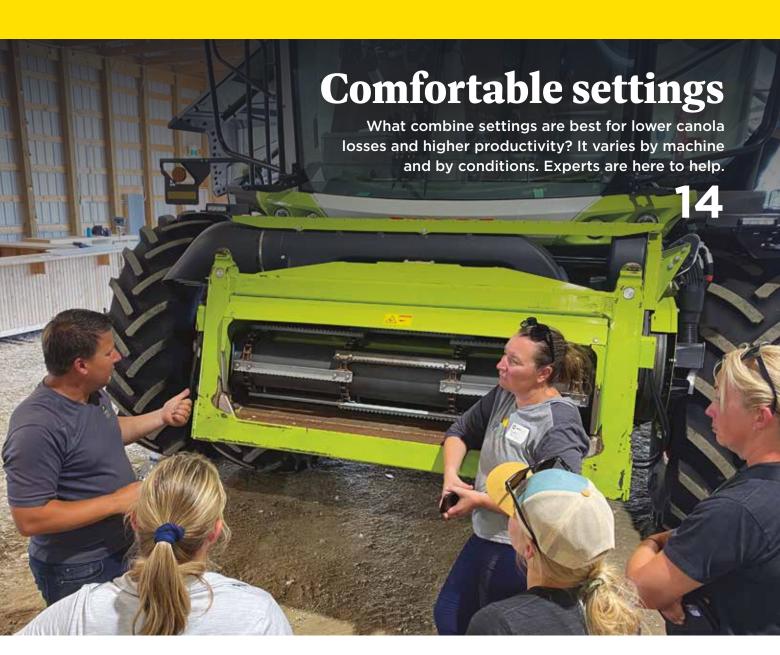


**\$\$** Sask**Canola** 





# CANOLADIGEST



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#### Why more farmers trust InVigor hybrid canola.

Season after season, you count on InVigor® hybrid canola to help you maximize yields. We appreciate that you've made InVigor Canada's most trusted canola seed, and it's a responsibility we don't take lightly. For 2025, we're proud to add three new early-maturing hybrids to our lineup – all of which give you consistent performance, clubroot resistance, and patented Pod Shatter Reduction technology.

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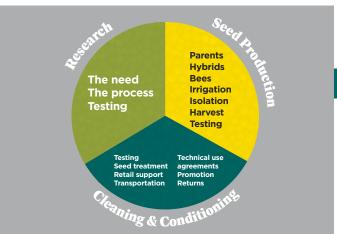
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It takes years to research and develop new canola seed cultivars. After that, it takes logistically complicated steps to produce and deliver commercial seed that meets the specifications of individual farmers.



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# Calendar 🕮

#### Alberta Canola Grower Engagement Meetings

November 21 - *Lethbridge* November 26 - *Lacombe* November 28 - *Camrose*  December 11 - *Grande Prairie*December 18 - *Web Broadcast*albertacanola.com/events

#### Canola Week 2024

December 3-5
TCU Place, Saskatoon,
Saskatchewan
canolacouncil.org/event/
canola-week-2024

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roductive soil is healthy soil. If farmed soil is not productive, it needs help. The soil health equation doesn't need to be more complicated than that.

Cornell University, in its Comprehensive Assessment of Soil Health, provides a long list of potential soil health indicators, including 17 physical, 11 biological and 15 chemical. Physical indicators include texture, available water holding capacity and wet aggregate stability. Biological indicators include root pathogen pressure, microbial respiration rate and active carbon. Chemical indicators include macro and micronutrients. pH and salinity.

The Soil Health Institute in North Carolina whittled the list down to four soil health indicators:

- Soil organic carbon concentration
- Carbon mineralization potential
- Wet aggregate stability
- Available water-holding capacity

Some think we should agree on those four and move on. But Jacqueline Hannam, U.K. soil scientist and president of the British Society of Soil Science, has a problem with one particular indicator.

"The list is a good start but, for example, we have productive or healthy soils that have a low water-holding capacity," she says. Sandier soils ideal for growing nice-shaped vegetables might not be "healthy", per this definition, because they don't have high water-holding capacity.

David Lobb is a soil scientist and professor of landscape ecology at the University of Manitoba. Lobb is also heavily involved in international discussions

and hand-wringing about soil health. He is currently vice chair of the Food and Agricultural Organization of the United Nation's (FAO) Intergovernmental Technical Panel on Soils. FAO members as well as politicians, farmers and media really want a simple definition of soil health, he says. But everyone wants a different definition and no one agrees. It goes around and around in circles.

Lobb is frustrated to the point where he doesn't even want people using the term "soil health", He wouldn't let me say it during a July visit to his department at the university. I had to sneak away from him to ask one of his colleagues about soil hea-... I mean, umm, you know.

Lobb has settled on two metrics: soil organic carbon and crop growth. Soil carbon is a good indicator of soil organic matter and soil "life". And if we can measure and improve soil carbon, farmers can get paid for soil carbon increases. But the key general indicator, he says, is crop growth. If a piece of land can produce crops as well or better than it did in the past, that soil is healthy. If productivity starts to decline, the soil may have issues.

We have a lot of eroded hill tops on the Prairies. A lot. Productivity on those hill tops can be very low. Lobb is a big proponent of moving soil from low areas back to the high ground from which it came. That can fix hill top productivity in a way that would take decades using any other method, he says.

Jim Tokarchuk, executive director of the Soil Conservation Council of Canada, gives an A+ to the Senate of Canada's new report Critical Ground: Why Soil is Essential to Canada's Economic, Environmental, Human and Social Health. He likes how the

report draws attention to the value of soil, acknowledges regional differences and recommends an economic and social lens for policies and programs.

I called Tokarchuk to see what an extension-minded person like me could do to help. The problem, he says, is that the world, and even Canada, has hundreds of different "healthy soils". That means no consensus on healthy parameters and therefore no consensus on how to measure soil health. The conundrum, Tokarchuk says, is how to explain soil health to landowners in a way that makes sense. And in a way that will inspire action today while politicians and planners around the world dance around a definition. "Measurement is critical," Tokarchuk says. He agrees with Lobb that the simplest measure is the ability for an area of soil to produce biomass and crop yield. And, he adds, taking Lobb a step further, for soil to produce that yield profitably.

Tokarchuk says the best thing we can do to preserve the productivity of Canadian soils is to identify those areas within a field or farm where productivity and profit potential are low, figure out the root cause or causes, and take action to fix the problem. If the fix is not economical, put those acres into long-term forage or trees.

Productive soil is healthy soil. If farmed soil is not productive, it needs help.





# **Growers Wanted to Represent Alberta Canola in Four Regions**

#### October 31st Deadline

The Alberta Canola director nomination cycle is now open for regions 3, 6, 9, and 12 until October 31, 2024.

It is essential for all twelve regions of Alberta Canola to have farmer representation during board discussions. Decisions on government policy and regulation, research funding, and other issues affecting the long-term success of canola farmers in Alberta should reflect the perspectives of growers from every region.

The terms for incoming directors will begin following the Annual General Meeting on January 22, 2025.

To learn more about the regions, the roles of directors, and the nomination process, please visit albertacanola.com/nominations or contact the Alberta Canola office at 780-454-0844.

# GRANDE PRAIRIE LLOYDMINSTER RED DEER

#### Who can become a director?

Anyone who has paid a service charge on canola to Alberta Canola since August 1, 2022, is an eligible producer and can be nominated to serve as a regional director. Eligible producers can be individuals or representatives of a corporation, partnership, or organization. To be nominated, eligible producers must grow canola within the defined region, though they do not need to reside there.

Nominations for director positions must be submitted to the Alberta Canola office by October 31, 2024, at 4:00 p.m.

For complete details on Alberta Canola's regions, the roles of directors, and to obtain a nomination package, visit albertacanola.com/nominations or contact the Alberta Canola office at 780-454-0844.





## **Alberta Canola Grower Engagement Meetings**

Alberta Canola is hosting a series of Grower Engagement Meetings across Alberta. As an organization that works for farmers, it is crucial for us to hear directly from you.

These meetings are your chance to learn about and provide feedback on

Alberta Canola's activities including research, policy & advocacy, and public education & promotion in addition to guest speakers.

For details on the 2024 Grower Engagement Meetings and to register, visit albertacanola.com/events.

November 21 - Lethbridge

November 26 - Lacombe

November 28 - Camrose

December 11 - Grande Prairie

December 18 - Online Broadcast

Alberta Canola's Flagship Event: Engage, Empower, Grow Together

## Alberta Canola Conference in Red Deer for 2025

Featuring Alberta Canola's 35th Annual General Meeting and Research Symposium | January 22 & 23, 2025

Join us for the Alberta Canola Conference, featuring the Annual General Meeting and Research Symposium, in Red Deer. Alberta.

On Wednesday morning, January 22, Alberta Canola will hold its 35th Annual General Meeting, open to all conference attendees and livestreamed for remote participation and voting.

The Research Symposium on Thursday, January 23, will feature updates from a panel of researchers discussing current projects and exploring new research areas.

This interactive event offers farmers and agronomists the chance to help shape the Alberta Canola's research priorities.







# **Call For Board Nominations**

SaskCanola is accepting nominations to fill four positions on its board of directors. This is an important opportunity to influence decisions that will guide the future of canola and the agriculture industry in Saskatchewan. We seek diverse candidates who are characteristic of our members at large (Saskatchewan oilseed farmers) to share their perspective at our board table.

For a detailed breakdown of director responsibilities, preferential attributes and time commitment, visit saskcanola.com/governance-regulations.

Application process: If you are a registered canola and/or flax producer (i.e. you have sold either canola and/or flax and paid levy to SaskCanola and/or SaskFlax anytime since August 1, 2022) and would like to play an active role in Saskatchewan's oilseed industry, please visit saskcanola.com to download the nominations form.

Submit your completed package to the returning officer by Monday, September 30, 2024 at 12:00 noon CST.



SaskCanola's Nominations Committee is on standby should you have further questions about joining the Board:

- Anthony Eliason 306-867-4684
- Jon Fehr 306-831-7141
- Margaret Rigetti 306-577-8457
- Ed Shafer 306-236-8167

# **Disease Testing Program**

SaskCanola, in collaboration with the Saskatchewan Ministry of Agriculture, is proud to once again offer free disease testing to Saskatchewan farmers. This initiative ensures that growers have access to essential tools for detecting the most devastating canola diseases on their farms. The current disease monitoring program encompasses testing for verticillium stripe, clubroot and blackleg.

