Calberta Canola





CANOLADIGEST



German Lessons 10

Canola (a.k.a. oilseed rape) yields in Germany are the best in the world. What can we learn from Germany?

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January 2024

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What can we learn from Germany?

Germany has the highest canola (a.k.a. oilseed rape) yields in the world, according to USDA Foreign Agricultural Service statistics, and the European Union as a bloc now edges Canada for top tonnage produced. How do they do it?









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Provincial crop planning guides are excellent resources for farmers to compare their own numbers and make adjustments to improve their results.

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ALBERTA CANOLA 4

Manitoba

Canola Growers

The Alberta Canola Conference in Grande Prairie - January 24 - 25 includes the AGM and Research Symposium. Alberta Canola welcomes Jeffrey Frost to its board and welcomes back Andre Harpe, Justin Nanninga and Roger Chevraux. Also, what does the Bunge-Viterra merger mean for farmers?

SaskCanola 6 Recent research shows that optimum canola yield is directly related to vegetative ground cover. SaskCanola has a new interactive texting service to provide real-time, customized updates for members. SaskCanola set to host four extension meetings in February.

> Mark Belmonte, professor of biological sciences at the University of Manitoba has two priorities: to create a welcoming, inclusive work space, and to develop the next generation of crop protection and production technologies. Join Manitoba Canola Growers for Canola Morning at Ag Days, January 16.

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SaskCanola Annual General Meeting

January 9, 11:25am - 12:30pm Saskatoon saskcrops.com/agms

Agronomy Update January 9-10 (virtual) agronomyupdate.ca

CrossRoads January 20-31 - Calgary crossroadscropconference.ca

Alberta Canola Conference & Research Symposium

January 24-25 - Grande Prairie albertacanola.com/acc

Alberta Canola AGM January 24, 10:30am-12:00pm Grande Prairie albertacanola.com/agm

CropConnect February 14-15 – Winnipeg cropconnectconference.ca

Manitoba Canola Growers AGM

February 15 (at CropConnect) Winnipeg canolagrowers.com/ upcoming-events

Top Notch Farming Meetings (Sask) February 6 - Spiritwood

February 7 – Unity February 8 – St. Walburg February 13 – Melfort saskcanola.com

Canadian Crops Convention

March 5-7 - Winnipeg canadiancrops.ca

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Positive vibes

BY JAY WHETTER

erman farmers cannot grow genetically-modified crops. They lost access to neonicotinoid seed treatments, and now nitrogen rates are restricted. European leaders have environmental and political reasons for all three decisions, but they

come at a cost.

One cost is yield. When agriculture strives for more efficient and sustainable use of arable land, agriculture can meet demand without taking up grasslands and forests. In the article "What can we learn from Germany?" on page 10, Mario Schneider, head of agronomic service for BASF in Germany, thinks oilseed rape yields in Germany could be 0.5 to 1.0 tonne per hectare (nine to 18 bu./ac.) higher without these limitations.

Another cost is mistrust between farmer and non-farmer. In the same article, Bryan Purcell, crop production analyst for Europe for the United States Department of Agriculture's Foreign Agricultural Service (FAS), says German farmers feel like the public is turning against them. "They are very concerned about what they perceive as an increasing negative view of the farmer by Germany," Purcell says.

A few days after writing the article on Germany, I attended (virtually) the Arrell Food Summit, an annual event of the Arrell Food Institute at the University of Guelph. Mohamad Yaghi, agriculture and climate policy lead with RBC's Climate Action Institute, was part of a panel called "The Business Case for Climate Solutions." The panel moderator asked, if you had a policy fairy who could change policy instantly, what change would you make, and why? "We need better communications about the benefit of farming," Yaghi answered. I jotted this down and put a star beside it. Then I called him to talk about it.

The agriculture sector, which includes farming, fishing, forestry and hunting, is already performing more carbon sequestration activities than any other business sector in Canada, Yaghi says, quoting a recent StatCan survey. "Yes, agriculture accounts for 10 per cent of Canadian greenhouse gas emissions, but farms can also play a huge role in the solution," he says, adding: "Canadian farmers, who manage 155 million acres, could sequester another 35 to 38 megatonnes of carbon in the soil, which is 25 per cent of Canada's projected 2050 emissions." With greater national adoption of minimum tillage, cover crops and agroforestry, which are the examples Yaghi lists, farms could sequester huge stores of carbon in the soil. Yet, the vibe has been that farmers are part of the problem, not an essential part of the solution. "Farmers were told they need to do better," Yaghi says, "and it hurt the conversation about farmers' essential role."

Yaghi would like more public and private research and development to identify appropriate climate solutions. "We need more information on practices that work in each soil type," he says. What cover crops, if any, will work on the Prairies? What crop rotations sequester more carbon? How can we develop cultivars that produce higher yields and sequester more carbon at the same time? Should we pay farmers to grow trees for the public good? Should we pay farmers to use enhanced efficiency fertilizer products?

Yaghi mentioned the massive \$20 billion Inflation Reduction Act in the United States, which will invest in clean energy, climate mitigation and resilience, agriculture and conservation programs. In the private sector, American companies spend \$14 billion per year on agriculture research and development, while in Canada companies spent only \$108 million (in 2020), he says.

To fire up investment, RBC took the lead on an initiative called the Canadian Alliance for Net Zero Agri-Food, which includes Nutrien, Loblaws, Maple Leaf, McCain and Boston Consulting Group. As it says at canza.ca, the alliance will develop, test and scale innovative technologies, champion bold and transformative policy measures, and develop a national carbon market.

Yaghi expects practices to sequester carbon and reduce emissions will eventually have a business case – better profits – but they may require some financial support in the first few years after adoption. "We have to show farmers a financial benefit for adopting these practices."

And we have to show Canadians that farmers are a huge part of the national carbon solution.

For the article on Germany, I asked Clint Jurke, the Canola Council of Canada's agronomy director, to comment on production practices in Germany that Canada should consider. He went a different direction, saying, "The public opinion about German farmers is our future if we cannot engage the public effectively."

The language, the confidence and the investment from public and private sectors can go a long way to demonstrate agriculture as the solution to Canada's carbon goals, not the problem.

Say Whelle

2ND ANNUAL **ALBERTA CANOLA CONFERENCE**

January 24-25 | Pomeroy Hotel Grande Prairie

Join us for great guest speakers at the 2nd Annual Alberta Canola Conference which features the Alberta Canola Research Symposium and Annual General Meeting.

DAY ONE **GUEST SPEAKERS** DAY TWO **RESEARCH SYMPOSIUM PANELISTS Jennifer Dyck Dr. Kelly Turkington Heather Watson Dr. Shelley Clint Jurke** Hoover CANOLA COUNCIL OF AAFC LACOMBE NATIONAL CANOLA FARM MANAGEMENT MARKETING PROGRAM CANADA **RESEARCH CENTRE** UNIVERSITY OF LETHBRIDGE CANADA

Janelle Whitley CANADIAN CANOLA **GROWERS ASSOCIATION**



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Dr. Stephen Strelkov UNIVERSITY OF ALBERTA

Alberta Canola's 34th Annual **General Meeting** Join us in-person or online.

Wednesday, January 24, 2024 10:30am - noon

Alberta Canola's Annual General Meeting will be held in Grande Prairie as part of the Alberta Canola Conference on Wednesday January 24, 2024, from 10:30 am until noon.

There is no charge to attend the Annual General Meeting or the Alberta Canola Conference. The Annual General Meeting will also be accessible online to growers and guests throughout the province.

Under Alberta Canola's bylaws, any producer who has a paid a service charge to Alberta Canola since August, 2021 is an eligible producer. Eligible producers can be individuals or represent a corporation, partnership, or organization.

Eligible producers attending the AGM either in-person or online are eligible to vote in an election and on any question.

Eligible producers are encouraged to pre-register for the AGM by January 10th to allow for verification of eligibility and to ensure voting links are delivered in advance of the meeting.

Eligible producers can submit resolutions to be presented at Alberta Canola's AGM. To ensure proper preparation, resolutions must be submitted in writing no later than 10 business days before the AGM (by January 10). This timeline allows for the collection of background information and the preparation of resolutions for their presentation at the meeting. Resolutions can be sent Karla Bergstrom, Executive director at karla@alberacanola.com

Eligible producers, canola growers, and guests can learn more and register at albertacanola.com/AGM



Alberta Canola director nomination results

The call for nominations for growers to serve on the Board of Directors of the Alberta Canola Producers Commission in Regions 2, 5, 8 and 11 is closed on October 31, 2023. Four canola growers have been acclaimed to represent growers in regions 2, 5, 8 and 11. The four canola growers elected by acclamation are Andre Harpe from Valhalla Centre, Justin Nanninga from Neerlandia, Jeffrey Frost from Olds and Roger Chevraux from Killam. Harpe will represent Region 2, Nanninga Region 5, Frost Region 8 and Chevraux will represent Region 11.

