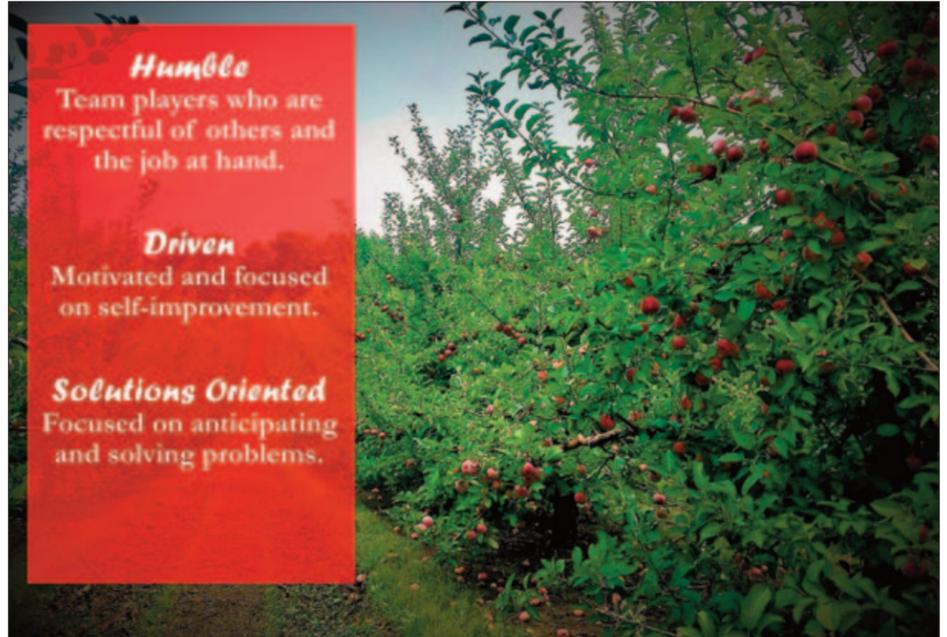
L-R: Neela Ali, HR assistant Schuyler Farms, Shawn McGowan, HR manager Schuyler Farms and NFGA, Mary Benedict, production supervisor, NFGA

Driven: Motivated and focused on self-improvement

Solutions-oriented: Focused on anticipating and solving problems

These are the words and actions of a family-owned business that's evolving with post-pandemic learnings. Schuyler Farms is a diverse enterprise spanning almost 5,500 acres that support production of apples, cherries, pears, corn, soy, sheep and geese. To move forward with focus, there's a clear need to communicate more efficiently internally and with all levels of government.

To address those needs, McGowan is responsible for all aspects of Labour



Market Impact Assessments, permits, on-boarding and off-boarding staff and employee relations. In addition, he's tasked with communicating with liaisons, ministries, Service Canada and FARMS/CanAg. He's also building community relationships and actively participating on the labour committee of the Ontario Fruit & Vegetable Growers' Association.

He makes use of software that's designed to streamline processes. JazzHR, for example, offers templates for hiring and metrics for success.

He's also drawn on Haldimand-Norfolk R.E.A.C.H. on outreach to employees with disabilities. This is one more instance of being attuned to diversity and different needs in the workplace.

"So often, it's not a misunderstanding of language but a misunderstanding of intent," says McGowan.

Cueing in on language is particularly important during stress points in the season. March is when about 150 temporary foreign workers arrive for spring work. August is when another 250 workers arrive for apple harvest. Altogether, the Caribbean workers represent Jamaica, Trinidad, Barbados, St. Lucia and St. Kitts. The Caribbean is not a homogenous culture, so the nuances of each group and individual must be respected.

In a nutshell, McGowan is the go-to person for responsibilities that were previously shared by many. The logic of having a human resources manager on staff becomes clear.

How to get more out of meetings

With that old adage – time is money – McGowan has introduced the Level 10 Meeting approach that's used by entrepreneurs in a hurry. A Level 10 meeting is a weekly 60 - 90-minute, collaborative executive meeting with the same agenda every week. At the end of each meeting, the participants quickly rate the meeting on a scale of 1 to 10 based on how well they followed the meeting format and how productive the meeting was. Sound good? Here are the details.

What is a level 10 meeting?

A level 10 meeting is a weekly check-in meeting with your leadership team, where attendees develop a strategy that they can hold themselves and their team accountable to. These team meetings are principally dedicated to solve issues and create an issues list of items that require attention.

The level 10 meeting agenda

This meeting agenda remains consistent and identical for every meeting. Scroll down to read our explanations and the duration for each section!

- Check-in
- Scorecard
- Rock review
- Customer/employee headlines
- To-do list
- IDS
- Conclude

Check in – 5 minutes

Ask each participant to briefly share a personal and professional accomplishment in the past week. Starting the meeting with a win is going to set a positive tone for the rest of the conversation. Be mindful of each others' time. If you take too long, then you are taking from others in the meeting. This is also an exercise in appreciating your team and time management.

Scorecard – 5 minutes

Use these five minutes to update your weekly scorecard or metrics for each attendee. Only address one to five of the most important metrics. This section is not to engage in discussion, but to add issues to the issues list. Each measurable will have a goal next to it and an owner on the leadership team who is accountable for hitting this goal. For example, you may track the number of sales calls made each week and have a goal of 100 calls per week. The owner of this number would be your sales and marketing director. During the scorecard review, you review each measurable with the owner of each one saying what the actual number was for the last week.

Rock review – 5 minutes

Each participant simply states if they're on track or off track for each assigned major (90-day) goal, which is referred to in level 10 meetings as a "rock". Here, also add issues to the issues list.