Farmers are encouraged to collect soil and stem samples in late summer or around swathing time. Collect soil samples from high clubroot risk areas such as field entrances and low spots. Canola plants suspected of blackleg

infection should be sampled at 60 per cent seed colour change, cutting below the crown into the root material to look for black discolouration. These samples can be dropped off at local Ministry of Agriculture regional offices or Discovery Seed Labs in Saskatoon. The first 200 applicants are eligible for a free blackleg and verticillium stripe test, requiring only one stem sample to test for both diseases.

Results will be emailed to participating farmers in early winter. Data will be shared with relevant organizations strictly for monitoring research.





## **QUARTER 2-**

# **Key Takeaways Recap**



IN AN EFFORT TO SHARE KEY TAKEAWAYS FROM DAY-TO-DAY RESPONSIBILITIES, SASKCANOLA HAS STARTED FEATURING BOARD AND STAFF INSIGHTS GATHERED FROM MEETINGS, CONFERENCES, INTERVIEWS AND OTHER ENGAGEMENTS.

HERE ARE FOUR RECENT HIGHLIGHTS:

#### Subscribe to SaskCanola's New Texting Service

SaskCanola's texting service sends farmers weekly oilseed market outlook reports and canola agronomy updates (Canola Watch) tailored to the current stage in-season, plus event

notifications and urgent news. Farmers can also text our dedicated number to start a two-way conversation with staff to address questions they have in the field.





#### Views from the Field Article

SaskCanola's board chair, Keith Fournier, was one of five representatives of Canadian crop grower organizations to share his thoughts with Top Crop Manager. The magazine asked Fournier and others what factors and trends are likely to influence crop production over the next decade and how to capture opportunities and overcome the challenges ahead. Fournier highlighted both the importance of ongoing investment in research and the valuable role of crop-related research. These include developing better crop varieties to help growers keep ahead of the game on things like changing disease and insect problems, and developing more efficient practices for managing fertilizers, land and water.

#### **Thirteen New Projects Underway for Canola** Agronomic Research Program

SaskCanola, Alberta Canola, Manitoba Canola Growers and Western Grains Research Foundation (WGRF) have collectively committed over \$3.7 million to fund 13 new Canola Agronomic Research Program (CARP) projects. These projects will investigate management solutions for various threats, including blackleg, clubroot, flea beetles, midges, sclerotinia, verticillium stripe and other biotic and abiotic challenges.

#### **Agronomy Resources**

Visit the Agronomy Resources section of our website, saskcanola.com, to access the latest insecticide options, herbicide carryover, and split nitrogen applications documents and more.

SaskCanola's collaborative work with other commissions aims to ensure the most complete and relevant information is available and easily accessible for farmers. We are committed to unifying our efforts to enhance crop management strategies and drive informed decision making. By working together, we aim to equip growers with the tools they need to achieve optimal results.

Scan the QR code to visit SaskCanola's agronomy resources library.



"There is huge value in pooling levy dollars to invest in research projects that address canola agronomic issues that farmers in all three provinces face, WGRF's investment is an

added bonus to the funding equation, as it allows levy dollars to stretch further for more important research to occur."

Keith Fournier, SaskCanola Board Chair



# Growing opportunities:

# MCGA awards scholarships supporting post-secondary education

Congratulations to this year's winners! We wish you all the best as vou pursue your chosen careers.

Each year, Manitoba Canola Growers Association (MCGA) proudly presents five \$1,000 scholarships to students who are graduating from grade 12. To qualify, they need to live on, work for, or have guardians that work for, a farm that is a member of MCGA and plan to attend post-secondary education in any field within two years of graduating.

Students submit their applications, which are judged by an independent panel, based on academics, their personal connection to canola, school and community involvement, references and an essay submission.

We were blown away by a record number of high-quality applications this year.



**Emilyn Nestibo** Goodlands, MB

Emilyn is enrolled in the Bachelor of Science (Agriculture) Plant Biotechnology Specialization program at University of Manitoba.



**Laura Delichte** St. Alphonse, MB

Laura is enrolled in the Diploma in Agriculture program at University of Manitoba.



**Madisyn Robertson** Neepawa, MB

Madisyn is enrolled in the College of Agriculture & Bioresources - Bachelor of Science in Agriculture program at University of Saskatchewan.



Raylyn Koshowski Dauphin, MB

Raylyn is enrolled in the Faculty of Kinesiology at University of Calgary.



Zenith Vanstone Miami, MB

Zenith will continue her education at Olds College of Agriculture and Technology.

## Where are they now?

#### Ashlyn Kirk - 2018 recipient

Ashlyn grew up on a family farm outside of Hamiota, Manitoba. She completed a BSc Honours in Biology with a focus on cellular and molecular biology (in 2022) and an MSc in Biology specializing in microbiology (in 2024).



She is currently working as a lab manager for the Institute for Microbial Systems in Society at the University of Regina.

"I was very honoured to be a recipient of the MCGA high school scholarship. Receiving this award validated my hard work at school and in the community, which inspired me to continue this dedication in my post-secondary education. Thank you very much for your continued contribution to supporting students in rural Manitoba! These kinds of opportunities make a huge difference in helping us to reach our goals."

#### Russell Pauls - 2018 recipient

Russell was raised on a farm near La Riviere, Manitoba. He graduated from the Agribusiness Diploma program at Assiniboine Community College in May 2020.

After graduating Russell worked in ag retail before writing his Certified Crop Adviser exams in the winter of 2021. Russell works for Field 2 Field Agronomy as a junior agronomist and helps on the family farm operation.

"Receiving the MCGA high school scholarship was a significant honour. I would like to give a heartfelt thank-you to Manitoba Canola Growers for awarding this scholarship. and I would also like to thank MCGA's farmer-members. It is due in no small part to your check-off dollars that people like myself and others are able to receive assistance in attaining an education and advancing our careers in the field of agriculture."



# **Manitoba Canola Growers**

# take 12 researchers to camp

Twelve researchers got on a bus and toured six south-central Manitoba farms June 25 and 26, interacting face-to-face with the farmers who rely on their science.

"We host this Research Camp each summer to bring researchers out to the farm so they can see first hand the challenges that we're trying to address," says Amy Delaquis, research manager with Manitoba Canola Growers. "When researchers meet the farmers who pay for the research

and rely on the results, we hope it elevates their overall understanding of canola production in Manitoba. We want the researchers to see why their work matters."

Dilshan Benaragama, one of the campers, appreciated the opportunity to talk with farmers and understand how they make farming decisions. "These conversations gave

me the idea that research we conduct should have a greater economic impact for farmers to do changes on their farms," says the University of Manitoba crop production chair in the Department of Plant Sciences.

Leanne Koroscil, another camper, is the manager of EMILI's Innovation Farms. Koroscil grew up on a farm in Manitoba and works on a farm today, yet she still benefitted from the Research Camp experience. "My highlight was the opportunity to connect my experiences in digital agriculture with the work of researchers and producers at the camp, all while learning

about the exciting research and progress happening in the canola industry," Koroscil says.

The camp made three farm stops on day one and three on day two. Campers met farmers Jeremie Lussier from Morris, Jackie Dudgeon-MacDonald from Darlingford, Andy and Terry Keen from Kaleida, Sally and Jennie Parsonage from Greenway, Samantha Devloo and Tegan Jonk from Bruxelles, and Paul Wurtz from Starlite Colony at Starbuck.

Andy and Terry Keen described for the campers their experiences with clubroot and the regenerative practices they employ within their cattle operation. "Making that connection back to the farm, whether it be for researchers, students or neighbours, is one of our farm goals," Andy Keen says. "When people stay in touch with farms, it's for the greater good

of the entire industry. We like to be an open book to share challenges and successes."

Edel Pérez-López is a clubroot researcher and associate professor at the Université Laval in Quebec. He posted this tweet on X: "I think every researcher working for growers should have this kind of experience. We learn so much about where our food comes from, the struggles behind it, and how our research can help overcome them."

Amy Delaquis tweeted a reply: "This is the exact reason Manitoba Canola Growers put on Research Camp each year."



## **Congratulations to Red River College scholarship winners**



Each year, MCGA supports professional baking students at Red River College Polytechnic with a \$1,000 scholarship to help continue their professional growth. Students enter a bake-off competition by creating an original recipe using canola oil. These achievements are formally recognized at the annual School of Hospitality and Culinary Arts Awards Reception.

Congratulations to this year's winners! First place winner was Emily Chevrefils, second place was Toyosi Akinlade and third place was Aiden Mulvihill. Special thank you to our judges Chef Austin Ryan from Cake-ology and Food and Travel Writer Shel Zolkewich.

(Left to right): Carrie Livingston, Communications Coordinator at MCGA, pictured with judge Shel Zolkewich, scholarship winners Emily Chevrefils, Aiden Mulvihill and Toyosi Akinlade and judge Chef Austin Ryan.

# **Animal breeders** blazed the trail on complex traits

Animal geneticists pioneered new tools to tackle complex traits. That expertise is coming to crops and could mean improvements to complex traits such as heat tolerance and nutrient use efficiency in canola.

BY JAY WHETTER

ho wants canola with heat tolerance to protect flowers and reproduction during summer heatwaves? We do! Who wants canola with enhanced drought tolerance, water use efficiency and nutrient use efficiency? We do!

Many genes manage these complex traits, which makes them hard to tackle. But animal scientists figured out two decades ago how to select for complex traits. Canola researchers are catching on.

Theo Meuwissen, animal scientist at the Research Institute of Animal Science and Health in The Netherlands, was a trailblazer. In an article, "Genomic selection: A paradigm shift in animal breeding" in the journal Animal Frontiers, Meuwissen wrote that complex traits in livestock are often determined by thousands of genes and the effect of each individual gene was "usually too small to be statistically significant and so were ignored." Meuwissen helped introduce the idea of genomic selection, which estimates the effect of all genes within a trait, not just the statistical significance (or lack thereof) of one gene at a time. The Animal Frontiers article says genomic selection feeds on three technological breakthroughs: the development of the genomic selection technology, the discovery of massive numbers of genetic markers, and high-throughput technology to genotype animals for thousands or hundreds of thousands of markers in a cost-effective manner.

The Global Institute for Food Security (GIFS) at the University of Saskatchewan in Saskatoon recently hired Hakimeh Emamgholi Begli, a quantitative geneticist, to work on genomic selection in common Western

"The animal industry has really embraced genomic selection and the modern breeding toolkit to significantly enhance their rates of genetic gain and across multiple traits."