Immediately following the Annual General Meeting on January 24, Harpe and Chevraux will begin their third terms as directors, Nanninga will begin his second term, and Frost will begin his first term.

Alberta Canola directors may serve up to three three-year terms on Alberta Canola's Board as long as they remain an eligible producer.

A full list of the Board of Directors and Alberta Canola's regions can be found on **albertacanola.com/regions**.



Andre Harpe Region 2



Jeffrey Frost Region 8



Justin Nanninga Region 5



Roger Chevraux Region 11

What does the Bunge-Viterra merger mean for farmers?

Bunge could be the largest grain buyer in Canada

The proposed merger between Bunge and Viterra could drastically shift grain marketing for Canadian farmers for years to come. Initially announced in June of 2023, and expected to be completed mid-2024, the merger has come under scrutiny here in Canada and abroad. The Competition Bureau of Canada and Transport Canada are currently going through the regulatory review process to look at the impact this merger would have on the market competitiveness of grain elevator access for growers and export capacity through the Canadian grain transportation system.

Bunge operates many grains processing facilities globally including 56 oilseed crushing facilities, 17 grain mills, and 47 refineries. The acquisition of 67 Viterra primary elevators in Canada complements Bunge's valueadded grain processing business units by increasing their ability to acquire grains such as canola for crushing and wheat for milling. This deal would catapult Bunge ahead of other major primary grain buying companies in Canada, like Richardson and Cargill by giving them an ownership stake of approximately 33% of Canadian primary elevator capacity.

This consolidation will not only have a ripple effect across the Prairies but also globally affect the dynamics of grain trade. There are concerns relating to the loss of regional competition from primary elevator ownership, and the potential for elevators to be closed or sold off. Analysis over the number of ports Bunge would have an ownership stake in, and the role their non-controlling in G3 Canada Limited is still ongoing. The provincial canola commissions are working with government regulators, as well as industry representatives to ensure that the voice of farmers is considered when assessing the pros and cons of this merger between Bunge and Viterra.

Subscribe to the Alberta Canola Connections e-newsletter for updates: **albertacanola.com/subscribe**

SaskCanola research results feature

How does in-row seed spacing and spatial pattern affect canola yield? Vegetative ground cover is key

Optimum canola crop yield is directly related to vegetative ground cover, according to research by the University of Saskatchewan and the University of Manitoba. The study indicates that seeding rate and row spacing are key factors in maximizing vegetative ground cover which in turn maximizes the solar energy plants need for seed growth.

"Think of your crop as a solar panel," explains Steven Shirtliffe, professor in the Department of Soil Science, University of Saskatchewan, and a researcher on the project. "Plants are collecting solar energy from the sun to create plant energy, which they put into growing seeds. The quicker a crop can build the layer of vegetation needed to collect the solar energy, the healthier the crops and the higher the final yield."

The study was conducted in the dark brown soil zone and semi-arid climate of the Saskatoon, Saskatchewan region and the black soil zone and sub-humid climate of the Carman, Manitoba area from 2019-22. It produced similar findings at both locations.. After reviewing plant growth responses to planting arrangements, the study recommends that canola growers seed at least 60 seeds per square metre (5.5 seeds per square foot) and have row spacing of 30 cm (12") or less.

"Canola was able to compensate for low seeding rates by increasing branching and number of pods, but this delayed flowering," explains Shirtliffe. "The row spacing effect was minimal compared to seeding rate, however wider row spacings always trended to lower maximum yields than narrower row spacing."

Crops with the highest yields were those that had achieved and maintained full canopy coverage earlier in the growing season.

"The sooner you can get the plants growing, the faster they will turn to seed growth," says Shirtliffe. "If the canopy is thin the crop will stay in a vegetative stage longer."

Shirtliffe encourages producers to get as close to the recommended seeding density and row spacing as possible. However, he recognizes the significant cost and investment needed to purchase new equipment. He stated that information from this study can help in modifying existing equipment and inform future purchasing decisions.

"When turning over equipment, producers should look at what will

achieve good emergence. If wide row placement is being considered to save seed and if you are only getting 30 per cent emergence, seed is being wasted and yield is being lost," Shirtliffe says.

"If row width is pushed really wide to 30" or 36" by seeding with a row crop planter, those rows never filled in the space between the rows," he says. "Any time the canola canopy didn't fill or was delayed in filling in, the yield wasn't as high."

KEY FINDINGS: This research found that canola yield is maximized when seeding rate and row spacing result in the longest duration of vegetative ground cover. It is also confirmed that existing recommendations to establish five to eight seedlings per square foot with row spacings of 12" are adequate to achieve maximum yield.

PROJECT TITLE, PRINCIPAL INVESTIGATORS: "How does

in-row seed spacing and spatial pattern affect canola yield?" Steven Shirtliffe, University of Saskatchewan, and Rob Gulden, University of Manitoba

FUNDING: SaskCanola

↑

Steven Shirtliffe, professor in the Department of Soil Science, University of Saskatchewan, is lead researcher on the project.

> To read the full report, visit SaskCanola's research database.

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To subscribe, text keyword SASKCANOLA to

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SaskCanola launches NEW texting service for farmers

In October, SaskCanola announced the launch of its new communications platform – an interactive texting service!

The addition of this platform aims to enhance efforts to communicate more directly about the ongoing, diverse ways that the commission is providing value to farmers by sharing real-time, customized updates.

Farmers who subscribe can expect to receive:

- A weekly oilseeds market outlook report featuring insights from market analyst Marlene Boersch who provides updates on domestic and global influences on canola market prices
- Canola Watch, a weekly (during the growing season) canola production newsletter
- Plus event notifications and urgent news/alerts

Farmers will also be able to engage directly with the SaskCanola team by texting the dedicated number to initiate a two-way conversation.

"Our intention with launching this new texting service is to provide farmers with timely information that empowers them to make informed decisions to optimize their farm businesses," said Tracy Broughton, SaskCanola's executive director.

By texting SaskCanola, you agree to receive promotional messages from SaskCanola sent via an autodialer. This subscription is not a condition of any service. Estimated 10 messages/month. Message & data rates may apply. Reply STOP to unsubscribe or HELP for help. Terms and Privacy Policy can be found at saskcanola.com/privacy-policy



Save the Date for Top Notch Farming Meetings



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Mark your calendar and plan to join SaskCanola, SaskFlax and SaskBarley this winter for one of our joint rural extension meetings. Visit **saskcanola.com** to view agendas and register!

Melfort

St. Walburg

Unity

Spiritwood

THE BULLETIN FOR MANITOBA CANOLA GROWERS



Exciting times in ag research

When it comes to trying to foster an inclusive space, Mark Belmonte, a professor of biological sciences at the University of Manitoba (U of M), says it's important for everybody to feel welcome.

"I didn't always feel welcome in schools when I was growing up," Belmonte says. "It's important for me to make sure people who are interested in science are given the opportunity to be able to ask questions, and to walk out of my lab with confidence knowing they can actually make changes from what they are learning."

Belmonte and his research team at the U of M focus primarily on plant molecular biology, and through discovery science are developing the next generation of crop protection and crop production technologies for farmers.

They are doing fascinating work with ribonucleic acids (RNA), which are molecules found everywhere on earth, each with a special function. In plants, these molecules act as messengers that enable the plant to combat different stresses, like environmental conditions or diseases.

In relation to genetics or genetic engineering, Belmonte says there is nothing more organic than DNA or RNA. "The amount of rigour and experiments required to ensure food is safe is more now than ever before," says Belmonte. This is important because it provides the consumer with the



Great Tastes of Manitoba videos University of Manitoba professor and researcher Mark Belmonte.

information they need to make a choice.

For Belmonte, now is an exciting time in agriculture and science. "With so many new technologies, it's going to require a community to implement and translate these in a way that will help both the consumer and the farmer."

Belmonte is passionate about his work and is committed to building a welcoming and inclusive science community.

"When you give students the opportunity to study in an inclusive space, to be able to listen to each other and share their stories, you give them the opportunity to be free thinkers."

This can provide huge benefits to every aspect of society, says Belmonte.

Watch Belmonte's video at greattastesmb.ca/farmers/ an-exciting-time-in-agriculture.



Stay in the Know:



Check out our Annual **Report on** pages 14 and 15!



Elections Learn more about our

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Tuesday, **January 16 Canola Morning** at Manitoba Ag Days

Manitoba Canola Growers **Association Program FCC** Theatre

9:30 a.m. - Manitoba's Most Wanted

Chris Manchur, agronomy specialist, Canola Council of Canada, @ManchurCCC

Courtney Ross, agronomy specialist, Canola Council of Canada. @rossCCC

Canola production in Manitoba over the

past growing season was met with many challenges, including drought, diseases, and insects. Some

notable insects that have caused issues for growers were flea beetles, diamondback moths and lygus bugs. As for diseases, blackleg and verticillium stripe were prevalent, while later in the season sooty molds and powdery mildew appeared. Chris and Courtney will highlight the top pests and pathogens that are "Most Wanted" here



Courtney Ross

in Manitoba, and what strategies can be taken to manage them effectively in future growing seasons.