Continued on next page

Level 10 Agenda

Meeting Date:
Participants:

Check In 5 minutes
Round table to share personal or professional accomplishment.

Scorecard 5 minutes

Metric	Owner	Goal	Actual	New Goal

Rock Review 5 minutes

Rock	Owner	On Track	Due Date

Customer/Employee Headlines 5 minutes
Round Table on client or employee feedback.

Headline	Presented By	Good	Bad

To-Do-List 5 minutes

Task	Owner	Done	Not Done

Level 10 Agenda

IDS – Identify, Discuss, Solve 40 minutes

Issue or Metric	Presented By

Conclude 5 minutes
Recap the To-do's
Cascading Messages

Meeting Rating

FOCUS: HUMAN RESOURCE MANAGEMENT

How to get more out of meetings

Continued from page 12

Customer/employee headlines – 5 minutes

Share your client and employee feedback with the rest of the team, with one sentence, indicating good or bad. Still, no discussion but continue to add issues to the issues list. If you take too long, then you are taking from others in the meeting. This is also an exercise in appreciating your team and time management.

To-do list – 5 minutes

Each team member either says that they're done, not done, or if an item is in progress for each of their responsibilities from last week's to-do list. Hold off on the discussion here and keep adding issues to your issues list.

IDS: Identify, Discuss, Solve – 40 minutes

Finally, this is where the discussion begins. IDS stands for: Identity, Discuss and Solve. This is the three-step problem resolution method you're going to use to understand the root of problems, discuss the problems and then identify specific action items that

individual team members can take to resolve the problems.

Taking the time to constructively solve problems is going to be a lot more effective than jumping to quick solutions. It's all about the journey, not the destination, right? Start by prioritizing all of the issues and then use IDS to work through them, by order of priority.

Conclude – 5 minutes

Take this final section of the level 10 meeting agenda to recap your to-do list and identify the next steps from the meeting. In the Conclusion, you want to

accomplish three very important things:

Recap the to-do's: Make sure every to-do was assigned to a person and that that person is certain they can finish it in one week.

Identify cascading messages: The leadership team makes decisions that affect the whole company. Be sure to assign a to-do to send messages out to other levels of the organization when relevant.

Rate the Meeting: On an honest scale of 1-10 how was this meeting. Anything under an 8.0 warrants discussion.

Sign up for AgriHR Toolkit

It is always difficult to find good people with the right kind of skills for your farm. The farm labour shortage has been identified as one of the greatest business risks in agriculture today. Putting effort into finding and keeping good people with effective human resource management can also save your farm money. This is especially important during a labour shortage.

The AgriHR Toolkit, developed by Canadian Agricultural Human Resource Council (CAHRC) through extensive consultations with producers across Canada, offers assistance every step of the way with guides, templates, resources, and the critical questions that you need to ask and answer about your business.

It offers tools such as an Employee Handbook template

you can download and customize for your farm and employees that includes key policies that are becoming components of the Temporary Foreign Worker Program (TFWP) such as the Abuse Free Workplace policy.

The AgriHR Toolkit includes targeted, practical advice based on years of research and field testing with ready-to-use tools and templates including a policy manual, orientation check list, job descriptions, and job offer letters to help save you time and money.

It's everything you'll need to find, retain and support your employees says Jade Reeve senior program manager, AgriSkills.

Access the online toolkit here: hrtoolkit.cahrc-ccrha.ca

Photo by Marcella DiLonardo.



Good management can help keep good employees

Jackpot! You had a quality job description, took time to interview, asked the right questions, checked references and have hired a motivated, skilled and pleasant new employee. In this tight labour market, celebrate. But, not for too long. There are still some onboarding tasks to complete that will benefit all, including your business.

Onboard with purpose

A great onboarding experience will pay real business dividends, cut productivity loss, reduce the need for additional recruitment and improve overall team morale.

"Once recruited, it's critical the candidate discovers that the role explained to them in the interview process is actually the role," says Tracy Hepworth, vice-president of human resources at Farm Credit Canada (FCC), who has hired many new employees.

If the person is new to the operation, they face a change and so does their manager. It's the employer's job to set the stage. A great start, with solid communication, increases the hire's desire to do good work, in turn helping them and the business to succeed.

Set clear expectations and vision

Clearly explaining specific job tasks is important and so is talking about the business' purpose, strategy and how the employee's work contributes. Is the farm business helping feed people, providing an input to a high-

quality product or something else? Share short- and longer-term business goals and the business stage – growing, maintaining or in transition.

If experimentation, innovation and suggestions are welcomed, how and when? Talk about the operation's work culture – command and control or collaborative and consensus-building. Explain team dynamics, expectations of the new employee and your leadership style.

"I plan for a new employee. I've blocked time to spend with them. I know what I want to speak with them about, what their first day, week and month is going to look like. I'm open and welcoming, taking time to know them on a personal level and opening up about myself. Employees want to be seen as a person, not just an employee," Hepworth says.

Compensation comes in many forms

Today, compensation, or "what's in it for them," goes beyond salary, sick leave and vacation time. Discuss opportunities for skill growth and career development, help them network or add non-traditional job pluses.

You might offer opportunities to take courses, attend conferences, or provide housing, meals and events – like a harvest party or a day off for a child's birthday. Or you might offer something even more specific,

Flexibility and work-life balance are attractive incentives.

Even small things can increase a desire to stay. If the person mentions loving chocolate, surprise them the next day with chocolate.