- Nancy Tout

Canadian crops, including canola, wheat, barley and peas. Emamgholi Begli will use data analytics to find the package of genes connected with complex traits, and estimate the heritability and genetic and phenotypic corrections between multiple traits.

Nancy Tout, chief scientific officer with GIFS, says Emamgholi Begli's background is a "source of strength for our team and the plant science industry at large," adding: "The animal industry has really embraced genomic selection and the modern breeding toolkit to significantly enhance their rates of genetic gain and across multiple traits."

Before coming to GIFS, Emangholi Begli worked on application of genomic selection in poultry in Europe. She also worked at the Centre for Genetic Improvement of Livestock at the University of Guelph. At Guelph, she investigated different genomic methods that would improve egg production over the laying life of a turkey hen. She brings those skills to GIFS.

GIFS hosted a webinar describing the potential benefits of genomic selection, a key part of its new accelerated breeding program. In the webinar, presenters provided examples of genomic selection benefits from Australia.

DataGene, a division of Dairy Australia, used genomic selection to improve complex traits in fertility, feed efficiency, heat tolerance, mastitis resistance and gestation length in dairy cows. From 2010 to 2020, rapid introduction of numerous complex traits caused a sharp uptick in balanced performance index (BPI) for Australian dairy cattle. As noted on the Dairy Australia website, BPI measures "genetic merit for the combination traits that contribute to a profitable business."



Genomic selection will help

Western Canadian farmers

- Nancy Tout

"close the productivity gap".

#### The challenge with plants

Emamgholi Begli says challenges specific to plants include the complexity of traits influenced by environmental factors.

"With plants, we may find complex traits that work in one environment will not produce the same in another environment," she says. "In comparison, animals benefit from simpler genetic architectures and controlled breeding environments, making genomic selection implementation relatively straightforward."

Also with plants, some complex traits are not easily passed from one generation to the next. These factors complicate the accuracy of genomic predictions and require robust computational models and large-scale genomic data. Part of the genomic selection process is to work with complex traits that are "heritable", find markers for the important traits, and use rapid analysis to check seeds for the presence of those markers. That way only seeds with the trait go on to greenhouse or field trials.

"Despite these challenges, genomic selection is a promising technique in plant breeding," Emangholi Begli says. "With genomic selection, better selections are hitting the field at a better rate."

In a 2023 report, Farm Credit Canada (FCC) senior economist Isaac Kwarteng wrote: "The low-hanging fruits are gone for growing our productivity. We recorded sensational increases in average annual productivity growth from 1971 to 2000, then hit a plateau." Canadian agriculture productivity growth was 1.4 per cent from 2011 to 2020 and is forecast at 1.0 per cent for 2021 to 2030, Kwarteng reports. To paraphrase the report's conclusions: The decline in productivity growth represents a major challenge, but also presents Canada with an "amazing opportunity".

Putting its money where its mouth is, FCC earlier this year contributed \$5 million to the GIFS accelerated breeding program. It wants to see Canadian breeders embrace the techniques deployed for over 20 years in dairy and for more than a decade in crops such as corn and soybean through large corporations. "The FCC Accelerated Breeding Program at GIFS will provide public and private breeders access to the same technologies not routinely available for crops and livestock important to Canada," FCC said in its announcement.

GIFS works with several dozen public and private organizations to accelerate innovation across the value chain, Tout says, but specific agreements are confidential.

We do know that Emamgholi Begli is doing work on canola. "We've established our capacity, capabilities and competencies to launch our accelerated breeding program using our established

expertise on canola," Emamgholi Begli says, "and are now excited to expand this across a number of crops, including pulses and cereals."

Chad Koscielny, Corteva's North America canola breeding lead, describes how private canola seed companies are

also using the technology. "Corteva has made remarkable gains in corn using new breeding technologies. We're applying the same technology to our canola breeding program and are seeing similar promising results within our R&D pipeline," Koscielny says.

Corteva has been using genomic selection to identify and select for complex traits in canola for several years now and Koscielny says "the progress has been exciting to see."

—Jay Whetter is the editor of Canola Digest



# The process to produce

It takes years to research and develop new canola seed cultivars. After that, it takes logistically complicated steps to produce and deliver commercial seed that meets the specifications of individual farmers.



teps to produce each bag of hybrid canola seed are in three main stages research, seed production and seed sales.

#### Research

#### The need

The research stage begins with identifying a market need for a new advancement or trait. and ends with final selection of cultivars (their parents actually, in the case of hybrids) for commercial seed production.

New traits can include disease resistance, stress tolerance, harvest traits (such as pod shatter), market traits (such as special oil profile), and performance traits (such as earlier maturity).

Researchers obtain new traits from native species, mutagenesis, gene editing or transgenics. Finding the trait in a native species or close relative and then back crossing that into premium germplasm is usually the first choice. The others follow in order, with transgenics a last resort because of the regulatory burden.

#### The process

Seed companies seek the most efficient way to introduce the new trait into commercial lines.

Breeders work the trait into top-grade parental lines and begin the long process of selecting parents that possess all the required traits. From their large population of parents, companies cross and cross and cross to find the best hybrids. These "best" combinations can number in the thousands. Companies use lab tests and field tests to whittle this down to a few dozen lines with commercial potential.

Seed companies increase the seed bank for these few dozen parent lines through small field plots.

#### **Testing**

The short list of hybrids go into largerscale trials to create data for Western Canada Canola/Rapeseed Recommending Committee (WCC/RRC), which supports (or not) lines for full registration through the Canadian Food Inspection Agency.

WCC/RRC ensures that each hybrid meets the canola definition and has data to indicate blackleg resistance and other

#### **Timeline**

While it is possible to fast-track traits with an immediate commercial need, possibly shaving a couple years off the process, this research phase generally takes a minimum of six years.

#### Seed production

#### New joins old

New cultivars join the existing product line in the pipeline. Seed companies have to estimate sales and decide how much of each hybrid to produce for that year's sales.

**Parents first** 

Hybrid seed production actually begins a year earlier with production of the parent lines, which are different for each hybrid. Companies grow the parents separately the first year, then grow them side by side the following season to force the cross

They often use pollinators, such as leaf-cutter bees, to increase seed yields.

that produces the hybrid.

#### **Irrigation**

Seed production often relies on irrigation for yield.

Seed production must be isolated from regular commodity canola, and it requires strict attention to detail to keep each parent and hybrid marked and separated. A lot of Canadian canola seed is produced in southern Alberta, with companies doing winter production in Chile to meet extra demand.

With so many hybrids, it can make for an extended and complicated harvest, with a lot of machine cleaning.

The need The process **Testing** 

**Parents Hybrids** Bees Irrigation Isolation Harvest **Testing** 

**Testing Seed treatment Retail support Transportation** Creaning & Conditioning

**Technical use** agreements **Promotion Returns** 

performance standards. Seed companies also use these field trials to test whether hybrids achieve high performance across multiple geographies.

Companies run large-scale field trials with experimental and current hybrids. Seed companies use this real-world, farmer-led trial data to help with final decisions on which new hybrids to bring to market.

# top quality canola seed

#### **Testing**

Throughout all steps of research and seed production, companies regularly check each lot for the presence of desired traits and canola quality standards, and the absence of undesired traits.

#### Seed sales

#### Cleaning and conditioning.

Companies clean and condition seed for safe storage in bins and bags.

#### **Testing**

They check it for germination, seed purity standards and canola quality. Seed is sized and sorted, if companies offer sizing.

#### **Seed treatment**

Farmers choose standard or premium seed treatments. Premium treatment for enhanced flea beetle, cutworm or blackleg protection adds 10 to 15 per cent to the suggested retail price.

#### **Many combinations**

After treating, each seed lot is bagged, tagged and palletized for delivery to distribution centres and then to local retails. With multiple hybrids, multiple seed treatment combinations (and, for some companies, multiple seed sizes), it adds up to a lot of separate bar codes to keep in order.

#### **Retail support**

Seed companies have territory staff to support various retails.

#### **Transportation**

All steps along the way require transportation.

#### Technical use agreements

A lot of seed sales include technical use agreements.

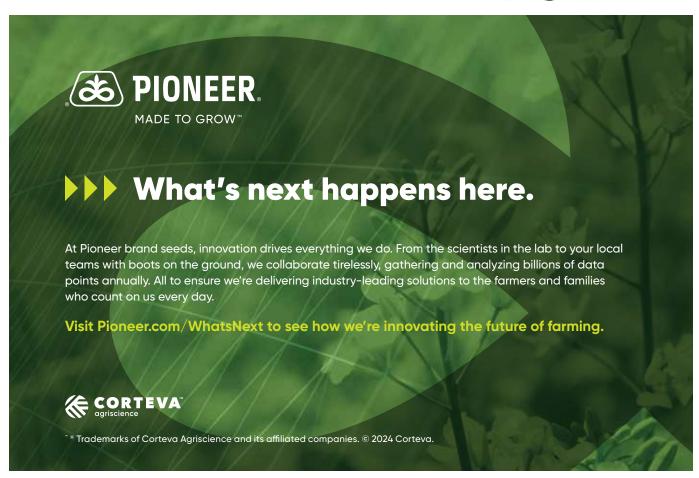
#### **Promotion**

This includes field signs, field demos, booths at all the farm shows, sponsorship and advertising (including some in this magazine).

#### Returns

Any bags that don't sell or get returned go through rigorous quality testing to make sure the seed continues to meet all standards before getting re-bagged for sale the following year.  $\approx$ 







# Comfortable settings

What combine settings are best for lower canola losses and higher productivity? It varies by machine and by conditions. Experts are here to help.

BY JAY WHETTER

gronomist Candice Harris wants to help farmers every way she can, including at harvest. Harris, an agronomy lead with Simplot Grower Solutions, supervises agronomy staff at locations across northwest Saskatchewan. She brought three colleagues to the Canola Council of Canada's half-day Combine Clinic for Agronomists in August 2023.

"Combine Clinic was an incredible hands on experience for my less-experienced staff. For my experienced staff, it was good for fine-tuning settings," Harris says. Even so, Harris says she and her staff are not yet ready to give advice on combine settings.

"I feel like it's something an agronomist could offer, but we need qualified staff to diagnose the issue and make a recommendation," she says. "We're quite knowledgable about drills – seeding depth, fan speed, checking for cracked seed. A combine is more complex."