10:15 a.m. - Seeding: Getting it Right

Amy Delaguis, research manager, Manitoba Canola Growers Association, @mymangin

Chris Holzapfel, professional agrologist, Indian Head Agricultural Research Foundation, @CBHolz13

Amy and Chris will look at results

Amy Delaguis

from canola field trials focused on phosphorus (P) fertilizer formulations/ blends, application rates and placement methods. This work compared the effects of contrasting granular fertilizer forms, applied in the seed-row at a wide range of rates, on canola establishment and yield. We will also look at furrow vs side band placement of P results. Preliminary results from Manitoba Canola Growers On-Farm



Chris Holzapfel

Research Program, including seed-placed fertilizer toxicity and seeding rate optimization for canola across Manitoba growing conditions will be discussed.

11:15 a.m. - Produced on the Prairies Video Premiere A partnership between Manitoba Ag Days, Great Tastes of Manitoba and Manitoba Canola Growers Association

11:20 a.m. - Your Farm Voice in Ottawa

Dave Carey, vice president, government & industry relations, Canadian Canola Growers Association, @davecarey

Join Dave Carey, one of Canada's top lobbyists, for a candid discussion where he will pull back the curtain on Ottawa federal policy making and unpack just what role farm groups play in the capital. Dave will talk about issues, Ottawa's state of play and lobbying strategy and tactics. Dave will help you understand how to make our farm voices heard.



Dave Carey

What can we learn from Germany?

Germany has the highest canola (a.k.a. oilseed rape) yields in the world, according to USDA Foreign Agricultural Service statistics, and the European Union as a bloc now edges Canada for top tonnage produced. What can we learn from Germany?

BY JAY WHETTER

anola yields in Europe are the best in the world, and Germany is the best of the best. Europeans call the crop oilseed rape (OSR), which is Brassica napus with low glucosinolates and low erucic acid. It differs from canola in name only. Average OSR yields in Germany for the decade from 2012 to 2021 were 3.6 tonnes per hectare, or 64 bu./ac., according to data from the Food and Agriculture Organization of the United Nations (FAO). Canada's average over those same years was 2.1 tonnes per hectare, or 37 bu./ac. Big reasons for high German yields are winter cultivars, high inputs and a long growing season.

"Germany's climate is very conducive to winter rapeseed," says Bryan Purcell, crop production analyst for Europe for the United States Department of Agriculture's Foreign Agricultural Service (FAS). "The crop calendar and maritime climate of the country suit it very well, usually protecting it from extremes that can occur further inland."

German farmers also have a 10- to 11-month growing season, planting in August-September and harvesting the following summer. "We see in Europe significant higher yield in winter OSR than in spring OSR," says Mario Schneider, head of agronomic service for BASF in Germany.

Management and inputs

"German farmers have years of experience with the crop and have the financial resources to obtain certified seeds, modern equipment and all the permittable inputs," Purcell says. "They have well established research institutions and outreach programs to help guide them."

German farmers also use a lot of inputs. Schneider says winter OSR in Germany is a "high input crop."

Seed genetics: OSR in Germany is non-GMO, but some cultivars have herbicide tolerance. Seed companies offer Group-2 tolerant Clearfield cultivars. Key genetic traits are resistance to blackleg (called 'phoma" in Europe) and turnip yellows virus which aphids transmit to OSR through feeding. Common seed treatments are the fungicides fluopicolide and fluoxastrobin for seedling diseases. They don't have neonicotinoid seed treatments, and current replacements are not as effective.

"German farmers have years of experience with the crop and have the financial resources to obtain certified seeds, modern equipment and all the permittable inputs. They have well established research institutions and outreach programs to help guide them."

- Bryan Purcell

Fertilizer: In Germany, farmers must do field specific fertilizer calculation before the first treatment. "It is mandatory and requested by law," Schneider says. This calculation is based on field characteristics, including previous crop, history of manure application, and soil quality, carbon content and available nitrogen.

Schneider gives an example: For an OSR yield target of 4.0 tonnes per hectare (71 bu./ac.), medium carbon content, 40kg/ha (about 35 lb./ac.) nitrogen available at the beginning of the growing season, and no history of manure, the nitrogen rate that can be applied is 165kg/ha, or about 150 lb./ac. In addition to nitrogen, most farmers apply 70-80kg/ha of phosphate, 70-80kg/ha of potassium (K2O) and 500-700g/ha of boron.

Disease management: Even with blackleg-resistant cultivars, some farmers will apply fungicide to protect against blackleg infection in the fall or early spring. Schneider notes that in most cases this fungicide application is used more for its growth regulating effect. He says 90 per cent of OSR in Germany gets a growth regulating treatment of fungicide, often metconazole. This shortens the crop to reduce lodging, reduces flower counts on the main stem to improve light infiltration to leaves, and increases rooting. At flowering, farmers will apply another fungicide treatment, or treatments, to protect against sclerotinia stem rot. Again, about 90 per cent of farms apply this treatment, Schneider says. Clubroot is also common in Germany.

CLINT'S CALLOUTS

Canola Digest asked Clint Jurke, the Canola Council of Canada's agronomy director, to highlight two German practices he'd like Canada to consider. Here are his picks:

- Germany shows us what yield potential is possible. We can improve yields here in Canada with better fertility plans.
- Another thing we can learn is what happens with bad regulation. Limits on crop inputs will reduce yield. And the public opinion about German farmers is our future if we cannot engage the public effectively.



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Find out more reasons why they call us CanolaMaster and calculate your savings at **CanolaMaster.ca**

Weed management: Without herbicide-tolerant technology, farms manage weeds with tillage, pre-emergent or early post-emergent herbicide, and late-fall applications to remove grassy weeds. By spring, the crop has complete ground cover and weed competition is minimal.

Insect management: Without neonic seed treatments, the alternative seed treatments are much less effective on flea beetles and aphids. Foliar applications are required. The most important insect pest is cabbage stem flea beetle. Adults feed on young canola plants, and their larvae hatch and feed inside stems. Other important insect pests in Germany are pollen beetle, aphids, rape stem weevil and cabbage seedpod weevil.

Simon Kröger, oil crops product management lead with seed company DSV in Germany, says early season vigour is essential to insect management without effective seed treatments. "To have ideal conditions for emergence and early vigour, precision drilling is used more widely with maize and sugar beet drills," Kröger says. He adds that farmers and researchers are also experimenting with companion crops to mask the OSR and make it less attractive to beetles. Starter fertilizer helps with vigour. And farmers spray pyrethroids in autumn, "but with limited success," he says.

Schneider adds that German farmers are increasing the break between OSR crops.

Major yield-limiting factors

Schneider says insect pressure and dry weather in April and May are the most limiting factors for higher yield. Germany's lowest average yield for the past decade was 2.99 t/ha (53 bu./ac.) in 2018, and the major factor, Schneider says, was a long, very dry period in spring and early summer in an important production region.

"My personal opinion is that we would be able to extract 0.5-1.0 t/ha more [with] no limit with fertilization and full availability of modern insecticides."

Purcell provides a longer list of weather challenges: too much rain during flowering, late freeze during April and early May, dryness at planting, dryness at flowering and podfill, flooding after emergence, and high temperatures during flowering. To this last one, he adds that because flowering is fairly early in the year (April-May), excess heat at flowering is not usually a problem. "Farmers are all complaining about climate change producing more extreme events and more challenges," Purcell says.

Another major yield-limiting factor is government policy.

"Due to the neonic ban, cabbage stem flea beetle is very prevalent and has gotten worse," says Purcell. The EU ban took effect after the 2018 production year. Purcell says OSR seeded area and yields shrunk after the ban, and have started to show a gradual rebound.

Purcell also highlights the restrictions on nitrogen and phosphorus use. Farms have to document the quantities of nitrogen and phosphorus, and if they don't follow the formula rates, as Schneider described in the earlier example, farms can be fined up to 50,000 Euros.

Purcell adds that for some "nitrate vulnerable zones," where nitrogen pollution is already at a very high level, the maximum permitted amount of nitrogen is 20 percent lower than the calculated requirement.

As good as Germany's OSR yields are, Schneider says they could be better. "My personal opinion is that we would be able to extract 0.5-1.0 t/ha more [with] no limit with fertilization and full availability of modern insecticides," he says.

Purcell says German farmers feel like the public is turning against them. "They are very concerned about what they perceive as an increasing negative view of the farmer by the public and the pressures that the public puts on politicians to increase bans on farming activities," Purcell says.