As a leader, practise caring

"Leaders don't get the option not to care about their employees," explains Hepworth. "I need to be engaged, listening to their desires and career aspirations. For me, if my ideas are heard and seriously weighed, even if my leader doesn't agree with them, I feel valued," she says. "When people feel valued, they're likelier to stay."

Know expectations and employee dynamics

Siblings or children on a family farm may inherently know their parents' work style, expectations and decision-making processes. But it can be a gap for a newcomer, leading to job and personal insecurity. Alternatively, a new hire can intimidate existing team members if they bring new ideas or ways to do things. The employer must recognize and address this.

New employees need information to do their job, from hours of work, assigned tasks and how long they should take, to who and how to ask for help and where people typically eat lunch. Do they need a cell phone or certain apps, for example? If they don't have the full ability and skills for the role, think about training options or juggling tasks until the

newcomer's ability develops.

Recognition fosters good morale

Having thought about the above, think about reinforcement. Routinely encourage and show appreciation for the right attitude and actions in the way the employee likes to receive acknowledgement. Maybe it's private praise like "Thank you for doing X, because it helped us meet the business goal of Y. You're a quick learner." Or institute a more public reward such as a new employee recognition award.

Show that you recognize when an employee takes on a challenge and be mindful of how you react to mistakes.

Also show that you recognize when an employee takes on a challenge and be mindful of how you react to mistakes, especially when someone is learning. Reinforcing positive behaviour often, balanced with respectful and timely addressing of anything undesired, enables the newcomer to adapt and grow.

"Some of the best recognition I've ever received was an email saying 'You knocked it out of the park. You're amazing!'" says Hepworth, "It showed me that someone cared about me."

Review and revise employee management policies

Hiring may also be a great time to review your business' employee management toolkit.

Onboarding can highlight gaps which can be closed accordingly depending on the needs, size and nature of the business. It might mean documenting a holiday or unpaid time-off policy to ensure consistency, or writing a process to lodge a complaint. Or it might involve dealing with noncompliance or creation of a more formal performance management plan so all employees know how and when they will be evaluated.

Newcomers to employee management can find best practices online, through agriculture organizations or even other businesses. Also consider hiring a human resources consultant, who can provide insight specific to your unique farm business, helping to customize and optimize your employee management policies.

Build your processes one step at a time, but Hepworth says never underestimate the importance of good employee management practices, especially on a farm, where attention to this area might not always be top of mind, particularly during the busiest times.

Yet, busy periods are where good practices are likely to have great payoff. "A growing business can easily focus on operations, but people are how work gets done. You can't always rely on yourself or your family. Bringing others onboard smoothly will help you retain a good employee and limit turnover, and that's really valuable," Hepworth says.

Source: Myrna Stark Leader for Farm Credit Canada

Controlling weeds at renovation

KRISTEN OBEID &
ERICA PATE

Once June-bearing strawberry harvest is over, it's time to renovate fields. Renovation includes mowing the plants to approximately two inches, fertilizing, narrowing the rows and controlling weeds. This process extends the productive life of a matted row strawberry field for two to four years.

Weed control is an important factor in renovation. If there are many large broadleaf weeds standing above the strawberry crop, apply 2,4-D amine (many generic 2,4-D herbicides) or clopyralid (Lontrel XC or Pyralid) before mowing. It really depends on which weed species is present in the field.

Apply 2,4-D amine 500 at 2.0 L/ha (0.8 L/acre) or 2,4-D amine 600 at 1.7 L/ha (0.69 L/ac) for control of dandelion, plantain, burdock, wild carrot, primrose, daisy fleabane and many annual seedlings. Established perennial weeds that 2,4-D amine will not control include: toadflax, buttercup, yarrow, ox-eye daisy, hawkweed, sheep sorrel and many others. It is recommended that strawberry growers mow the strawberry plant leaves two to three days after application, to minimize 2,4-D amine movement into the strawberry crown and new runners. This treatment may cause temporary distortion of strawberry leaves. Do not apply between mid-August and fall dormancy because of possible damage to flower bud formation.

Apply 2,4-D amine in 100–200 L of water per hectare (40 to 80 L/acre). When applying 2,4-D amine, use low pressure and coarse spray droplets to minimize drift, as nearby crops may be extremely sensitive. Careful cleaning of the tank is also critical following the use of 2,4-D, as it is difficult to clean out and may affect other crops sprayed with the same sprayer.

Clopyralid should be applied

immediately after harvest, then wait seven to 10 days prior to mowing. Clopyralid (Lontrel XC) application rates are 0.34 to 0.5 L/ha (0.126 to 0.2 L/acre) in 150 to 200 L water per hectare (60 to 80 L/acre). It should not be tank-mixed with other herbicides or pesticides. Apply clopyralid to control legumes, composites (asters and daisies), nightshades (including groundcherry) and smartweeds (including prostrate knotweed, red sorrel and wild buckwheat). Clopyralid will kill underground rootstocks of sensitive weeds such as vetch and Canada thistle and will strongly suppress flowering and vegetative growth of less sensitive ones such as ox-eye daisy and sheep sorrel. Another grass herbicide application may be made at this time. Some weeds will escape all herbicide applications and should be removed by hand.

A four-to-six hour rain-free period is required after application for maximum control. Clopyralid should be applied only once per year. Clopyralid does not provide residual control of emerging weeds and must therefore be applied directly to the foliage. When clopyralid is applied properly, strawberry plants generally show satisfactory tolerance. Clopyralid should not be applied when fruit buds are being initiated.