Harris thinks they'd need a combine school with a week of training. "If the dealerships would offer training, we would send staff," she says. This past winter, Green Valley Equipment, a John Deere dealership network in south central Manitoba, hosted 50 farm women at its Morden training centre.



Try the Combine Optimization Tool at canolacalculator.ca

Tamara Babisky, a cattle and grain farmer from Brokenhead, Manitoba, helped organize the combine training session as part of the Manitoba Farm Women's Conference. Babinsky is the primary operator of the farm's John Deere combine. They also have a New Holland.

The session included videos and inperson discussion from a "great team of instructors", Babisky says. They learned how excess dockage ends up in the hopper, how grain gets cracked or crushed, and how to measure losses. "It was informative for people with all levels of involvement with combines," she says.

Scott Hildebrand, combine specialist with Green Valley Equipment, was one of the instructors. Hildebrand says they would offer these training sessions to other groups, including agronomists, if asked.

Harvest loss specialists ScherGain and Bushel Plus also have new programs to help combine operators reduce losses. ScherGain has a knowledge-sharing subscription service at combinesettings.com, where farmers learn from farmers. Bushel Plus has a new Harvest Academy for hands-on training. (See the sidebars for each.)

Shawn Senko, agronomy specialist with the Canola Council of Canada, says it would be difficult for agronomists to become familiar with all the makes and models their customers use. "It takes a while to become familiar with a machine, even after years of doing it. When I get a new one, it's a steep learning curve," he says. "But a basic understanding of settings to get a grower started would be possible."

Ultimately, farmers want to figure out how to set their combines for minimal losses and maximum productivity in various conditions - from canola to wheat, from warm afternoons to damp evenings. "This takes some time with drop pans, but the end result should be a greater knowledge of the farm's own combines," Senko says. "With this knowledge, farmers can recognize their own loss levels and find their own threshold for acceptable loss."

Spending money on some outside helpwhether an agronomist, machinery company staff, a network of other farmers or combine loss specialists- will likely pay off.

—Jay Whetter is the editor of Canola Digest.



↑ This thick mat of volunteer canola, taken in the fall of 2023, shows the potential loss coming out the back of a combine. You don't want to see this!

# Harvest loss help - Q&A

1. Does your dealership or company have a quick set-up guide to help combine operators achieve minimal loss and maximum performance in canola?

Rick Hubrich, regional product supervisor for Claas in Regina, Saskatchewan: We have many videos online. Claas Connect and Cemos Advisor, an app, also help customers walk through the process to optimize their combines. These are free to download.

Scott Hildebrand, combine specialist with Green Valley Equipment (John Deere) in Morden, Manitoba: We do have a certain process in place and steps to test and set a combine for minimal loss while maximizing combine performance. It's not as simple as following a check list though. It always starts with determining where the losses are coming from. Are they coming from the rotor/separator, or are they coming from the cleaning system? Once we have determined that, it helps us to know which settings or adjustments to tweak to help bring the losses down. There are far too many variables involved to be able to use the same process or settings every time. Some of the variables include the canola variety, stalk conditions, temperature, sunny or cloudy, moisture content, and standing or swathed. Even day to day within the same field or variety will often require the combine to be set differently.

Grant Milne, cash crop specialist for New Holland: We preprogrammed various crop settings into our IntelliView monitor. Canola is one option we offer as a pre-set crop. So while we do recommend doing some small tuning to your specific field needs, the computer in the combine can handle the vast majority of the settings on behalf of the operator to ensure maximize capacity and minimize crop loss.

2. What is the best way for a combine operator to learn how to minimize losses?

**Scott Hildebrand:** It's an ongoing process. The combine needs to be tested regularly as conditions change throughout the day or even

throughout the field. Producers that tend to use the same settings throughout the entire canola harvest will experience higher losses in certain conditions, quite possibly without even noticing it. The more you test within different conditions, the more you will learn where you need to set your particular machine to optimize its performance within that condition. Once you know what works, record it. Write it down, or save it as a preset on your combine's monitor. Over time, you will develop an extensive database of combine settings for each variety or harvesting condition, and you won't need to start from scratch. Additionally, modern combines use built-in technology to help automate this process. Learning how to leverage and properly use this technology is key to getting the most out of your investment in harvesting equipment.

**Rick Hubrich:** As mentioned, the apps walk you through the process. We also have clinics at each dealership to discuss settings and operations. The Cemis display has an optimization function. Cemos Dialog operator assistance system guides operators to the optimal machine setup. Operators confirm settings with the push of a few buttons. Also available since 2023, Cemos Dialog can help calibrate the loss sensors.

#### 3. Can a farmer hire you (or someone at your company) to come out to the field and help with these settings?

Dave Cey, branch manager with Novlan Brothers in Lloydminster, Saskatchewan (New Holland): My sales staff go out to every combine sold, new or used, and show operators how to set the combine using drop screens. With the New Holland combine automation, operators set the harvest strategy they would like minimum losses, max output, max grain quality, or a combination. Operators then set the sensitivity of all these settings and the combine changes on the go.

**Scott Hildebrand:** Yes they can. We charge a fee for that service, but there is usually a very quick return on that investment when comparing the dollar amount of losses.

Rick Hubrich: When customers ask for assistance from our dealerships, usually the salesperson will pop out and help set the combine. When available, I will go and assist as well. We do not charge for this. ∺

#### Learn more about how to reduce combine loss with these videos.



# **Bushel Plus Harvest Academy**



to reduce harvest loss and increase yields, revenues and efficiencies. "The season and even subtle straw conditions can

influence combine performance, which in turn can affect yields," says Marcel Kringe, founder and CEO of Bushel Plus. "Harvest Academy will present new concepts, tackle common oversights, and focus on

Presenters will share expertise on pre-harvest integration, safety, cost-effective harvest practices with critical calibration of newer machines with automated settings. The academy can customize

For more information, visit theharvestacademy.ca.

# Farmers share tips with farmers at combinesettings.com



Trevor Scherman with ScherGain created combinesettings.com so farmers could share tips with and doesn't work with specific combine models in specific

is very hard as there are so many variations between

per year. For that price, they get to see what everyone Australian farmers and see how they do it. Those are the conditions they have all the time."



# Proven® Seed: **Another Step Towards Simplifying Seed Choices** with NTACT™ Technology

As western Canadian agricultural practices evolve, the quest for efficient, profitable and practical harvest methods intensify. Straight cutting and pod integrity are two complementary advancements that promise to bring efficiency and profitability benefits to growing canola.

#### Straight Cutting: A Shift Toward Simplified Harvesting

The option to straight cut or delay swathing continues to gain traction among farmers seeking to streamline operations, reduce costs and maximize yields. The primary advantage of straight cutting is the elimination of the swathing process, which saves time, labour and fuel. Additionally, straight cutting minimizes losses caused by windrow movement due to strong winds.

However, straight cutting poses challenges. Canola's susceptibility to pod shattering—where mature pods break open, dispersing seeds prematurely—has historically deterred many farmers from adopting this approach. This is where NTACT Technology comes into play.

#### **NTACT Technology: Enhancing Yield Stability**

Shatter reduction is a breakthrough in canola genetics. In the past, canola varieties that did not have specific selection for harvest management characteristics

were prone to shatter loss, particularly under adverse weather conditions during ripening. Proven Seed's development of NTACT hybrids mitigate this risk, enabling more growers to adopt straight cutting with confidence.

Genetic advancements have fortified canola pods, preventing premature opening. These enhancements have been achieved through selective breeding and biotechnological interventions, focusing on strengthening the pod walls and increasing their elasticity. The result is a canola crop that stands resilient against environmental stressors, significantly reducing seed loss.

#### **Aligned for Optimal Results**

The synergy between straight cutting and NTACT Technology offers a holistic solution to the challenges of canola harvesting. Straight cutting allows farmers to harvest efficiently, while NTACT hybrids ensure maximum seed retention. This combination translates to higher net yields and improved farm profitability.

NTACT Technology from Proven Seed allows farmers to harvest their crops with reduced labour, lower costs and enhanced yield stability.









Always read and follow insect resistance management requirements (where applicable), grain marketing and all other stewardship practices and posticide label directions. Scan the QR code or visit traits bayer.ca/en/product-legal to review important stewardship and product information  $including \ regulatory \ status, \ grain \ marketing \ requirements, \ herbicide \ and \ insect \ tolerance, \ pesticide \ use \ and \ product \ trial \ results.$ 

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PV 782 TCN

PV 783 TCN

Learn more at ProvenSeed.ca

# How to elevate yields?

BY CLINT JURKE

Canola yields faced challenges from 2017 to 2023, largely due to weather. But why is the plateau 40 to 41 bu./ac. when genetic potential for the crop is much higher? The answer is likely related to agronomy.

#### Canadian average canola yields peaked in 2016 at 42.3 bu./ac. It

was a good year, weather-wise. Moisture was normal to above normal all across the Prairies, even in the Brown soil zone. In fact, some of the best yields in 2016 came out of the Brown soil zone. And temperatures were moderate. Most of the Black and Grey soil zones had no days over 30°C.

Since then the Prairies have experienced a lot more summer heat and a lot less growing-season rainfall. Crops suffer without rain, and canola especially suffers with hot weather at flowering.

Canola yields have faced challenges from 2017 to 2023, not exceeding the 2016 crop and averaging less than 40 bu./ac. for the past three years.

#### How to elevate yields?

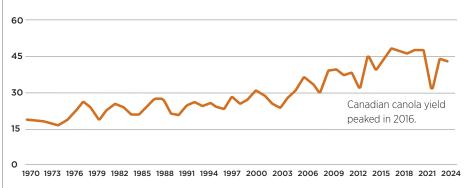
Weather clearly caused the plateau in Canadian canola yield. We know this because wheat, barley and pea yields followed almost identical patterns. But why is the plateau 40 to 41 bu./ac. when genetic potential for the crop is much higher? Why not a plateau of 45 or 47? The answer is likely related to agronomy.

#### **Nutrient management**

You could argue that growers are fertilizing for the crop they're getting. A 52 bu./ac. canola crop removes 130 to 220 lb./ac. of nitrogen, according to the latest guidelines developed by now retired University of Saskatchewan researcher Fran Walley. Yet 2017-21 average nitrogen rates for Canadian canola were 119 lb./ac., according to Fertilizer Canada grower surveys. Basically, growers are fertilizing for a 41 bu./ac. canola crop.