Do you think any of the practices common in Germany should be considered in Canada? Please email the author and share your thoughts.

—Jay Whetter is the editor of Canola Digest. Email whetterj@canolacouncil.org.

— <mark>Mar</mark>io Schneider

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The guide to better profits

Provincial crop planning guides are excellent resources for farmers to compare their own numbers and make adjustments to improve their results.



BY RICHARD KAMCHEN

rop producers can improve profits when they understand their true cost of production, says Samantha Marcino, Saskatchewan's acting provincial specialist for oilseed crops. "Production costs, unlike the weather, are a factor under the producer's control."

Canola's appeal is its high estimated gross revenue, but the crop also comes with very high nutrient needs, and therefore a high cost of production. Provincial crop planning guides are excellent resources for farmers to compare their own numbers and make adjustments to improve their results.

"We recommend producers use them as a benchmark, and add in their own operating expenses to determine what is best for their farming operation," Marcino says.

She stresses that the Saskatchewan guide's numbers are only estimates and can be extremely variable, depending on individual farms and growing season conditions.

The 2024 guides are posted or will be soon. The 2023 guides estimated strong profitability trends for canola. Saskatchewan predicted the crop to be the most profitable commonly grown field crop – excluding some special crops – while canola also compared favourably to competing crops in Alberta, leading in profitability across a number of growing areas. Manitoba's 2023 profit guide, however, ranked canola profits only sixth highest.

Identify profit variability

"For the most part, canola continues to be a profitable crop in the rotation," says Jason Casselman, Canola Council of Canada agronomy specialist for the Peace River region. But that's not to say every field and acre present ideal conditions for growing the crop. Each field is going to have some its own characteristics and underlying factors. And even within a particular field exists variability.

Water management is a huge part of ensuring land will be profitable, something that can be gleaned from yield maps. Casselman's also a big advocate of targeted applications of fertilizer, herbicide and fungicide. By spraying some areas but not others, field costs per acre will be lower, and returns better thanks to lower application costs to go with improved yields.

"What I think is interesting is looking at those parts of the field that might need a little bit extra attention to get the best canola crop from the whole field," he says.

Provincial guides also illustrate differing costs between soil zones. "There are significant regional differences across Saskatchewan," says Marcino. "Different soil types and weather patterns are two big factors affecting crop production."

Canola yields in black soil zones are historically higher than brown or dark brown soil zones, she points out. For the Saskatchewan guide, target crop yields represent the

The Guides

Alberta crop budget calculator and other tools:



Saskatchewan crop planning guide:



Manitoba cost of production guides and calculators:





"We recommend producers use them as a benchmark, and add in their own operating expenses to determine what is best for their farming operation."

— Samantha Marcino

five-year average of the 80th percentile of production for each crop in that soil zone. "These yields vary greatly depending on the year and producers should be inputting their own average historical yields to get a more accurate target yield," Marcino says.

Estimated fertility costs are higher in some soil zones, reflecting the higher yield potential. More fertilizer tends to be applied in the black soil zone than the brown soil zone, which comes down to forecast moisture availability. "Fertility on its own without moisture isn't going to be used by the plant. The amount of fertility that's applied has to be calculated with the amount of moisture that's available," Casselman says.

In some cases, growers can improve profits through split applications of fertilizer, he adds. "Applying all your fertilizer and hoping for the necessary moisture comes at a risk. Splitting it provides some more assurance that their fertilizer investment is going to pay off," Casselman says. "A grower can really take advantage of a split application on fertility based on the amount of moisture that they're getting."

By implementing split fertilizer applications on his own farm, Casselman was able to bring his cost of production below Alberta's guide estimates.

"We did some top-dressing after the crop had been seeded, and at the end of May came back with some extra nitrogen," he says. "So, looking at the cost of production comparison, the fertilizer values that were in the Alberta charts were a little bit higher."

Casselman found extra savings by purchasing urea fertilizer at a discount after seeding had wrapped up.

Other guide benefits

Casselman uses the guide's custom work cost estimates to give him an idea of what custom rates should be for his budgeting purposes. This analysis also helps him determine if it makes more financial sense to own a particular piece of machinery or equipment.

The guides can also assist growers to pick out which areas of their farms are contributing to profitability and which aren't, he says. If it's owned property, a farmer might look at culling certain acres or trying to improve them, by means of, say, addressing drainage issues or identifying nutrient limitations.

"That's part of the calculation on profitability: can you afford to farm that land or can you afford to improve that land? And what does it take? Can you make it better or should you drop it?" Casselman asks.

These calculations may also prove useful in negotiating longer-term rental deals in order to secure the time needed to earn back land improvement investments through higher production, he explains.

-Richard Kamchen is an agriculture freelance writer based in Winnipeg.



More canola, same acres

Be patient, but don't wait for perfection

BY TANIS SIRSKI

Growers who achieve consistent top-level yields have the machinery prepped and inputs on hand so they're ready when good seeding, spraying and harvest conditions come along – but they're not waiting for perfect conditions.

n the Parkland area of Manitoba where I live and work, some farms have – so far – been able to get away with fairly tight canola rotations. A good crop rotation will break up disease cycles. If farmers are in tight rotations, all other agronomy practices such as seeding rate, appropriate weed control timing, scouting and replenishing nutrient levels to at the least crop removal rates are that much more important.

In general, the higher yielding canola growers follow a few key practices.

They use higher fertilizer rates. They generally use "adequate plus" fertilizer rates matched with a sound understanding of the potential and productivity of acres going into canola. Highproducing growers understand that using soil samples, variable rate fertilizer on fields where it makes sense, calculating crop removal rates and understanding the productivity of their land are critical factors. Micronutrients and biologicals are tested for fit, but N, P, K and S are priorities.

They aim for uniform seeding depth and adapt to the conditions of the day. Aiming for seed depth of 0.5" to 1" gives them half an inch of wiggle room. With fields having variable moisture throughout the field, stubble to contend with, rocks and hills, uniform depth can be a tough task. It starts with keeping up with the necessary maintenance and checks on their seeding implement, and knowing when it's time for an upgrade. Contour following drills with independent-link openers are valuable for uniform placement. Getting out of the tractor to check for good seed to soil contact and seeding into moisture also plays a part.

They are patient, but don't wait for perfection. Growers who achieve consistent top-level yields have the machinery prepped and inputs on hand so they're ready when good seeding, spraying and harvest conditions come along – but they're not waiting for perfect conditions. Our growing season is short and days slip by. They don't wait for the perfect rainfall before they start to seed. They spray weeds early. They hit the timing on sclerotinia stem rot fungicides. And when insects are at thresholds, they spray. They also know that "doing nothing" can sometimes be the right choice.

They consider the genetics x environment x management (G x E x M) relationship when buying seed for each field. They know the needs of each field because they walk or quad each field, look at satellite imagery, collect weather data and fly a drone to monitor for pests, diseases, moisture levels, stresses and yield robbing risks that can add up over the season. The G x E x M relationship is particularly important for disease management for top yields in my area where canola rotations are tight. Understanding how clubroot, sclerotinia, blackleg, verticillium stripe and seedling diseases grow, infect and spread is necessary. Understanding what to do in cases of high disease pressures or environments and what can't be done (for example, there are no fungicide options to control verticillium stripe) is equally important. Some of the best options for disease prevention or reduction is to incorporate another crop into the rotation and increase the number of years before a field goes back into canola. High quality seed from a seed company focused on disease management is another good strategy.

"They don't wait for the perfect rainfall before they start to seed. They spray weeds early. They hit the timing on sclerotinia stem rot fungicides. And when insects are at thresholds, they spray. They also know that "doing nothing" can sometimes be the right choice."

They seek outside knowledge and advice. Good relationships are a resource for their farm. They try to avoid being blinded by their own "rules of thumb" and are more willing to adapt.

Canola is a very resilient crop and can compensate when given good conditions to do so. In my experience, top-yielding growers understand and accept that there are no guarantees, that genetics and marketing messages alone don't grow a crop, and that a good crop does take a bit of luck and happenstance. At the same time, they know that opportunities do not create themselves. Farmers who plan and are prepared to execute on plan A, B, C or D are the ones that create yield across a field and across their farm.

-Tanis Sirski, B.Sc., M. Sc., P.Ag., CCA, lives in Grandview, Manitoba and farms in the Dauphin area. She is also a retail territory manager with Corteva Agriscience.



More canola, same acres Three key considerations

BY CURTIS LITTLEWOOD

To grow more canola on the same land base, choose cultivars with disease resistance that matches the needs of the farm, use a fertilizer rate that supports the field yield goal, and prepare the land for strong emergence.

his is very much a Coles Notes version of my recommendations to grow more canola on same land base. Three very important considerations are variety choice, fertilizer rate and land preparation. **Variety choice.** Most hybrids have good yield potential. It can be hard to pick a variety that will yield better than another. So farms will want to look at other factors, like disease resistance that matches the needs of the farm. I'm in a clubroot area, so clubroot resistance is important. An effective practice is to choose a long-season variety for the best fields, and seed them early.