Clopyralid may induce a slight malformation of new foliage. Injured leaves are often narrow with a rough appearance. Petals often appear reddish in colour and sepals may bend back. Early season varieties such as Annapolis may be more susceptible.

A post-emergence grass herbicide, such as Venture or Poast Ultra should be applied separately to kill annual and perennial grasses. Include an adjuvant with the grass herbicide.

Following renovation, Sinbar can be applied at 0.7 to 0.85 kg/ha (0.28 to 0.34 kg/acre) to control germinating summer annuals and fall germinating

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ontario.ca/crops

Ontario Berry Grower

Ministry of Agriculture,
Food and Rural Affairs

Ontario 



Figure 1. After herbicide application and mowing.
Photo Credit: Erica Pate, OMAFRA

weeds. Delay this application until germination of weeds is obvious. If 2,4-D was applied at renovation, delay Sinbar application until plants have recovered from any stress (approximately two weeks). Strawberry plants are generally most tolerant to this timing. Apply Sinbar in at least 300 L of water per hectare (120 L/acre). Do not apply Sinbar within two weeks before or after an application of Venture or Poast Ultra applications as crop tolerance to Sinbar may be reduced. Sinbar is a very effective herbicide but may stunt strawberry on light sandy soil. Do not use Sinbar on soils with less than one percent organic matter

or more than 70 per cent sand.

Authority or Chateau or Reflex may be applied in late fall to dormant strawberries before spreading straw mulch. These herbicides will provide good residual control into the spring.

Make sure your straw is as weed-free as possible. Many new weeds are introduced into perennial strawberry production systems through straw mulch. It is critical that growers obtain as weed-free straw as possible. Purchase your straw from a reputable source and, if possible, visit the grain field where the straw will come from before harvest to check for weeds.

References

- Zandstra, B and Hanson E. 2017. Weed control in perennial strawberry. https://www.canr.msu.edu/news/weed_control_in_perennial_strawberry
- New Brunswick Strawberry IPM Weed Management Guide. <https://www2.gnb.ca/content/dam/gnb/Departments/10/pdf/Agriculture/SmallFruits-Petitsfruits/StrawberryIPM.pdf>

Kristen Obeid is OMAFRA weed management specialist – horticulture. Erica Pate is OMAFRA fruit crop specialist.

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Spotted wing drosophila management 2023

Registrations for Spotted Wing Drosophila, June 2023

More information on these applications can be found on the Ontario Crop Protection Hub. Before applying any pest control product, always review the most current version of the product label.

¹ General Re-entry



ERICA PATE, OMAFRA

The Berry Growers of Ontario have funded spotted wing drosophila (SWD) monitoring at ten sites across the province this year. I expect growers are beginning to control SWD at this point in the season, or will be soon. Once SWD is active and there is ripe fruit present on your farm, it is time to spray. Here is a list of products registered for SWD control and suppression. However, remember that insecticide applications are not the only tool available!



- Picking regularly, every 2 days if possible, can be very effective
- Cool fruit as soon as possible after harvest
- Keep the field clean- remove any unmarketable fruit from the field and destroy it
- Prune the canopy and manage water to reduce humidity and make the environment less favourable for SWD
- Spray every 5-7 days, and re-apply after ½ inch of rain
- Renovate June-bearing strawberries as soon as possible!

Stay tuned to the ONfruit.ca blog for regular spotted wing drosophila and other pest management updates. Thank you to the multiple consultants for helping to monitor this season!

Product	Crops	Rate	Preharvest Interval	Restricted Entry Interval	Max # applications/year	Re-treatment interval
Malathion 85E malathion 85% Group 1B Reg. #8372 Use a maximum of 1000 L water per ha	Blueberries, Currants & Gooseberries	1000-2500 mL/ha	2 days	12 hours ¹ ; 1 day handset irrigation; 2 days hand harvest	3	7 days
	Strawberries	1000-2500 mL/ha	3 days	12 hours ¹ ; 3 days hand harvest	2	7 days
	Raspberries, Blackberries	1000-2500 mL/ha	1 day	12 hours ¹ ; 1 day handset irrigation & harvest	2	7 days
Imidan WP phosmet 70% Group 1B Reg. #29064	Blueberries	1.6 kg in 1000 L water /ha	17 days hand harvest	12 hours ¹ ; 6 days scouting, weeding, bird control & hand pruning; 15 days mechanical harvest; 17 days hand harvest; 20 days handset irrigation and activities involving foliar contact	1	N/A
Danitol Fenpropathrin 30.9% Group 3 Reg. #33817	Bushberries	779-1169 mL/ha	3 days mechanical 15 days hand harvest	24 hours ¹ ; 3 days mechanical harvest; 7 days scouting, weeding, hand pruning; 15 days hand harvest, training; 17 days hand set irrigation	2	14 days
	Raspberries					
Up-Cyde 2.5 EC cypermethrin 250 g/L Group 3 Reg. #28795	Bushberries	245-285 mL/ha	2 days	12 hours	2	7 days
	Caneberries	245-285 mL/ha	2 days	12 hours	3	7 days
	Strawberries	245-285 mL/ha	2 days	12 hours	3	7 days
Cormoran Acetamiprid 80 g/L and novaluron 100 g/L Group 4A + 15 Reg. #33353	Bushberries	1400 mL/ha	8 days	12 hours	3	10-14 days
Delegate spinetoram 25% Group 5 Reg. #28778	Bushberries	315-420 g/ha	1 day	12 hours	3	12 days
	Caneberries	315-420 g/ha	1 day	12 hours	3	7 days
	Strawberries	280 g/ha	1 day	12 hours	3	7 days
Entrust spinosad 240 g/L Group 5 Reg. #30382	Bushberries	334-440 mL/ha	1 day	When dried	3	5 days
	Caneberries	334-440 mL/ha	1 day	When dried	3	5 days
	Strawberries	292-364 mL/ha	1 day	When dried	3	5 days
Success spinosad 480 g/L Group 5 Reg # 26835	Bushberries	165-220 mL/ha	1 day	When dried	3	5 days
	Caneberries	165-220 mL/ha	1 day	When dried	3	5 days
	Strawberries	145-182 mL/ha	1 day	When dried	3	5 days
Exirel Cyantraniliprole 100 g/L Group 28 Reg. #30895 Use a surfactant, where permitted, for optimum control.	Bushberries	1-1.5 L/ha	3 days	12 hours	3-4 (max. 4.5 L/ha)	5 days
	Caneberries	1-1.5 L/ha	1 day	12 hours	3-4 (max. 4.5 L/ha)	5 days
	Strawberries	1-1.5 L/ha	1 day	12 hours	3-4 (max. 4.5 L/ha)	5 days
Harvanta 50SL Cyclaniliprole 50 g/L Group 28 Reg. #32889	Bushberries	1.2-1.6 L/ha	1 day	12 hours	3 (max 4.8 L/ha)	5 days
	Caneberries	1.2-1.6 L/ha	1 day	12 hours	3 (max 4.8 L/ha)	5 days
	Strawberry	1.2-1.6 L/ha	1 day	12 hours	3 (max 4.8 L/ha)	5 days
Scorpio Ant and Insect Bait For suppression only. Spinosad 0.07% Group 5 Reg. # 33306	Caneberries, Bushberries, Strawberries	35-45 kg/ha	1 day	12 hours	3	As the bait is consumed or every 4 weeks