Fertilizer Canada grower survey data also shows that "actual" yields are fairly close to the average "target" yields for the Black soil zone, suggesting that growers are perhaps

## Canola yield



Source: Statistics Canada, Table 32-10-0359-01

setting yield targets that are too low for the yield potential in that soil zone. What would happen to yield and profitability if growers pushed nitrogen (and overall fertilizer rates) a little higher? In some cases, growers could achieve profitable gains simply by applying 100 per cent of the recommended fertilizer rate based on soil tests.

#### Pest management

Blackleg is going up and many farms could be underestimating yield loss. Think about genetic resistance.

Early weed competition will be reducing yield - especially if those weeds take up critical soil moisture. Early weed control is an important step in profitability. It may



be better to pencil in two in-crop sprays, starting with an early application at the one- to four-leaf stage of the crop. Follow up with a second spray at the back end of the label window, if necessary. It may not be necessary if the canola canopy closes in.

Glyphosate-resistant kochia is taking up more acres, often getting a toe-hold in areas of a field where crop growth is limited due to soil productivity limitations.

#### Genetics

Not including 2016, canola yields are generally quite a bit lower in the Brown soil zone than in the Black soil zone. Could growers choose earlier-maturity cultivars and plant them early in the season so the crop doesn't flower during the hottest summer days?

We encourage growers to try at least one new cultivar each year, ideally in the same field as their preferred cultivar, seeded the same day with the same fertilizer practices, to compare results.

Try cultivars with different blackleg resistance in fields where blackleg seems to be getting worse.



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SPRING WHEAT 5.2 bu/ac 12.7%

Average yield increase\* 2 sites over 1 year, Canada



SARLEY

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bu/ac

Average yield increase\*
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\* Trials with AGTIV® IGNITE™ L (Serendipita indica)

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#### **Crop rotation**

Tight rotations will reduce yield. This is proven in research trials and in crop insurance data.

#### Other factors

Through Canola Council of Canada survey results and feedback from personal conversations, here are a few common agronomy decisions that lead to lower yields:

- 1. Too few plants per square foot
- 2. Recreational tillage
- 3. Unprofitable/unproductive acres
- 4. Soil compaction
- 5. Seed lost during harvest
- 6. Swathing too early

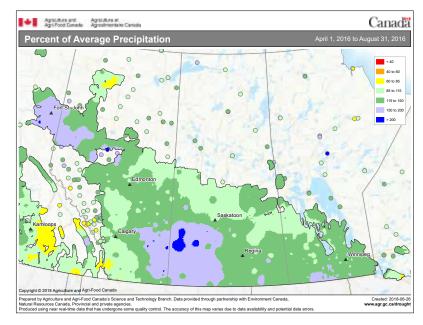
#### **Profitability**

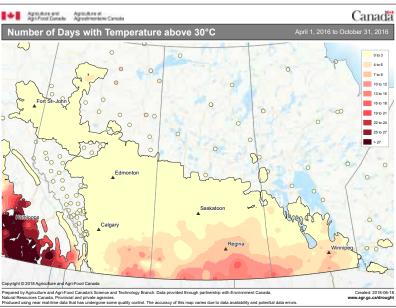
Canola and wheat profitability have been falling in the past few years, related to lower commodity prices relative to inputs. These profitability signals are likely reducing investment in the crop, particularly fertilizer rates.

Agronomy should improve profitability, especially if input decisions are made with an eye to the bottom line. For example, growers could set a fertilizer rate based on expected yield and then use in-crop top ups if the moisture situation and yield outlook improves. That way the crop has the nutrients to match the new yield potential. Pest management decisions based on scouting and economic thresholds are more likely to provide a return on investment. Early weed spraying costs the same as later spraying, but tends to result in higher yields.

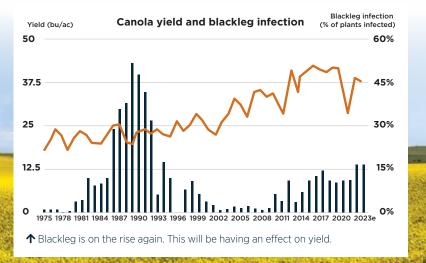
Growers cannot save their way to profitability. This was the message from an Agriculture and Agri-Food Canada inputs study led by Bob Blackshaw a decade ago. Canola needs an adequate seeding rate to reach five to eight plants per square foot, and those plants need timely fertilizer and risk-recommended crop protection.

— Clint Jurke is agronomy director for the Canola Council of Canada.





↑ Canola yield peaked in 2016, a year with a relatively cool summer and ample but not excessive moisture.





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# **BASF** shorter-season hybrids mitigate risk

ASF has two new shorter-season hybrids for 2025. They are InVigor L330PC and InVigor L333PC. They have maturity similar to InVigor L233P, but with added first-generation clubroot resistance, hence the "C". The "P" is for pod shatter.

"Longer maturity is still genetically programmed to yield the highest," says Russell Trischuk, technical services manager with BASF.

"For that reason, this is probably the earliest range we would think of launching without sacrificing yield," says Blaine Woycheshin, marketing manager, InVigor, for BASF.

For relative ranges, the two new shorter season hybrids will mature roughly one to two days earlier than InVigor L340PC and roughly three to four days earlier than InVigor hybrids with a "5" in the middle spot.

"We see these new shorter-season hybrids going into short to mid growing zones," Trischuk says. Farmers can plant them earlier and have them flowering ahead of the peak summer heat. "Beat the heat and get the combine rolling earlier," Woycheshin says.

Besides planting early to avoid hot conditions at flowering, Trischuk outlines three other potential use scenarios for shortseason hybrids:

Later seeding to avoid flea beetles. "Often the field put in first is the one the flea beetles eat," he says. "Short-season hybrids seeded later give farmers the opportunity to stagger seeding to avoid flea beetles."

The opportunity to seed later can also help with weed management. It gives more time for a pre-seed burnoff.

Early seeding and the pod shatter trait give maximum harvest flexibility, whether swathing later or straight combining. It will fit into most harvest scenarios.

Ultimately, these use scenarios all come down to risk mitigation. "Multiple maturities spread out risk," Trischuk says. "We strongly encourage growing multiple hybrids on the farm." \*\*

# **Proven adds** pod shatter trait

he two new Proven Seed canola hybrids for 2025 - PV 782 TCN and PV 783 TCN - have the company's new Ntact trait to improve pod shatter tolerance. These hybrids have been bred and tested in Western Canadian conditions to achieve high pod integrity, the company says, adding: "Their increased pod integrity from the Ntact trait technology give growers the option for a wider harvest window that includes the straight cut option."

Both hybrids are clubroot resistant. Proven Seed is a division of Nutrien Ag Solutions. ::

# Corteva ramps up sclerotinia tolerance

he new Pioneer canola cultivar P617SL has the strongest built-in sclerotinia disease tolerance in the Pioneer canola portfolio, says parent company Corteva Agriscience.

Corteva Agriscience introduced its first cultivar with advanced tolerance in 2008. "Corteva scientists spent many years identifying and accumulating multiple native genes for sclerotinia resistance," says Steven King, global canola lead for Corteva. "One of the keys to this breakthrough is the ability to induce the disease in test plots consistently year over year by creating the ideal environment for disease development - temperature, humidity and pathogen inoculation. Another key is using this field data to create DNA markers tagging each of the identified resistance genes."

The company says P617SL offers a greater than 80 per cent reduction in sclerotinia stem rot infection in canola, compared to 65 per cent for the previous generation. Sclerotinia resistance is not a requirement for Western Canada Canola/Rapeseed Recommending Committee, so we have no third-party verification of these tolerance levels.

Corteva also claims strong verticillium stripe protection. There are no industry standards at this time for verticillium

The cultivar has blackleg resistance and a new source of clubroot resistance, with resistance to several pathotypes, including 3H, 3A and 3D. The Corteva spec sheet lists P617SL as a tall canola cultivar with good standability, late maturity and a pod shatter score of 6. 2

# **Bayer enhances** straight cut feature

K401TL is the newest, highest yield-potential hybrid from Dekalb, says parent company Bayer. It has mid-maturity, clubroot and blackleg resistance, and the Straight Cut Plus trait.

Using the Canola Council of Canada pod shatter rating scale (read more about it in the Harvest Management section at canolaencyclopedia.ca), Bayer scores DK401TL a 7.1. The scale goes from 1 to 9, which 9 being the most shatter resistant. Bayer has four other hybrids with Straight Cut Plus, all with scores from 7.0 to 7.3.

"Like all Dekalb canola hybrids, we've seen harvestability benefits with DK401TL, including earlier maturity, quicker drydown and flexibility to choose harvest timing with the SC+ enhanced pod integrity,"says Tim Darragh, market development manager - canola trait systems, at Bayer.

The combined LibertyLink and TruFlex traits give the flexibility to apply Liberty or Roundup alone or in sequence, depending on the weed situation. For example, farmers can apply Liberty early to go after Group 9-resistant kochia and have the option to come in later with Roundup for Group 1-resistant wild oats and volunteer cereals.

# **BrettYoung** introduces new generation LibertyLink hybrid

Y 7204LL from BrettYoung is the first release in what the company calls its new generation of LibertyLink canola hybrids.

"New generation is a reference to all relevant traits showing up in a single hybrid," says Eric Gregory, director of marketing for BrettYoung. "Our breeder DL Seeds has had a lot of moving parts within their breeding program the last few years, including pod shatter trait, LibertyLink trait, switch to Ogura pollination systems and new major gene blackleg traits. BY 7204LL is the first hybrid to be commercialized that reflects the seven-plus years of introgression efforts."

The hybrid's Pod DefendR shatter tolerance rates a 7.5 on the Canola Council of Canada's shatter tolerance rating scale. Next generation clubroot protection includes field resistance to predominant pathotypes. The hybrid also contains the Rlm7 major gene for blackleg resistance. 💢

# **Canterra Seeds** introduces its earliestmaturing hybrid

his fall, Canterra Seeds introduced CS3300 TF, their earliestmaturing hybrid to date and featuring their PodProtect trait that the company says gives the hybrid a score of 7+ on the Canola Council of Canada's shatter tolerance rating scale.

Courtney Welch, canola product manager for Canterra Seeds, says her team has noticed a trend with farmers in longer season zones adding an early-maturing hybrid to their plan in case seeding is delayed or so they can space things out at harvest. "But the yield has to be there," she says.