Fertilizer. Use a blend and rate based on soil tests, field history and environmental conditions. Use 4R practices and come up with a rate that will support the farm's yield goal. I recommend deep banding fertilizer, at least two inches down and away from the seed, applied at the time of seeding. Adjust rate based on needs for each field. For canola, include starter fertilizer in the seed row – a little monoammonium phosphate.

Land preparation. This includes weed control. Consider preemergent burnoff as a base for herbicide-tolerant canola. I work in a "full tillage area" because farmers say they couldn't start seeding until the middle of May with the higher moisture. Farmers use a highspeed disc to evenly distribute residue, but you don't want the soil too loose. A well prepared seedbed will help with uniform seed depth placement and even emergence, which are very important for canola.

Other important considerations

Use a seeding rate that will achieve a target canola stand of five to seven plants per square foot. Set seeding rates based on thousand seed weight. Use a seed depth that puts seeds 1/4" into the seedbed moisture. Seed should also be independently checked for germination percentage and vigour. Seed as early as possible, taking into consideration frost conditions in spring.

Pest management for higher yields includes early weed control and the consideration of spraying crop twice. Apply fungicide at 15-20 per cent flower and again at 60-70 per cent. Fungicide for sclerotinia stem rot is one practice that farmers often miss, either applying too late or not at all, and it can cost them a lot of yield. Control any insects that are at or past economic thresholds. Of course clubroot issues and blackleg can also can affect maximum canola yield. Be sure you know what s going on in your field, including controlling volunteer canola from previous years that may have disease on it. Scout lots.

As for harvest, straight cutting usually produces the highest yields. Swathing too early is another practice that can cost farmers a lot of yield. If farmers are swathing canola, I recommend they hold off until 80 per cent seed colour change on the whole plant, not just the main stem. A lot of farmers don't take side branches into consideration. If pre-harvest is needed, I usually recommend Heat LQ and glyphosate with water volume of 20 gallon per acre or more. This water volume is very important to get chemical to bottom of the canopy. Be sure combine settings are correct for the canola. Check behind the combine to see if there is much canola in the trash.

"Fungicide for sclerotinia stem rot is one practice that farmers often miss, either applying too late or not at all, and it can cost them a lot of yield."

I checked with Russell and Brian Kushinski, farmers I work with in Calmar, Alberta. They added some invaluable insight around harvest:

- The whole year starts in the fall with the combine, they say. The Kushinskis replace the combine chopping knives every year to completely spread out chaff and straw behind the combine.
- Stubble height is important as it affects how straw is managed out the back of combine.
- When swathing, have sharp cutting knives and take the time to do an excellent job.

In the future, I would like us to try fall seeding again to take advantage of the whole growing season. I know we tried it before, but I don't think we should give up on it. When it comes to high canola yield, we're newbies compared to Europe. They've figured it out.

-Curtis Littlewood, B.Sc. Ag., P.Ag., is manager and owner of Advantage Agronomy & Consulting Services based in Leduc, Alberta.



More canola, same acres

Pay attention to detail

BY DAVID CUBBON

Observe fields, record information and review this information annually. Paying attention to these details is critical to top yields.

roducers have asked me for the magic bullet to grow a 70-bushel canola crop. I haven't found one. No one management practice by itself will give top canola yields. I have found that farmers who grow top yields pay attention to detail and use the science available. The package of practices you put in each field is critical to success. Here is how I recommend you acquire that package:

Talk to neighbours. Every farm has different issues that limit yield. Soil types change. Fertility requirements change from field to field and from year to year. Soil acidity (pH) issues are showing up. Weed pressure changes from field to field. Excess water from both water tables and shallow potholes flooding impact yield. Disease pressure from blackleg, clubroot and verticillium stripe is specific to each field. As a producer, you need to know what is going on in your area. Talking to neighbours gives you a good overview of the potential problems in your area.

Hire an agronomist. Understanding what is going on in your fields is essential to growing top canola yields. An agronomist will help producers deal with issues described in the previous paragraph, and provide discipline in the scouting process. Proper scouting looks at canola fields at critical times to look for specific problems. When scouting canola, I found many issues that needed to be addressed, such as high blackleg levels, clubroot, poor weed control and poor fertility in specific areas of a field. Many times, I found these issues before the producer did.

Agronomists should help producers identify and speed up the adoption of new technologies. Agronomists are trained professionals required by their profession to update in the field they practice in. If you hire an agronomist, they should be a sounding board for any new ideas that you want to implement in your fields.

Test your soils. If you wait for visual symptoms of nutrient deficiency, it means fields have already seen significant yield loss over the past few years. If yield potential is high, I have seen good response from in-crop applications of 21-0-0-24 to deal with nitrogen and sulphur shortages. I recommend high rates of phosphorus (P) and potassium (K) fertilizer on fields with soil tests

below 15 ppm of P and 125 ppm of K. If not using variable rate application, farmers need to over-apply nutrients in some areas to get top yields. Returns are good enough that banking P and K is not a bad idea.

Collect data for every field. Keeping records allows a producer to monitor the detailed data generated for specific fields. Keep results of soil tests, disease surveys and yields for every field. Satellite imagery and yield maps help track what is going on. Make sure you or your agronomist reviews these records. Having field records you don't use doesn't make sense. If change is happening in your fields, proper records will find the problem sooner.

Use science-based information to introduce new practices. When you see a change in the data from your fields, make the adjustments needed to maintain top yields. An agronomist can help you choose new approaches that are supported by scientific trials.

Observe fields, record information and review this information annually. Paying attention to these details is critical to top yields.

—David Cubbon is a P.Ag and CCA from Meadow Lake, Saskatchewan. Cubbon was an agronomist and ag adviser in the area for over 40 years, including with Meadow Lake Co-op and the provincial government.

"Agronomists are trained professionals required by their profession to update in the field they practice in. If you hire an agronomist, they should be a sounding board for any new ideas that you want to implement in your fields."



More canola, same acres

Be on time

BY DALE FEDORUK

Timing is one of those input decisions that does not cost any more to do, but the payback for timely tasks can be very rewarding.

ith the current marketplace, elevated input costs and especially escalating land prices, how do we grow more on the acres we have? Well, there are many answers to this question, and it's been discussed for years.

Some things we can manage very effectively, but we must always remember that Mother Nature has the last move.

Growing more on the land we have comes down to a well thought out plan. All successful crop production has an integrated plan to manage a diversified rotation. Canola requires a more systems approach and has a higher level of risk, especially compared to cereals.

This article outlines four of the most important steps – timing, soil testing, cultivar selection and scouting.

Be on time. Timing has the potential to make an incredible difference between a good crop and an amazing crop. Seeding date, pre-seed burn, in-crop herbicides, insecticides, fungicides, swathing, pre-harvest or desiccation. We've all had the experiences of looking over the fence line and drawing comparisons and wondering why! Timing is one of those input decisions that does not cost any more to do, but the payback for performing timely tasks can be very rewarding. Most often, early is better than late, especially for weed, insect and disease control. All properly timed management decisions will provide an incremental gain.

Soil test for balanced nutrition. Crop nutrition can become a significant limiting factor. Always plan for a home run, but don't be unreasonable with your expectations and acknowledge the 4Rs.

You must maintain a balanced nutrition plan. Avoid creating more of an imbalance – which can actually reduce or limit yields. More nitrogen is not always better. Manure is king! If you have access to any form of manure, this can pay huge dividends and provide payback for many years to come.

Choose cultivars that suit the farm. Select canola varieties with genetics and traits well suited to your area or micro-climate. I suggest doing small scale variety trials each year to determine which varieties and systems will perform the best on your farm.

Seed treatment options are plentiful. Make sure to cover your bases effectively for additional pathology concerns, flea beetle pressure and cutworms. The proper seed treatment choice can alleviate a significant amount of stress during establishment and early crop development. Reduced abiotic and biotic stress for the plants is important, but reduced mental stress for the farmer is critical.

Field scouting is a must. Increased frequency will pay dividends. It's not like Ron Popeil would say, "Set it and forget it." Canola requires a bit of pampering and coddling. Canola likes to have weekly visits at a minimum, and even more during critical times. *****

—Dale Fedoruk, B.Sc. Ag., P.Ag., C.C.A., owns Elite Environmental Ltd., an agronomy company based in Red Deer, Alberta.

"Crop nutrition can become a significant limiting factor. Always plan for a home run, but don't be unreasonable with your expectations and acknowledge the 4Rs."