Please note: this is a reference sheet and does not replace the labels. Continue to check the product labels for more specific instructions and uses.

Spotted wing drosophila is a serious pest in Ontario and suppression products may not provide acceptable levels of control. Do not make more than two consecutive applications of Group 5 insecticides.

BITS AND BITES

U of Guelph holds groundbreaking for new Honey Bee Research Centre



Paul Kelly, Honey Bee Research Centre manager, stands amid apiaries in the current facility. It has operated since 1894 as part of the University of Guelph's Ontario Agricultural College.

Saving honeybees from ongoing population declines is part of the ultimate goal for a state-of-the-art Luckevich Pinchin Honey Bee Research Centre (HBRC) to be operating by 2025 at the University of Guelph.

A groundbreaking event on June 14 kicked off construction of the \$16-million centre, planned as a needed upgrade to the existing pollinator research, teaching and public outreach hub that already looks after the largest number of honeybee research colonies in North America.

The new 15,000-square-foot centre will feature indoor and outdoor education spaces, classroom and event space, a laboratory, bee breeding facilities and pollinator gardens, and will be built near Townsend House, the longtime HBRC home on Stone Road.

“This new Honey Bee Research Centre will allow us to scale up research and outreach,” said Dr. John Cranfield, Ontario Agricultural College (OAC) associate dean external relations.

“The new facility will give the centre space to grow its engagement with apiarists, with community members interested in learning more about pollinators and honeybees, and with young people looking to be a part of positive change to support pollinators and to ensure a healthy environment and a safe food supply.”

Among donors to the project, Lydia Luckevich, a 1979 U of G chemistry alumna, will provide \$7.5 million. The centre will be named for her and for her late husband, Don Pinchin, founder of Pinchin Ltd., an environmental consulting firm.

AgRobotics are coming to a field near you

AgRobotics Field Tour

July 5 Itinerary

8:30 am	Location 1: Haggerty Creek Ltd. 7708 Bentpath Line Bothwell, Ontario 42.70627° N, 81.89117° W	
10:00 am	Location 2: Sharp Farms 1364 Naylor Road Florence, Ontario 42.70644° N, 82.02185° W	
11:00 am	Location 3: Richard's Rolling Acres McCreary Line and Manduamin Road Tupperville, Ontario 42.60350° N, 82.24999° W	
1:30 pm	Location 4: Kerr Farms 9820 Fairview Line Chatham, Ontario 42.423683° N, 82.112368° W	

HAGGERTY AGROBOTICS | KERR FARMS | KEJAY | Ontario

Ontario's AgRobotics Working Group is inviting the horticultural industry to a Field Tour, July 5 in the Chatham-Kent area and to a Field Demonstration on July 12 in the Holland Marsh area.

“These are separate events,” explains Kristen Obeid, weed management specialist-horticulture, Ontario Ministry of Agriculture, Agri-Food and Rural Affairs. “You will see different robotics technologies at each event.”