TF stands for TruFlex, the glyphosate-based herbicide tolerance system and Welch says CS3300 TF has "excellent standability", first-generation clubroot resistance and multigenic blackleg resistance with major resistance genes representing group A (Rlm1/LepR3) and E2 (Rlm7).

For more on blackleg and choosing resistance that matches the common races in a field, see "Genetic resistance" in the Blackleg chapter at canolaencyclopedia.ca.



## Cleanfarms 2024 Unwanted Pesticides & **Old Livestock/Equine Medications Collection**

Southern Alberta - October 21st to 25th | Northern Saskatchewan - October 7th to 11th

Safely dispose of unwanted or obsolete agricultural pesticides and livestock/equine medications - no charge! Take them to the following locations on the dates noted between 9 a.m. and 4 p.m.

## **Alberta**

#### BARNWELL Tuesday, Oct. 22 Independent Crop Inputs Inc. N.W. of 27-9-17 West of Hwy. 4, 94035 Range Rd. 17-3, TOK 0B0

BARONS Thursday, Oct. 24 South Country Co-op Ltd. 123014 Range Rd. 234,

#### TOL 0G0 BENALTO

Friday, Oct. 25 Benalto Agri Services Ltd. 38531 Range Rd. 2-4, том оно

#### BROOKS

Friday, Oct. 25 South Country Co-op Ltd. 7th St. and Industrial Rd.,



#### CARSELAND

Monday, Oct. 21 Cargill 263026 Township Rd. 221, Corner Hwy. 24 & Agrium Rd., TOJ 0M0

#### DRUMHELLER Monday, Oct. 21

Kneehill Soil Services Ltd. W., TOJ 0Y0

#### DUNMORE Thursday, Oct. 24 AgroPlus Inc. 2269 - 2nd Ave., #22, T1B 0K3

FOREMOST Wednesday, Oct. 23 AgroPlus Inc

#### 199 1st Ave. W., TOK 0X0 FORT MACLEOD

Wednesday, Oct. 23 Nutrien Aa Solutions 250 Boyle Ave., TOL 0Z0

Wednesday, Oct. 23 Hanna UFA Farm & Ranch Supply Store 601 1st Ave. W., TOJ 1PO

#### HIGH RIVER

Friday, Oct. 25 Nutrien Ag Solutions 498012 - 122 St. E., T1V 1M3

#### HUSSAR

luesday, Oct. 22 Richardson Pioneer 151 Railway Ave., TOJ 1SO

#### INNISFAII Thursday, Oct. 24

Central Alberta Co-op 35435 Range Rd. 282, T4G 1B6 LETHBRIDGE COUNTY Tuesday, Oct. 22

#### Wilson Siding 75006 Hwy. 845,

IOMOND Monday, Oct. 21 South Country Co-op Ltd. 115 Railway Ave., TOL 1GO

Wednesday, Oct. 23 Olds UFA Farm & Ranch Supply Store 4334 46th Ave.

#### OYEN Thursday, Oct. 24 Richardson Pionee

1 mile East on Hwy. 41, TOI 210 THREE HILLS

#### Tuesday, Oct. 22 Richardson Pionee 503 - 3rd St. S.W., TOM 2AO

VETERAN Friday, Oct. 25 Richardson Pioneer 400 Waterloo St., TOC 2S0

#### WARNER

Monday, Oct. 21 Nutrien Ag Solutions Junction Hwy. 4 & Hwy. 36, 1/2 mile N. on the Access Rd., TOK 2LO

#### Northern Saskatchewan

BIGGAR Tuesday, Oct. 8 Parrish & Heimbecker 12 km West of Biggar on Hwy. 14, SOK OMO

#### BRODERICK

Friday, Oct. 11 Rack Petroleum Ltd. Broderick Access and

#### Hwy. 15, SOH 0L0 CARROT RIVER

esday, Oct. 8 Richardson Pione 265 2nd St., SOE OLO HAFFORD

#### Wednesday, Oct. 9 AgriTeam Services Inc. 11 km West of Hafford on Hwy. 340, Turn North on Jackson Rd., SOJ 1AO

HUMBOLDT Thursday, Oct. 10 Humboldt Co-op 10564 Crawley Rd., SOK 2AO

#### **IMPERIAL**

Friday, Oct. 11 Richardson Pioneer 1 mile North on Hwy. 2, SOG 2|0

#### KINDERSLEY Wednesday, Oct. 9 Simplot Grower Solutions 907 11th Ave. E.,

SOL 1SO MEADOW LAKE

#### Monday, Oct. 7 Meadow Lake Co-op 513 9th St. W., S9X 1Y5 MELFORT

esday, Oct. 9 Nutrien Ag Solutions 810 Saskatchewan Dr. W., SOF 1A0

#### **NEILBURG** Friday, Oct. 11 Nutrien Ag Solutions 300 Railway Ave. E., SOM 2CO

NORQUAY Tuesday, Oct. 8 Norquay Co-op 13 Hwy. 49 E., SOA 2V0

#### NORTH BATTLEFORD

Thursday, Oct. 10 Cargill Ltd. 12202 Durum Ave., S9A 2Y8

#### PORCUPINE PLAIN londay, Oct. 7 Nutrien Aa Solutions

Hwy. 23 W., S0E 1H0 PRINCE ALBERT Thursday, Oct. 10 Lake County Co-op

#### 4075 5th Ave. E., S6W 0A5 ROSETOWN

Thursday, Oct. 10 Rack Petroleum Ltd. 3 miles North East of Rosetown on Hwy. 7 32 Airport Rd., SOL 2VO

#### ROSTHERN Friday, Oct. 11

Blair's Crop Solutions N.E. 33-42-3 West of the 3rd, 2 km West of Rosthern, SOK 3RO

Tuesday, Oct. 8 Simplot Grower Solutions ½ mile on Hwy. 24 N., SOI 2MO

#### WII KIE

nday, Oct. 7 Nutrien Ag Solutions 1½ miles West of Wilkie on Hwy. 14, SOK 4W0

#### WYNYARD Wednesday, Oct. 9

Wynyard Co-op Assoc. 571 South Service Rd..

#### SOA 4TO YORKTON

Monday, Oct. 7 SynergyAG 21 Rocky Mountain Way Rd. (Hwy. 9 S.), S3N 4B2



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- For collection dates elsewhere, go to: cleanfarms.ca/ materials/unwanted-pesticides-animal-meds/



# Verticillium stripe management takes a step forward

We still have a lot to learn about verticillium stripe in canola. To address some of the knowledge gaps, a recent project investigated the disease development, evaluated canola genotypes for resistance and examined its interactions with blackleg.

# Verticillium Stripe Disease Cycle (Coxicel by the Jungus Verticillium hongisporum) Diseased Canola Plant The Europe (Interpreta) Microsclerotia Diseased Distribution of Disease Prophysion and inspire of microsclerotia Microsclerotia Microsclerotia Microsclerotia Microsclerotia Distribution of Disease Microsclerotia Microsclerot

#### BY TARYN DICKSON

#### The five-year (2019-2024) 'Verticillium stripe management'

**project** investigated the disease development and made a few discoveries that will help with disease assessment and canola breeding to improve resistance.

Researchers measured yield losses in two ways: on a per-plant basis by growing plants in micro-plots inoculated at different densities, and by growing plants in six by 1.5 metre field plots harvested by a small-plot combine. They used greenhouse experiments to determine interactions between blackleg and verticillium stripe.

Weather conditions were wetter than average in the early growing season and resulted in good disease development in the 2020 field experiments. In 2021, precipitation was well below average in June and July and resulted in much lower disease development, however yield losses still occurred.

#### Results

The research provided several outcomes we can learn from:

#### Infection at any stage can lead to yield loss.

Infection by verticillium stripe in the early stages inhibited canola establishment and growth. Later infection led to deterioration of the stem and vascular tissues. Infection at both stages affected yield and yield loss increased as the infections become more severe. Yield losses also occurred under dry conditions with few symptoms.

**Application:** Reduce the risk of introducing verticillium stripe by reducing soil movement within and between fields.

This way if verticillium stripe fungal propagules, called microsclerotia, are in the soil, they will be less likely to enter or spread in a field. See how microsclerotia impacts the verticillium stripe disease cycle in the graphic (see image).



Longitudinal sections of the stem show the vascular discolouration restricted to the lower stem in blackleg, (a); verticillium stripe symptoms extended up the stem, with a hollow, darker centre (b) and a hollow and darker centre together with black discolouration were observed in stems infected by both diseases.

Photo credit Dr. Yixiao (Becky) Wang

#### New scales can assess disease severity.

Researchers developed verticillium stripe disease severity assessment scales for early and later stage infections of canola.

Application: The verticillium stripe steering committee has the goal of putting these assessment scales into an easily shareable format and distributing it to the canola industry. This could be used for field assessments and could benefit future canola breeding efforts.

**Inoculation method improves disease screening.** Researchers refined methods for *V. longisporum* inoculation of canola, including using the root-dip method.

**Application:** These are important tools for screening canola germplasm for disease resistance and evaluating verticillium stripe resistance.

#### Verticillium can make blackleg worse.

Extra measures may be needed to control blackleg where verticillium stripe is present.

Application: Continue to implement/ improve on blackleg management efforts, including using the CCC's Understanding Blackleg Resistance guide to identify the resistance groups best suited for current pathogens in your fields, and then choosing canola cultivars accordingly.

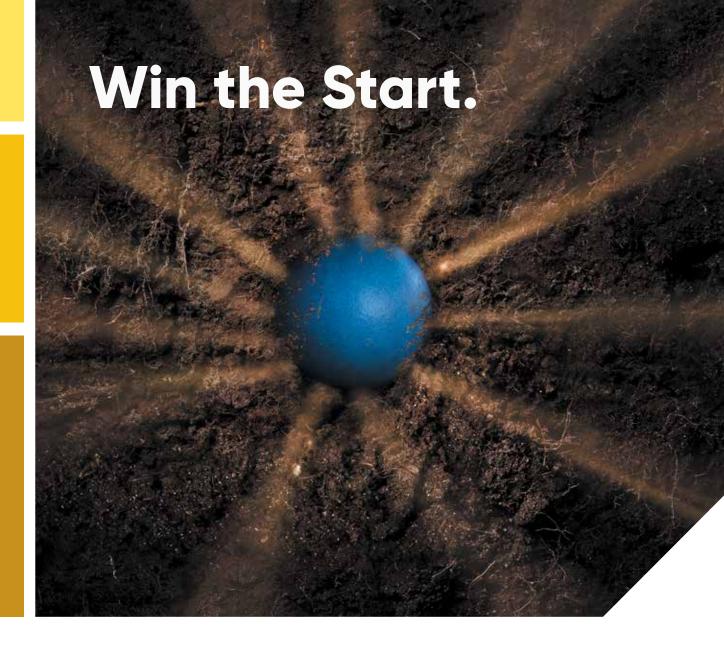
# Verticillium stem discolouration extends higher up the stem.