Canola agronomy for the Brown soil zone

The Brown soil zone has lower canola acres and lower canola yields than other regions of the Prairies. This article describes agronomy practices that could improve results for canola in this large area.



The Brown soil zone is a large region of lighter

soils in southwest Saskatchewan and southeast Alberta. Total area is 30 million acres, with a little less than half dedicated to annual crops. These are grassland soils, like dark brown and black soils, but with historically lower moisture, higher heat, more wind and, therefore, lower organic matter and generally lower crop yields than the other soil zones.

Dominant crops in the Brown soil zone tend to be cereals and pulses, which can be more tolerant of warm, dry conditions. Durum wheat, barley, peas and lentils are popular in crop rotations. With rising demand for canola, the crop does present a potential market opportunity for this region. Here are practices that could improve results.

Canola as a rotation crop

Canola provides a break for fusarium head blight in cereals and aphanomyces in pulses. Canola cultivars with Group 9 (glyphosate) and Group 10 (glufosinate) resistance systems give growers new in-crop herbicide options to manage herbicide-resistant weeds.

Seeding

Common practice is to direct seed into standing stubble. Stubble captures winter moisture, protects soil from wind erosion, and residue reduces evapotranspiration of surface moisture. The Canola Council of Canada (CCC) surveyed agronomists and farmers in the Brown soil zone in 2022, asking about challenges to canola production. Common answers included seeding depth and seeding rate.

Depth. Experienced growers and agronomists do not have a consensus on the right depth. Some say that canola seeded 1-1/4" into moisture emerges faster and the crop is flowering before the heat of July. Others seed no more than 1" deep because they say canola seeded deeper often won't emerge.

← The Canola Council of Canada ran trials in 2023 comparing canola two seeding depths (¾" and 2") and two seeding rates (five and 10 seeds per square foot) at five sites in the Brown soil zone. Results will be posted in a new article on Brown soil zone agronomy at canolawatch.org/fundamentals.



Rate. A common approach in the Brown soil zone is to target the lower end of the recommended range of five to eight plants per square foot.

Date. Farmers in the Brown soil zone usually start spring seeding before farmers in other soil zones. A common practice is to seed more frost-tolerant crops first (peas and cereals, for example) then follow with canola in late April and early May.

• Short season strategy. Choose an early-maturing cultivar that flowers before the hottest days of summer. Temperatures above 30°C can significantly reduce canola yields, especially if nighttime temperatures stay warm. Yield potential realized in

mid- or long-season canola variety demonstration trials cannot always be attained in areas that tend to have higher ambient air temperatures in July and August.

• Long season strategy. Choose a later-maturing cultivar to take advantage of the longer growing season.

Equipment. Ultimately, farmers in the Brown soil zone want a seeding

system that works through residue without the need for tillage or harrowing. Disc drills are popular in the zone because their low soil disturbance minimizes moisture loss.

Fertilizer

A common practice in the Brown soil zone is to apply seed and most (often all) fertilizer in one pass. A starter rate of phosphorus (which could be 40 lb./ac. of monoammonium phosphate) is the only fertilizer that should or could go in the seed row. Place all other fertilizer in bands away from the seed row. Seed-placed nitrogen is more damaging to canola seedlings in dry soils.

Split applications and risk management. Farms could apply a nitrogen rate at seeding based on average or expected yield, then top up in season if moisture conditions vastly improve. Top end yield can be high in the Brown soil zone in years with higher rainfall. In 2016, for example, the Brown soil zone had higher yields than any other soil zone on the Prairies. To reduce ammonia volatilization losses when top dressing urea, use a urease inhibitor.

Time is always a constraint on farms, but farmers may want to establish some on-farm trials to determine the efficacy, profitability

Farms could apply a nitrogen rate at seeding based on average or expected yield, then top up in season if moisture conditions vastly improve. Top end yield can be high in the Brown soil zone in years with higher rainfall.

and risk profile of applying some of the fertilizer at planting and applying additional nitrogen in the growing season. Data over fields and time will provide a useful dataset to determine whether in-crop nitrogen increases profitability, with consideration for the additional time required.

Soil sampling. Jeff Schoenau, University of Saskatchewan soil science professor and farmer from Central Butte, Saskatchewan, recommends soil tests that include depths to 24" to account for sulphates and nitrates that can accumulate in brown soils. (Sulphate and nitrate often leach deeper into the soil profile in black and grey soils.) Check micronutrients when soil sampling. While boron

deficiencies are rare on the Prairies, canola needs more boron than other crops and boron levels can be low in sandy soils with low organic matter.

Harvest

Straight combining of canola is more common in the Brown soil zone. With the winds common in the Brown soil zone, most farmers would rather leave canola standing than risk swaths blowing. Shatter tolerance reduces the

risk for straight combining. With a longer season and usually dryer conditions, standing canola will often dry down without the need for pre-harvest desiccant.

Weeds. Glyphosate-resistant kochia is a huge issue in the Brown soil zone. Early weed control is important to preserve as much moisture as possible for the crop. Fall weed control is also valuable. Autumns are long and regrowing weeds, emerging winter annuals and volunteer canola can take up scarce moisture.

Economics

Economic risk is a drawback to canola in the Brown soil zone, according to results from the CCC Brown soil zone survey. The upfront cost of seed, chemicals and fertilizer is higher for canola than for other common crops in rotation. Survey respondents say the contribution margin for canola can be equal to lentils, but canola is a higher risk crop due to input costs. Survey results also showed that growers who already grow canola are more inclined to spend money on their canola crops because they are familiar with what it takes to grow canola successfully. They understand the potential ROI from canola in a good growing season.

Are there pH-insensitive strains of clubroot?

BY TARYN DICKSON

While liming may serve as an effective tool to complement host-plant resistance, field-specific conditions can affect its utility. Consider this before investing in liming to manage clubroot.

Stephen Strelkov, researcher at the University of Alberta, recently investigated a very specific (currently unknown) factor affecting the efficacy of liming treatments on the pathogen that causes clubroot in canola.

The practice of adding lime to increase the pH of soil has been used to manage clubroot in cruciferous vegetables, but liming requires considerable effort and expense when used in a canola production system. Check for consistent successful results before considering full adoption. For instance, while infection and clubroot disease symptoms are favoured by acidic soils, optimal soil pH could vary among *P. brassicae* populations, particularly considering the vast diversity in this pathogen.

This project investigated two questions on this topic:

- 1. Does the application of lime have varying effects on different *P. brassicae* isolates?
- 2. Can liming inadvertently select for pH-insensitive strains of the pathogen?

To answer the first question, the researchers grew clubroot-susceptible canola under greenhouse conditions in a soil mixture with liming (pH 7.5) or without (pH 6.0), and inoculated at high and low spore concentrations with various pathotypes of *P. brassicae*. To answer the second question, consecutive cycles of infection were carried out in a greenhouse using four isolates of the pathogen selected based on the results of the first study.

At the higher spore concentration, the lime application had minimal effect on disease severity. Conversely, at the lower spore concentration, liming was effective in reducing the disease severity. However, the amount of disease severity reduction was variable and depended on the isolate tested. Liming also reduced spore production per plant, although there was no significant correlation with disease severity.

Without liming, disease severity generally increased over each of the three cycles of infection. With liming, disease severity generally decreased over each cycle. In most cases (except for one), disease severity was reduced



↑ Greenhouse trials testing the benefit of liming for a clubrootsusceptible canola hybrid found that liming reduced the disease severity for all clubroot isolates, but the reduction for some, 6B and 6M in particular, was much greater than for others.

to values comparable with a resistant variety. Trends for resting spore production per plant over the multiple cycles of infection were similar to those observed for disease severity.

Therefore, liming had the greatest impact on clubroot severity and resting spore production after repeated exposure to the pathogen populations. However, repeated liming also runs the risk of selecting for pH-insensitive strains of the clubroot pathogen.

Overall, liming on its own may not provide sufficient management of clubroot in soils that are highly infested with *P. brassicae*, but could be one tool in a multi-pronged approach. As well, the efficacy of liming in a specific field will depend on the sensitivity of the pathogen population, since different isolates of *P. brassicae* have varying sensitivity to liming.

— 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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\$17 million for 17 research projects

With \$9 million from the federal government's Sustainable Canadian Agricultural Partnership and another \$8 million from grower organizations and industry, the next round of Canola AgriScience Cluster research will help strengthen Canada's canola sector.

he Canola AgriScience Cluster will channel over \$17 million in public and private funding into four priority areas of research to support sustainable growth of the canola industry. By helping to improve yields, meet increased market demand and enhance economic and environmental sustainability, the research findings are expected to advance the growth and resilience of Canada's canola sector.