Please register for each event separately. See flyers above. For July 5 registration visit <https://rb.gy/lyfrg> For July 12 registration visit <https://rb.gy/w76i0>

Field Tour July 5th – Starting at Haggerty Creek – BOTHWELL

- At this event you will likely see:
- Naïo Oz, Dino and Ted
 - Raven OMNIPower
 - Korechi HCT
 - Korechi HCW with electric mower
 - Soil optics sensor
 - Drones
 - Carbon Robotics LaserWeeder™
 - AgroIntelli Robotti

Start time: 8:30 am
Cost: No cost – but registration required for lunch numbers
Starting location: 42.70716621989582, -81.89129630000001
To register: 2023 AgRobotics Jul 5 Field Tour (site.com)

Field Demonstration July 12th – Starting at Ontario Crops Research Station – BRADFORD

- At this event you will see:
- Naïo Oz
 - FarmDroid FD20

Start time: 10:00 am
Cost: No cost – but registration required for lunch numbers
Starting location: 44.04067536938701, -79.59760455897649
To register: 2023 AgRobotics Jul 12 Demo Day (site.com)

Questions?: e-mail, text or call Kristen Obeid (519) 965-0107

Source: AgRobotics Working Group June 12, 2023 invitation

AgRobotics Demo Day

Wednesday July 12, 2023 10 am – 2 pm

Join the AgRobotics Working Group for in-field demonstrations of the Naïo Oz and FarmDroid FD20

Start: Ontario Crops Research Centre – Bradford
 44.04068308177228, -79.59766893199415

Final: Smith Gardens – East Gwillimbury
 44.17341029947581, -79.50176975058397

Lunch and refreshments will be provided

RSVP Required: [2023 AgRobotics Jul 12 Demo Day \(site.com\)](https://2023.AgRobotics.Jul.12.Demo.Day.site.com)

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High Tunnel. Haygrove tunnel for sale. Approximately 21,000 square feet. Will be sold at live auction. Wednesday July 5, 2023, 3:30 pm. Twilight auction. Martintown, Ontario. Nick and Denise Body. For more info visit Peter Ross Auction Services or call Nick 613-528-4670.

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CROP PROTECTION

Spray drift: A lesson in physics from Isaac Newton



DR. JASON DEVEAU

For sprayer operators to reduce the potential for pesticide drift, they must be situationally aware, willing to make operational changes, and they must possess a basic understanding of why drift happens – and that means physics. Sir Isaac Newton was 23 years old when he postulated, “An object in motion remains in motion at constant speed and in a straight line unless acted on by an unbalanced force.” He was telling us that the more we can control or compensate for the forces that influence a droplet’s movement, the more likely we can direct where it will end up. Here’s a run-down on some of those forces and what operators can do about them.

Droplet size

Coarser droplets have more mass, which means they have more inertia; they are less prone to deflection by wind, more prone to deflection by gravity, and therefore most likely to travel ballistically (e.g. like a cannonball). Coarser droplets also have smaller surface-to-volume ratios. This means they resist evaporation on hot and dry days, staying on course and remaining wet longer on target surfaces (often associated with better product performance). Switching to nozzles that produce a coarser spray will reduce drift potential but may also negatively affect coverage by reducing droplet count, canopy penetration and retention. Operators should understand how much coverage is required for whatever they are spraying and be prepared to switch to a coarser spray as the situation dictates.

Distance to target

The longer a droplet remains in the air, the more opportunity for outside forces to affect its trajectory. Increasing pressure can increase droplet velocity, but it also increases spray volume (on non-PWM sprayers), reduces the average droplet size, and does not have an appreciable influence on the finer, more drift-prone droplets. A far better approach is to bring nozzles as close to the target as practicably possible. In other words, horizontal boom sprayer operators should lower the boom and airblast sprayer operators should invest in towers, adjust deflectors, and consider pruning or hedging practices.

Travel speed

Consider the following metaphor. If you dropped a ball from the window of a moving car, it would follow a downward/forward vector. The faster the car, the greater the forward component. How would wind play a role in this? Windspeed and travel speed are additive, which means that driving into a headwind adds travel speed to wind speed, increasing the chance of deflecting the ball – or in the case of a sprayer, displacing droplets from the swath and leaving them hanging in the air.

Those suspended droplets are also subject to turbulent eddies created by the sprayer chassis and wheels that swirl in unpredictable ways and can propel them upwards, increasing their distance to target. Increased travel speed also tends to amplify boom yaw, necessitating higher booms to prevent impacts and increasing a droplet’s distance to target. Operators sometimes resist slowing down because of the negative effect on their work rate. However, this can be offset by more efficient filling and cleaning practices and/or from an improved yield arising from better coverage uniformity. Slowing down works.

Wind and atmospheric stability

Spray droplets can be displaced from the swath by the wind. The distance they drift depends on apparent wind speed and droplet size. On moderately (not excessively) windy days,



operators can predict the direction spray might drift and plan accordingly when there are sensitive areas to protect. If the options are available, wind can be blocked by shrouds or out-competed by air assist. However, simply reducing the distance to target and increasing droplet size can be effective practices. In any case, some proportion of the spray will always remain airborne, and its fate will depend on atmospheric stability. (See Figure 1).

On warm, sunny days, turbulence will ground airborne droplets or dilute them in a process called atmospheric mixing. As finer droplets gain altitude and spread out, the odds of downwind deposition are reduced. On the other hand, calm conditions tend to coincide with a condition known as a temperature inversion, where the air is warmer with elevation instead of colder, as is typical. In such a situation, thermal convection will not occur, and finer droplets can hang in the air for long periods of time. This makes them susceptible to light, lateral winds that can carry them long distances or downhill, according to topography. Inversions are more likely to occur between evening and early morning in humid and cloudless conditions. Inversions are of particular concern when applying volatile products that can off-gas into the air long after they are applied. Operators should avoid night-spraying practices that might coincide with an inversion. Understanding the physics of how droplet size, travel speed, distance to target, and environmental conditions affect drift potential empowers a sprayer operator to act accordingly. This sometimes