Longitudinal stem sections helped distinguish verticillium stripe from blackleg.

Application: Incorporate a longitudinal stem cut and examination into your (or your agronomist's) scouting procedure, along with use of the Verticillium Stripe Field Guide for proper identification and differentiation from blackleg. When submitting suspect stem samples for testing, request that they test for both verticillium stripe and blackleg.

Read the full summary and report on the Canola Research Hub at canolaresearch.ca.

— Taryn Dickson is resource manager for Crop Production & Innovation with the Canola Council of Canada. Taryn also manages the Canola Research Hub.



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# Assess your risk readiness with the AgriShield scorecard



Weather is one of many risk factors on the farm. How are you managing all those other business risks? The AgriShield risk scorecard at myagrishield.ca will help you answer that question.

Too hot. Too cold. Too dry. Too wet. Weather takes up a lot of the risk management energy for crop producers. The big reason why canola yields have been flat or dropping over the past six years is related to weather. But weather is just one of many risk factors on the farm. How do you track and manage all those other business risks?

The AgriShield risk scorecard at myagrishield.ca will help you answer that question. Farm Management Canada developed the comprehensive risk assessment and mitigation platform especially for Canadian farmers.

"Farmers put a lot of effort into crop and livestock production, obviously. Without crops or animals to sell, there isn't much of a business," says Heather Watson, executive director of Farm Management Canada in Ottawa. "Yet when you look at your farm as a whole, production is only one of a myriad of success factors. We have identified six risk areas producers should monitor to manage farm risk."

#### The six risk areas are:

- **Business Environment**

Within those six risk areas are a number of risk categories, including familiar farm business topics: personal well-being, cost of inputs, transition planning, and of course, weather conditions.

"By taking a few hours in the off-season to work through AgriShield, farmers can actually visualize their risks," Watson says. "Some of these risks will be familiar and well-managed. Some may not be top of mind. The beauty of AgriShield is that it helps farmers decide if certain risks are a priority or not."

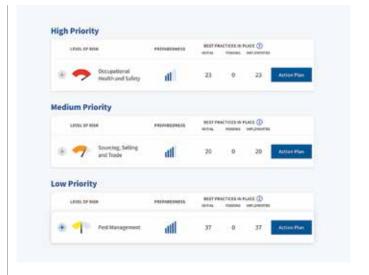
#### The process

The risk assessment process includes dozens of questions under the six risk areas. The following example is from the "Sourcing, selling and trade" category within the Markets risk area:

**Example Question:** Are the following practices currently used on your farm?

- Develop a formal, written marketing plan describing your business activities, your marketing objectives, your current marketing position and your target market(s).
- · Calculate and monitor the cost of production for each type of production on your farm.

To which you answer yes, no or not applicable.



↑ After going through the guestions, the program calculates your responses and scores each category as low, medium or high priority.

After going through the questions, the program calculates your responses and scores each category as low, medium or high priority. Categories that score in the red are high priorities for extra thought and action. The program then gives a list of actions to inform your risk management planning, such as the following two from "Occupational health and safety" in the People risk area:

- Make sure that at least one person on the farm follows regular first aid and CPR training.
- Ensure complete first aid kits are readily available at all times on the farm and that they are well maintained.

"Unlike other assessment or planning tools, AgriShield takes the guesswork out of risk management planning by providing producers with a ready-made list of best practices to manage and mitigate risk," says Watson. "All you have to do is choose the solutions that will work best for you."

AgriShield costs \$150 for an annual subscription. Content is based on Farm Management Canada's Comprehensive Guide to Managing Risk in Agriculture, literature reviews and consultations with farmers, advisors, academia and government across Canada. For more information, email info@fmc-gac.com or go to myagrishield.ca to sign up. Take advantage of the free trial if you'd like to try before you buy.

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# Millions get to know Canadian Canola



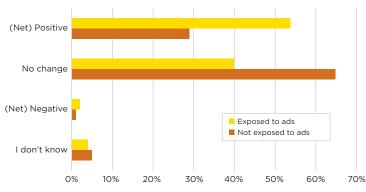
The canola grower organizations' National Canola Marketing Program launched *Hello Canola* a year ago. In an omnibus survey of Canadians, powered by Leger, nine per cent of respondents said they recalled one or more aspects of the campaign. FHR, the agency guiding the campaign, calls that a win.

#### Canadians met our friendly neighbourhood Canadian

**Canola a year ago** through a digitally-led *Hello Canola* campaign targeting millennials aged 25-49 in densely populated areas of English-speaking Canada. Approximately one in 10 Canadians surveyed recognized the face and recalled the message. That's a good start.

The National Canola Marketing Program (NCMP) is a partnership of SaskCanola, Alberta Canola and Manitoba Canola Growers that was more than five years in the making to secure program approval

and funding, and align on a launch plan. "We wanted our grower directors to come to the table ready to let go of the old strategy," says Jenn Dyck, market development director with Manitoba Canola Growers. "And on top of that, we needed to create a program that provided maximum impact for the budget, which meant important, and sometimes difficult, conversations to set expectations."



↑ According to the Leger survey, five in 10 Canadians positively changed their opinion of canola upon learning it was Canadian

Before launching *Hello Canola*, the NCMP used a Leger omnibus survey of Canadians to establish their baseline opinions, perceptions and understanding of canola. Following year one of the multi-year campaign, the program tapped Leger once again to determine the impact it had on Canadians. It was important to use the exact same questions when putting the survey back into market, to directly measure impact against the initial baseline. However, a qualifier was also added asking if people recalled seeing the campaign, which helped measure the effectiveness of the campaign spend.

Nine per cent said they recalled one or more aspects of the campaign. FleishmanHillard HighRoad (FHR), the strategic communications agency guiding the campaign, says that's a win.

#### The love gets a lift

The *Hello Canola* campaign aims to move Canadians from apathy to love of canola among Canadians, and to show Canadians that canola is more than just a low-cost cooking oil. The campaign showed a lift in the canola connection to pet food, biofuels and beauty products. Of those nine per cent who recognized the campaign, they showed a:

- 13 point increase in overall familiarity with canola (51% to 64%)
- 26 point increase in familiarity of canola as animal feed (23% to 49%)

- 35 point increase in familiarity of canola as a fuel (20% to 55%)
- 25 point increase in positive opinion having learned canola is Canadian (29% to 54%)

"Overall, the data shows that in most cases, Canadians who were exposed to our ads were more familiar with canola than those who weren't," says Lynn Weaver, market development manager with SaskCanola. "Our campaign did its job to highlight the various uses of canola."

Hello Canola made these gains through targeted social media

and digital tactics specifically targeting the millennial age group. Millennials use social media more than any other media outlet to discover brands, and they have high average income.

"Our tactics garnered 35 million impressions and our cost per impression went down compared to our previous efforts," says Louise Labonte, public engagement and promotions coordinator with Alberta Canola.

#### Year two

Moving into year two, the goal remains firm: Make the knowledge of, use of and support of canola a near-universal fact for all Canadians.

The campaign will continue to lean on hand-picked social media influencers to support in driving awareness and engagement. Year one data showed that influencer content outperformed *Hello Canola* branded content when it came to driving engagements among the target audience.

"Influencers are key for meeting Canadians where they are and creating content that our audience will enjoy - while still being educational," Labonte says. "Influencer relations will be a strong channel for us to continue using in year two, as we strategically look to add driving relevancy and consideration as measurable objectives alongside continued awareness."

The campaign will continue to drive awareness for canola among Canadians, while also beginning to spur action and involvement. "We need to begin creating opportunities and spaces for Canadians to be part of the story," Dyck says.

—To catch up on the campaign and its tactics and messages, please visit hellocanola.ca. 😕



# How's the weather?

We ask our six new panelists what tools, apps or expertise they use to make somewhat better decisions based on long-term and short-term weather predictions.

BY JAY WHETTER



# **Jennie Parsonage**

Baldur, Manitoba

ennie Parsonage farms with her husband and runs an aerial spraying company, Air Greenway, with her sister and brothers. Weather

monitoring is extra important for the spraying business. They use a paid version of the Windy app, which provides wind speed and direction (and temperature) for a large area at once. Blue tinted areas on the map are good spraying conditions, green is OK and orange and red areas are too windy. "This gives us a quick reference from home base on where we can go to get a couple of fields sprayed," Parsonage says.

The Windy app also provides a wind forecast up to nine days into the future, although Parsonage rarely looks beyond one day at a time.

The Parsonage farm also has its own Davis weather station and taps into the Davis WeatherLink network, which has 20 stations within the area they fly. "This gives us real-time data on gusts," Parsonage says, although accuracy depends on where farmers put their stations. "Stations in the yard are not helpful for wind. We were going to spray near one farm that I knew had a station. It was reading two km/h of wind. I phoned and asked if that was accurate, and he said he just parked the super B truck beside the station."

Manitoba Agriculture has weather stations all across the province that provide updates every 15 minutes from 7 a.m. to 5 p.m. Parsonage emailed and asked if they could provide updates until 10 p.m. for the stations closest to their farm. They made the change. "I thought that was pretty responsive for a government agency."

Finally, they check Global News SkyTracker and Environment Canada for weather radars.

"This gives us a quick reference from home base on where we can go to get a couple of fields sprayed."

-Jennie Parsonage in reference to the Windy app



# Amanda and **Curt Hazlett**

Red Deer, Alberta

manda and Curt Hazlett farm with Curt's father and his wife at three locations - the home farm just east of Red Deer, another block of land 45

minutes south, near Bowden, and a third block 30 minutes east, near Delburne. With land so spread out, "we lean into our neighbours" for weather updates, Amanda says.

The neighbour network may sound old fashioned, but it's accurate and timely. It tells the Hazletts what's actually happening on the ground. Weather conditions and hail risk from farm site to farm site are different enough that they need three separate insurance policies, Amanda says.