In November, Agriculture and Agri-Food Minister Lawrence MacAulay announced over \$9 million in Canola AgriScience Cluster funding under the Sustainable Canadian Agricultural Partnership. When federal funding is combined with contributions from SaskCanola, Alberta Canola, Manitoba Canola Growers, Ontario Canola Growers Association and the canola industry, the total investment will be more than \$17 million over the five-year time frame.

The Canola Council of Canada will administer the funding, spreading it among 17 projects that encompass all links in the canola value chain. Research will address four priorities:



↑ Curtis Rempel, Canola Council of Canada vice president, crop production and innovation, speaks at the November announcement of the federal government's new investment in canola research. "Innovation is key to unlocking the next level of canola's success, and continued partnership on research is an essential part of that," Rempel says. Agriculture and Agri-Food Minister Lawrence MacAulay (seated, right) announced the new Canola AgriScience Cluster funding under the Sustainable Canadian Agricultural Partnership.

PRIORITY 1:

Climate change and environment

The goal is to reduce greenhouse gas emissions and increase carbon sequestration from canola. Canola plays a significant role in carbon sequestration given the deep rooting nature of the crop. Research projects will concentrate on methods to further increase carbon sequestration, while reducing greenhouse gas emissions from fertilizer and dairy-associated methane emissions. Projects will evaluate strategies to increase nitrogen use efficiency and improve nitrogen management and methods to inform fertilizer rate recommendations.

PRIORITY 2:

Economic growth and development

The goal is to increase canola's global competitiveness. Three genomics projects will look to produce novel clubroot genes, genespecific markers for precision breeding of blackleg resistant cultivars, and new canola genotypes with improved yield and abiotic tolerance. One plant physiology activity will aim to improve seed and seedling vigour. Three projects will evaluate the impact of canola meal in dairy cow and aquaculture diets.

PRIORITY 3:

Sector resilience and societal challenges

The goal is to improve canola's resilience in response to climatic stressors and pest pressures. Priority three will concentrate on canola breeding opportunities to produce improved climate adaptive resilient traits and flea beetle resistant traits, along with optimizing fungicide use for sclerotinia stem rot.

PRIORITY 4:

Knowledge and technology transfer and impact assessment

This is where the Canola Council turns results into recommendations. Along with activities related to administering the Science Cluster to guarantee continued success and high impact of research findings, this priority also includes:

- Knowledge and technology transfer. The objective is to assist scientists in sharing their findings from current and past activities with growers and other industry stakeholders. The Canola Council's agronomy specialists will turn research results into tangible practices that can be applied on farms and disseminate findings through innovative strategies and knowledge transfer products, including Canola Watch (canolawatch.org), the Canola Research Hub (canolaresearch.ca), the Canola Encyclopedia (canolaencyclopedia.ca) and Canola Digest magazine (canoladigest.ca).
- Economic impact assessment. A network of econometric analysts will examine and provide quantitative data on the return on investment of research dollars and impact on the canola industry.

Three Short Articles

Application basics for Optimum GLY

Corteva Agriscience's glyphosate-resistant canola system, Optimum GLY, launched in 2023 and will be available in a few cultivars for 2024.

Crop stage: Glyphosate can be applied to Optimum GLY canola from cotyledon to first flowers. "Optimum GLY expands the window of application past the six-leaf stage, allowing farmers the flexibility to time their herbicide application to maximize weed removal options," says Mark Kuchuran, product manager with Corteva Agriscience. "This gives producers time to cover large acres or clean up late flushes of weeds without the risk of yield impact from late-season applications."

Rate: Growers can use any approved glyphosate herbicide on Optimum GLY canola at rates up to two Roundup equivalent litres (RELs) per acre per season. One REL is equivalent to 360 grams of active ingredient per litre. Growers can apply the two RELs in one pass or as two passes, at least 14 days apart, of one REL/acre each. "For optimum weed control, it is recommended to spray the required amount of glyphosate as early as possible," Kuchuran says.

Dockage has higher moisture than seed

Dockage is a storage risk for canola. It can collect along bin edges and, because it usually has higher moisture than seed, can create a hot spot for mould growth. This small hot spot can cause a chain reaction that could eventually spoil a whole bin.

The Canadian Grain Commission used a small subset of samples collected though the Harvest Sample Program this past fall to compare canola seed moisture and dockage moisture. It separated 49 samples into seed and dockage and noted considerable differences. Average seed moisture for the 49 samples was 7.46 per cent, which is perfect for safe long-term storage of canola. The CCC recommends eight per cent. However, average dockage moisture was 10.8 per cent. If that dockage clumps together, as it often does, this could present a storage risk. Keep this in mind when checking bins. Canola with high dockage, especially straight combined canola where you know the dockage could be on the green side, could be at risk – even if the seeds are dry.

"Monitoring your stored canola on a regular basis from the time it enters the bin, to the time it leaves will reduce your risk for dockage due to spoilage," says Courtney Ross, agronomy specialist and storage lead with the Canola Council of Canada.

Thank you to Veronique Barthet, oilseeds program manager at the Canadian Grain Commission's Grain Research Laboratory in Winnipeg, for running this survey.

Moisture results for the 49 canola samples

	SEEDS	DOCKAGE
Average moisture %	7.46	10.80
Standard deviation	1.30	1.68
Standard Error	0.19	0.24
Minimum moisture %	5.39	5.40
Maximum moisture %	11.28	14.20

Real-time variable rate

Precision Planting's SmartFirmer provides real-time in furrow information that can trigger automatic seed and nutrient rate adjustments on the fly.

SmartFirmer optical sensors operate in the seed furrow, measuring reflectivity of the soil at various wavelengths. These measurements are correlated to soil moisture and organic matter. Being a U.S. Midwest company, Precision Planting provides a corn example: A corn grower could choose to plant 32,000 seeds per acre in soil that has one per cent organic matter and 40,000 seeds per acre in soil with 3.5 per cent organic matter. SmartFirmer feeds real-time organic matter data into the planter computer, and the computer adjusts the seeding rate accordingly. The system can also adjust liquid nitrogen, reducing application rates in soils with higher organic matter where the soil is more likely to provide nitrogen from mineralization.

I

"The speed of response is due to the extreme speed of the computers inside the SmartFirmer, vDrive and vApply, which are orders of magnitude faster than any human response," says Dale Koch, product manager at Precision Planting research facility at Tremont, Illinois. (Precision Planting is a division of AGCO.) "It can respond as fast as it takes for a seed to drop from the meter to the ground, which is no more than a few feet at typical planting speed."

SmartFirmer requires the Precision

Planting 20/20 monitor and electronic architecture. SmartFirmer units are about US\$800 per row, and the number per seeding unit is up to the farmer. "You need a minimum of three control to be done automatically," Koch says. "Since there is variability by row across the field, the more the better."

> ← SmartFirmer optical sensors operate in the seed furrow.

Canola on the Hill 2023

On November 7, 2023, Canadian Canola Growers Association (CCGA) and the Canola Council of Canada (CCC) went to Parliament Hill to meet with parliamentarians and senior staff to advocate on behalf of Canada's 43,000 canola farmers and the entire canola value chain. CCGA and CCC concluded a full day of meetings with a joint parliamentary reception.

BY TROY SHERMAN AND TENESHA LAWSON

CCC's Lobby Day Highlights

s part of its ongoing advocacy and engagement efforts to advance the industry's public policy priorities, CCC board and staff recently held its Ottawa lobby day. This provided the opportunity to meet with parliamentarians, political staff and senior officials to discuss key issues for the value chain leading up to the Fall Economic Statement and Budget 2024. Topics covered as part of this activity included:

1 Sustainability and biofuels

Canola is a climate solutions provider and is playing a key role in reducing emissions. The domestic and international biofuels markets are a key part of the canola industry's growth and diversification efforts and are a catalyst for private sector investments in new processing capacity.

Our Asks: Address farmer concerns with the federal fertilizer emissions reduction target and incentivize domestic investment in clean fuel production.

2 International trade and market access

Today, the vast majority of Canadian canola is destined for export markets and international trade is the lifeblood of the industry. With new canola crushing capacity coming online in the next several years, finding markets for more canola-based products (i.e. increased volumes of meal used in animal diets) will be important. **Our Asks:** Ensure a balanced approach to China given the importance of this market for Canadian canola and defend Canada's trade policy and reputation by defeating proposed legislation that would undermine our trade negotiations.

3 Competitive and innovative regulatory environment

As Canada looks to advance dual objectives of productivity growth and emissions reduction, a competitive and innovative regulatory environment is necessary to drive investment and innovation. This must include an unwavering commitment to science- and evidence-based decision-making.

Our Asks: Establish a clear regulatory pathway as quickly as possible for plant breeding innovations and ensure that the Pest Management Regulatory Agency has the resources required to support a robust world-class regulatory system.

4 Transportation

Supply chain issues continue to have an impact on Canada's global reputation as a supplier of grains and oilseeds, including canola. Increasing competition among the Class 1 railways and ensuring transparency in reporting through the Grain Plans will better position the canola industry to move product to market and meet global demand.