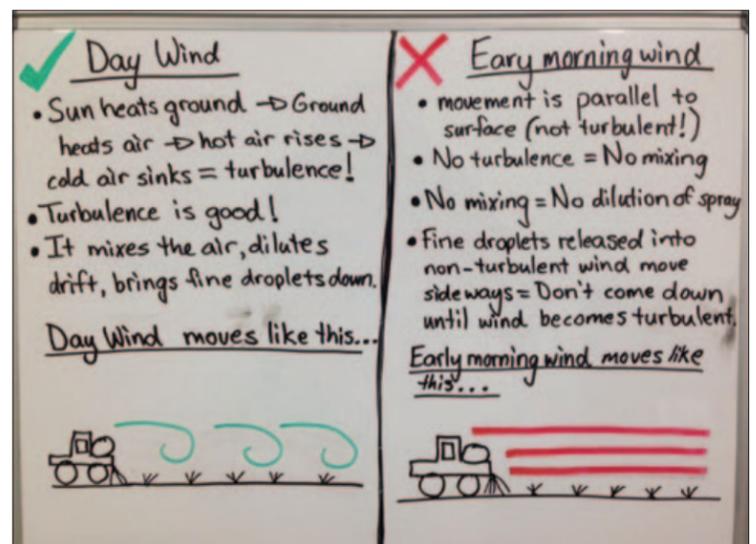


Figure 1: Image shared with permission from Mary O'Brien (Mary O'Brien Rural, AU)



requires compromise, and ultimately (however inconveniently), an operator may have to halt spraying until conditions improve.

For more information on spraying best practices, go to www.sprayers101.com and enter the keyword “drift” in the search field.

Additional Resources

1. OMAFRA Fact sheet –

Pesticide Drift from Ground Applications

2. Sprayers 101 for resources on sprayer cleaning and the dangers of temperature inversions.
3. OFA Information Sheet – You Suspect Herbicide Drift – Now What?

Dr. Jason Deveau is the application technology specialist with the Ontario Ministry of Agriculture, Food and Rural Affairs.



Non-Stop Action – 24 / 7

SCORPIO ANT & INSECT BAIT

Scorpio is a soil applied insecticide containing spinosad in a highly compressed wheat pellet formulation that requires no mixing or spraying. It can be used around fruits, vegetables, ornamentals, flowers, turf and other sites.

Scorpio provides exceptional protection against many varieties of ants and cutworms, and limits damage caused by spotted wing drosophila and wireworm.

SAFE - approved for organic use.
EFFICIENT - works 24 / 7 for up to 4 weeks.
EFFECTIVE - controls pests without the residue.

SCORPIO is a trademark of W. Neudorff GmbH KG



CROP PROTECTION

Success insecticide label expanded to help manage cabbage maggot on rutabaga grown in Ontario and Québec

JOSH MOSIONDZ

The Pest Management Regulatory Agency (PMRA) recently announced the approval of an Emergency Use Registration for Success insecticide for suppression of cabbage maggot on rutabaga in Ontario and Québec ONLY from June 8th, 2023 – June 7th, 2024. Success insecticide was already labeled for management of cabbage maggot on rutabaga in Canada using a foliar application however the Emergency Use Registration allows for use of Success as a soil drench in addition to the foliar application to target maggots in the root zone. This Emergency Use Registration was led and submitted by the Ministère de l'Agriculture, des Pêcheries et de

l'Alimentation du Québec 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 insect management decisions within a robust integrated insect management program and should consult the complete label before using Success insecticide.

For a copy of the Emergency Use Registration label in Ontario or Québec, contact your local vegetable crops specialist, your regional supply outlet, or visit the PMRA label site [/www.hc-sc.gc.ca/cps-spc/pest/registrant-titulaire/tools-outils/label-etiq-eng.php](http://www.hc-sc.gc.ca/cps-spc/pest/registrant-titulaire/tools-outils/label-etiq-eng.php)

Josh Mosiondz is minor use coordinator, OMAFRA, Guelph.

Crop	Target	Rate (mL product/ha)	Application Information	PHI (days)
Rutabaga	Suppression of cabbage maggot	182 - 364	Apply Success Insecticide in a soil drench at the rate of 182 mL/ha to 364 mL/ha (87 g/ha to 174 g/ha a.i.). For 76 cm (30-inch) plant row spacing apply Success at 4 mL to 8 mL per 305 linear metres (1000 linear foot). Do not make applications less than 4 days apart. Apply a maximum of 3 applications. Do not apply more than 1.1 L/ha of Success per year. Optimum application timing is based on field scouting. Begin applications when adult activity is observed in or near the field.	3

Posterity fungicide label expanded to help manage Fusarium internal rot on greenhouse peppers and Botrytis grey mold on greenhouse lettuce

JOSH MOSIONDZ

The Pest Management Regulatory Agency (PMRA) recently announced the approval of a minor use label expansion registration for Posterity fungicide for suppression of Fusarium internal rot on greenhouse pepper and Botrytis grey mould in Canada. Posterity fungicide was already labeled for disease control on a wide range of crops in Canada. These minor use proposals were submitted by Agriculture & Agri-Food Canada, Pest Management Centre (AAFC-PMC) as a joint project with the United States Department of Agriculture (USDA) IR-4 project as a result of minor use priorities established

by growers and extension personnel.

The following is provided as an abbreviated, general outline only. Users should be making disease management decisions within a robust integrated disease management program and should consult the complete label before using Posterity fungicide.

For a copy of the new minor use label contact your local greenhouse vegetable crops specialist, your regional supply outlet, or visit the PMRA label site <http://www.hc-sc.gc.ca/cps-spc/pest/registrant-titulaire/tools-outils/label-etiq-eng.php>

Josh Mosiondz is minor use coordinator, OMAFRA, Guelph.