The Hazletts also use Environment Canada weather radar to check the size and direction of weather systems. But systems often seem to make sharp turns when they get to the Red Deer River valley, so their farm seems to miss some rains, Amanda says.

Landscape also makes for extremely localized weather that would not show up on a general forecast. If it's too windy in the yard, they can usually spray fields down in the river valley, Curt says, which is 250 feet lower and sheltered. Their fields in the river flats don't have any neighbouring fields either.

Walking fields is another important weather measure. Amanda often takes their kids, three and five, scouting to check weeds, crop stage, field conditions and disease risk. They also check if the ground is firm enough for the sprayer. "One other resource I look at is Richardson's risk pressure map for sclerotinia," Amanda says.

As for planning around the weather, "we shouldn't even consider long-term weather forecasting in our area," Curt says.

"With land so spread out. 'we lean into our neighbours' for weather updates."

-Amanda Hazlett



# **Ryan Gauthier**

Donnelly, Alberta

yan Gauthier triangulates among three weather apps "trying to find the average," he says. "It can happen that none predict the same thing."

The apps are Weather
Network, Weather Channel and
Environment Canada.

He also considers "old wives' tales", especially the one about two or three days of wind from the east bringing rain. "It's incredible how accurate that is," Gauthier says.

The yard has a wind vane wired to a small monitor on the side of the shed to show wind speed and direction. "I also have a wind sock to confirm the vane is still working," he says.

For Gauthier, the key weather reports are wind speed and heat for spraying decisions. He wants hot days for Liberty, and when Canola Digest talked to him in early July, highs for the season were barely getting above 17°C. "So I spray Roundup in the morning and hope it gets warm enough in the afternoon to spray one field with Liberty," he says. "I don't want to spray Liberty at 10°C."

# "It's incredible how accurate that is."

-Ryan Gauthier in reference to the "old wives' tale" about two or three days of wind from the east bringing rain.

#### "There is nothing more honest than that."

-Jonah McGrath in reference to his good ol' plastic rain gauge.



# Jonah McGrath

Leroy, Saskatchewan

onah McGrath added two new tools to his weather monitoring this year – an Amazon Vevor mini weather station and the Davis WeatherLink app.

The low-cost Vevor unit measures humidity, precipitation, temperature, wind speed and wind direction, and relays that to a display in the house or shop.

WeatherLink is a free phone app that taps into a network of weather stations. McGrath can get updates from the a station at the nearby BHP Billiton potash mine and another about 20km in the other direction. With most of his land between these two stations, McGrath gets two different and fairly detailed reports. If hail is moving in from either direction, for example, he can move equipment into shelter or perhaps make a quick call to the hail insurance broker, McGrath says.

Rounding out his weather tools are a standard weather app, with radar, on his phone and a rain gauge. "There is nothing more honest than that," McGrath says.

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## Andrea De Roo

Fairlight, Saskatchewan

ndrea De Roo's off-farm job is director of agronomy with Crop Intelligence, a Saskatchewan company that supports in-season decision making using weather stations and soil moisture probes. De Roo has three

She puts stations into fields after seeding. A key feature for her is the soil moisture probe. It measures soil moisture at various depths. Farmers can monitor root activity by watching how soil moisture changes over time. For example, if water levels at 50cm depth start to go down, you can assume the roots have reached that depth. "We use soil moisture measurements in the fall to set yield goals and crop rotations," De Roo says. "In-season top dressing is also a big part of our program."

For example, this year they fertilized for a 70 bu./ac. wheat crop but conditions as of early July suggested a potential 100 bu./ac. crop. So they top dressed with a liquid fertilizer mix of UAN and ammonium thiosulphate at rates of 25-30 lb./ac. of actual nitrogen and six to eight of actual sulphur. "With this rate on wheat, we can usually count on another 10 bu./ac. and a boost in protein." They will also top-dress canola with a similar rate and expected yield bump.

"We used to run fully replicated trials to see if the top dress worked. It did, so we don't need to do them anymore," De Roo says.

The weather station also logs temperature and rainfall. It tracks the degree and length of a frost event, to give a severity rating, it tracks growing degree days so farms can estimate crop growth stage, and it gives a Delta T indication of spray conditions. Delta T is an indicator of water evaporation rate. You don't want it too high or too low.

As for other weather services, De Roo uses the Windy app, which shows wind speed and direction, including at different elevations. That is useful when flying drones. Windy forecasts wind for later in the day, tomorrow and possibly the following day with some accuracy, De Roo says.

She also listens to weather forecasters at all the winter meetings. "Although you have to take those with a grain of salt," she says. "This spring was so different from what people forecasted."

"We use soil moisture measurements in the fall to set yield goals and crop rotations. In-season top dressing is also a big part of our program."

-Andrea De Roo

"If all the grass in the ditch is bent over in the same direction. it's probably too windy to spray. If canola leaves are flipping so you can see the lighter coloured undersides, it's probably too windy to spray."

-Owen Orsak



## **Owen Orsak**

Binscarth, Manitoba

wen Orsak has a 65-foot spruce tree in the farm yard and "if the top is moving, it's probably too windy to spray," he says. "If all the grass in the ditch is bent over in the same direction, it's probably too windy

to spray. If canola leaves are flipping so you can see the lighter coloured undersides, it's probably too windy to spray." These wind indicators, based on years of family history on the farm, are just as valuable as a weather app, Orsak says.

Spraying season is when he checks weather the most. This was their first full year with a sprayer with pulse width modulation, which gives some droplet size control. "With larger droplets, we can handle a bit more wind," he says.

Also new for this year, the farm has a field-based Ukko Agro weather station set up in conjunction with Syngenta. It measures rainfall, humidity, temperature, wind speed and direction. It relays this information to Orsak's phone. "I could get messages every 30 minutes if I wanted," he says. "I can check how much rain fell overnight without leaving my bed. If fields will be too wet for the sprayer, I can stay in bed."

Sygenta uses the stations to help farmers make fungicide decisions. Orsak doesn't usually spray canola for sclerotinia stem rot, but will often spray wheat to protect it from fusarium head blight. When Canola Digest talked with him in early July, the farm had tallied 12" (294mm) of rain from April 15 and the "planes were flying right now" applying fungicide.

As for seasonal rainfall predictions, Orsak knows his area is likely to get rain. The benefit of soil moisture probes and long-range weather forecasts are to set yield expectations and fertilizer rates. Orsak plans for good average yields and always fertilizes accordingly. He deep bands at seeding, so if the crop is light and doesn't use it all that year, it will be available for next year.

He thinks in-season soil moisture probes would just stress him out unnecessarily. "Unless you have irrigation pivots, what are you going to do with that information?," he says. ∺

— Jay Whetter is the editor of Canola Digest.

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# Our call for an interswitching extension

Interswitching gives shippers on a single rail line access to service from the next closest railway. The Flip the Switch coalition, which includes the Canola Council of Canada and Canadian Canola Growers Association, wants a 30-month extension of the existing pilot.



#### Why interswitching matters to farmers?

Of all licensed primary elevators across the prairie provinces, 97 per cent are located on a single rail line leaving them captive to service from only one rail network. Captive shipping situations can limit the ability for inland elevators to receive deliveries from farmers, which in turn restricts farmers' ability to sell and be paid for their product. If delays persist, it can also affect the price a farmer receives for their crop if prices shift unfavourably.

#### BY TROY SHERMAN AND TENESHA LAWSON

**Throughout spring 2024, the Flip** the Switch coalition, which includes the Canola Council of Canada (CCC) and Canadian Canola Growers Association (CCGA), launched an updated website and new engagement efforts with parliamentarians and political staff to advance extended interswitching. A major catalyst for these efforts was to debunk some of the claims made about extended interswitching and highlight the benefits of this policy for the grains sector and the broader Canadian economy.

#### What is extended interswitching?

Extended interswitching is one of the only ways to inject competition in Canada's Class 1 railway system. For shippers who are physically located on a single rail line, extended interswitching will give them the ability to seek competing service from the next closest railway if it is within the 160km radius currently legislated within the pilot. This means better rail service, improved efficiency, and better access to markets for farmers and shippers.

"Extended interswitching adds a competitive element to grain shipping through access to competition," says Brittany Wood, senior manager, transportation and trade policy, with CCGA. "It means enhanced grain supply chain fluidity, more predictability for farmers, and a strengthened Canadian reputation as a reliable supplier of high-quality canola."

What's next? The current extended interswitching pilot announced in the federal government's budget 2023 is set to expire at the end of March 2025. The Flip the Switch coalition, in coordination with the Coalition of Rail Shippers and others, has been calling for an extension of the pilot by an additional 30 months.

This would provide shippers with a longer runway to use extended interswitching, provide the government with additional time to collect the data it requires to determine its effectiveness, and would align with the timelines for the statutory review of the Canada Transportation Act, at which point we will be advocating that the

extended interswitching pilot should be made permanent.

"Extended interswitching benefits farmers, shippers, and consumers, which furthers a stronger agricultural sector," says Chris Vervaet, executive director of the Canadian Oilseed Processors Association. "Extending the pilot and distance of extended interswitching are the first steps in making extended interswitching permanent, ultimately strengthening Canada's economy."

To date, the Flip the Switch coalition has met with several key stakeholders on this important file, including the Prime Minister's Office, the Office of the Leader of the Opposition, the Minister of Transport's office, the Minister of Agriculture and Agri-Food's office, and several Conservative provincial caucuses. These strategic advocacy efforts are undertaken with the goal of extending the pilot by an additional 30 months.

Going into the Fall, CCC and CCGA will continue working with the Flip the Switch coalition partners and others to advance the conversation on extended interswitching.

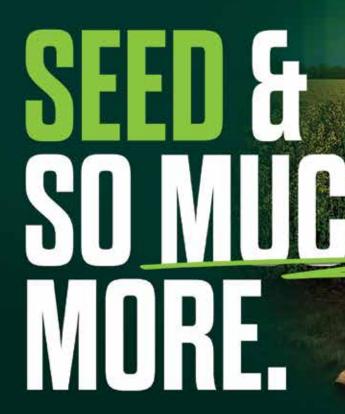
— Tenesha Lawson is manager of stakeholder communications for Canadian Canola Growers Association. Trov Sherman is senior director. government and industry relations, for the Canola Council of Canada.

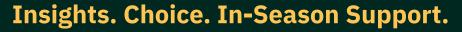


#### **FLIP THE SWITCH**

To learn more and make your voice heard about the importance of extended interswitching, visit the Flip the Switch campaign at interswitching.ca.







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