Crop(s)	Target	Rate (L product/ha)	Application Information	PHI (days)
Greenhouse Peppers	Suppression of Fusarium internal rot	0.625	Apply no more than 2 foliar and no more than 2 drench applications for a maximum of 3 applications or total of 375 g ai/ha per crop cycle. Optimal control is achieved with a program of multiple applications. Apply in sufficient water volume to obtain thorough coverage. For foliar application a minimum spray volume of 150 L/ha is recommended. Apply when plants are flowering or when conditions are favourable for infection. DO NOT apply to peppers intended for transplant out to fields.	0
Greenhouse Lettuce	Suppression of Botrytis Grey Mold	1.0	Apply in sufficient water volume to obtain thorough coverage. For foliar application a minimum spray volume of 150 L/ha is recommended. Increase water volumes as the canopy density increases. Apply when conditions are favourable for infection. DO NOT apply to lettuce intended for transplant out to fields	0

Emergency use registration granted for halo blight on hops

The Pest Management Regulatory Agency (PMRA) recently announced the approval of an Emergency Use Registration (EUR) for Fullback 125 SC fungicide for control of halo blight (*Diaporthe humulicola* – sometimes referred to as *Diaporthe* leaf spot/blight) on hops in numerous provinces in Canada. This EUR for Fullback 125 SC fungicide on hops can be used only in Ontario, Québec, Saskatchewan, Manitoba and Prince Edward Island from June 1, 2023, until May 31, 2024.

Halo blight is a new disease affecting hops in northeastern North America since 2017. Symptoms begin as brownish-grey, elliptical lesions on leaves that may have white margins. Severe disease can lead to leaf browning, reduced cone development, and cone browning and shattering. Significant losses from this disease have been reported from hopyards in Québec and the northeastern U.S. *Diaporthe* leaf blight was first observed in an Ontario hop yard in June 2020, and has since been

reported from multiple hop yards across the province.

Fullback 125 SC fungicide was already labeled for management of diseases on a wide range of crops in Canada. This use will also be addressed as a future label expansion by an Agriculture and Agri-Food Canada – Pest Management Centre (AAFC-PMC) submission through the regional upgrade selected by Québec at the 2022 AAFC-PMC 'A' priority setting workshop (pending favourable trial results and subsequent submission evaluation by PMRA). This EUR request was initiated by Québec with support from the Ontario Hops Growers' Association in response to significant yield losses and spread of halo blight in recent field seasons.

The following is provided as an abbreviated, general outline only. Users should be making disease management decisions within a robust integrated disease management program and should consult the complete emergency use label before using Fullback 125 SC fungicide.

Crop	Target	Rate (mL product/ha)	Application Information	PHI (days)
Hops	Control Halo Blight (<i>Diaporthe humulicola</i>)	731 – 1024	Apply in sufficient water volume to provide uniform coverage, when conditions are favourable for disease development. Do not apply more than 2048 mL per hectare/season (maximum 2 applications) and do not exceed 1024 mL/ha in a single application. Disease control will be reduced if rain occurs with 2 hours of application. 12 hour restricted entry interval.	17

For a copy of the emergency use label, visit the PMRA label site. Ontario growers may contact Melanie Filotas, horticulture IPM specialist, OMAFRA, Simcoe, melanie.filotas@ontario.ca, or Josh Mosiondz, provincial minor use coordinator, OMAFRA, Guelph, joshua.mosiondz@ontario.ca. Non-Ontario growers from participating provinces may contact their local Provincial Minor Use

Coordinator or provincial crop specialist(s). Alternatively, you may contact your regional supply outlet or FMC of Canada Limited representatives.

Source: ONSpecialtyCrop June 5, 2023 newsletter

Optimize Fruit Bulking with “Science Driven Nutrition”™



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

A proper nutrition plan ensures cohesiveness throughout the growing season. Bulking is the period of time when growers must focus on facilitating the production and movement of sugars into the cell structures. During cell division, the crop timing prior to the fruit bulking window, growers increased calcium applications to support fruit cell development and fruit firmness. When this opportunity to introduce calcium into the fruit ends four-to-six weeks post petal fall, maintenance applications using products like Agro-K's **Vigor Cal™** or **Calcium 7%**, are required to support tree growth and fruit firmness.

In addition to supplemental calcium, the apple tree requires an increased amount of energy to support the rapid leaf expansion and shoot growth that occurs at this time. Agro-K's **AgroBest 9-24-3** is an excellent source of phosphorous, which is a key nutrient behind the energy driving healthy cell development. Zinc assists with the leaf and vascular tissue development on the new growth, while magnesium, manganese, sulfur and iron synergize to maximize chlorophyll production and photosynthesis. Agro-K's **Zinc Plus +5** is a great example of foliar products containing multiple micro nutrients designed to support leaf development and function during fruit bulking.

Potassium, which helps to move sugars throughout the plant and regulates plant moisture through the opening and closing of the stomata, is one of the most important nutrients during this time. The apple crop's potassium needs increase exponentially during the summer months. Fruit color, weight and uniform maturity at harvest all hinge on maintaining proper potassium levels during cell bulking with products like Agro-K's **KDL** and **Potassium 0-0-6**. Excessive nitrogen, an inhibitor to fruit color, must also be avoided during this crop window.

Science-Driven Nutrition™



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

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

For more information on using Science-Driven Nutrition™ to help your crop flourish throughout the season, visit www.agro-k.com.

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