Our Ask: Support Canadian farmers and shippers by making the Prairies' extended interswitching pilot permanent and increasing the distance to 500km.

↑ Driv

Prime Minister Justin Trudeau met with the Canola Council of Canada board during Lobby Day in Ottawa November 7.

CCGA'S Lobby Day Highlights

hy go to Ottawa? Policy decisions have real implications at the farm level. By putting a face to the farmers behind this multi-billion-dollar Canadian industry, we are able to connect with policymakers and influencers who may not have an understanding or experience with agriculture or the farm. Policy risks are real, and lobby day is an excellent opportunity to have farm leaders talk directly with decision-makers—to connect with them about the realities of farming and how policies can create opportunities or obstacles for farmers.

CCGA, joined by the provincial canola commissions, participated in over 25 parliamentary meetings to highlight three important policy areas to advance a sustainable future:

1 Rail transportation

Canola representatives discussed the importance of rail service for farmers and the need for appropriately designed regulatory mechanisms to enhance the reliability of rail service and promote competition between the railways.

Specifically, Budget 2023 initiated a 'pilot' for regulated extended interswitching, expanding the radius from 30 km to 160 km for any shipper in the prairie provinces, for a duration of 18 months (in effect September 2023 to March 2025). The pilot should be made permanent, extended to 500 km, and applied nationally as this is an important pro-competitive tool, injecting commercial forces into the railway-shipper negotiations, that in turn, help ship farmers' products more efficiently.

Our Ask: Support competition in Canada's railways by making Budget 2023's extended interswitching pilot permanent.

↓ While at the Parliamentary reception at the National Gallery of Canada, Chris Davison, president and CEO of the CCC, Roger Chevraux, CCGA board chair and Alberta Canola chair, connected again with Lawrence MacAulay (centre), Canada's minister of Agriculture and Agri-Food.





↑ Lawrence

MacAulay, Canada's minister of Agriculture and Agri-Food (centre), met with (I to r) Roger Chevraux, CCGA board chair and Alberta Canola chair, Codie Nagy, CCGA director and SaskCanola director, Delaney Ross Burtnack, executive director of Manitoba Canola Growers, and Rick White, president and CEO of CCGA.

2 Sustainable Agriculture Strategy

Canola farmers are leaders in sustainability with a strong commitment to preserving the environment for future generations. To ensure their success, it's crucial to involve them in decision making. Agriculture and Agri-Food Canada's Sustainable Agriculture Strategy should recognize their achievements, provide incentives for pragmatic changes, avoid one-size-fits-all approaches and targets, and promote regionally tailored solutions to address specific agricultural challenges.

Our Asks: Invest further and create an enabling regulatory environment to support agriculture research and development to boost farmer competitiveness and climate resilience.

3 Canada Grain Act

Last overhauled in 1971, the *Canada Grain Act*, which governs the Canadian Grain Commission (CGC), has not kept pace with the evolution of the Canadian grain sector and the way farmers grow, deliver and sell crops. Government leadership is needed to move the 2021 review and consultation forward and legislative change should be a priority in this Parliament.

Our Ask: Modernize the *Canada Grain Act* to align farmer protections and Canada's grain quality assurance system with today's practices and position Canada as a leading supplier of high-quality, safe grain.

What's next? CCGA will continue to advocate for these issues and others to ensure canola farmers' voices are heard in our nation's capital.

— Troy Sherman is director of government relations for the Canola Council of Canada. Tenesha Lawson is manager of stakeholder communications for Canadian Canola Growers Association.

CCC meetings of note

- Prime Minister of Canada
- Deputy Leader of the Conservative Party of Canada
- Chair of the House of Commons Standing Committee on Agriculture and Agri-Food
- Chair of the Senate Standing Committee on Foreign Affairs and International Trade
- Deputy Minister of Agriculture and Agri-Food Canada
- Deputy Minister of International Trade

CCGA meetings of note

- Minister of Agriculture and Agri-Food
- Minister of Small Business
- Minister of Rural Economic Development
- Shadow Minister of Agriculture, Agri-Food, and Food Security
- Office of the Leader of the Opposition

Turning up the sweet love for canola

Canadians' love of home-grown maple syrup inspired Hello Canola to tap that same tree, looking at ways to promote canola through its Canadian-ness, warm community and extreme usefulness.

When asked to name a truly Canadian agriculture

product, Canadians usually say maple syrup. The goal of *Hello Canola,* which will continue with integrated promotion throughout 2024, is to get more Canadians to put canola at the top of the list.

"While doing our background research to develop *Hello Canola*, we learned that Canadians admire maple syrup and saw it as distinctly Canadian," says Louise Labonte, public engagement and promotions coordinator with Alberta Canola. "We hope this campaign will grow a similar sentiment for canola."

Maple syrup is often mentioned in relation to other Canadian items of pride – like poutine and hockey – and it's part of Canadian foods, like maple-glazed Tim Hortons donuts. Furthermore, events featuring pancakes and maple syrup bring communities together, positioning maple syrup as a metaphor for Canadian-ness.

Canola can be, too!

But Canadian-ness isn't enough. A Leger survey of the general Canadian population completed at the beginning of 2023 showed that only three out of 10 Canadians said their opinion of canola improved when they learned that canola was made in Canada. Two thirds didn't change their opinion based on that fact alone – they needed more.

When asked what else would make them change their affinity towards canola, health and affordability led the pack. Through Hello Canola planning research, which included the Leger survey and discussions with a wide range of industry stakeholders, three themes remained consistent:

- As a crop, canola has a variety of stories that are rooted in positive impacts for Canada. When people can see the connection, they are more likely to become invested.
- When viewed as an ingredient in food for humans and animals canola's purpose and value to Canadians begins to matter more.
- The world of energy is changing. Canola is a foundational piece in the future of sustainable fuel.

Hello Canola brings all of these pieces together. "It led us to align on what we need to say, who we need to say it to and how we are going to say it," says Labonte. "Our campaign purpose is to make the knowledge of, use of and support of canola a near-universal fact for all Canadians. Our objective is to build a positive reputation for canola by moving Canadians from apathy to love of canola."

The audience

Survey results showed that Canadians who said they were familiar with canola were far more likely to have a higher opinion of canola compared with those not familiar. For soft skeptics and those in the dark about canola, Hello Canola hopes to reach them through storytelling and emotional momentum. Making Canadian Canola a person – "Hi, I'm Canadian Canola!" – who can share the canola story and connect with people will build that emotional momentum. Four influencer ambassadors are also helping tell the canola story as it relates to nutrition, food, lifestyle and farming.

The central hub for content is the new website at **hellocanola.ca**. The consumer-targeted site has information on the benefits of canola, canola in our daily lives, and recipes, along with a learning centre for anyone curious about canola. Paid advertising is currently in motion, focused on reaching the Millennial audience where they are – Instagram, Facebook, Connected TV and online video.

"We targeted Millennials, those born between 1981 and 1996, with this campaign as they are a demographic cohort of young urbanites. They have an average household income of \$72,000, 66 per cent are married or in a relationship, 46 per cent have children at home – and 93 per cent use social media daily," Labonte says. "Millennials use social media more than any other media outlet to discover brands."

The major blitz will run through January, with social shorts featuring the beloved Canadian Canola character telling canola stories each month through June.



Canola In Our Lives

Canola, just for cooking eil? Not a chance. With a wealth of uses and applications in Canada and around the world, the crop is playing a bigger role in your daily life than you might've thought.

The power behind the campaign

The provincial canola associations – Alberta Canola, SaskCanola and Manitoba Canola Growers – fund the new campaign through their joint National Canola Marketing Program. The grower organizations hired FleishmanHillard HighRoad, a strategic communications and public relations agency, to develop the strategy and bring Hello Canola to life through creative, influencer relations, paid advertising, website, social media and public relations elements.





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Agriculture and Agri-Food Canada Advance Payments Program Agriculture et Agroalimentaire Canada

Programme de paiements anticipés The Advance Payments Program is a federal loan program administered by Alberta Grains. It offers Canadian farmers marketing flexibility through interest-free and low interest cash advances.

The five experiences of women farmers

Farm Management Canada explored the experiences of Canadian farm women in a new study. The report characterized the satisfaction, participation, recognition and support farm women experience, and identified five patterns – content, inspired, constrained, uncertain and obstructed.

BY TREENA HEIN

Many accomplished, hardworking and resilient women are found among the ranks of Canadian farmers, but up to this point, their specific experience hasn't been

deeply measured. A new study, "Expanding opportunities for Canadian agriculture by understanding the experience of farm women," provides a range of insights into how the farm woman experience can be improved, which obviously can only benefit Canadian farming as a whole.

The study digs deep into what it's like to be a woman in farming. Conducted by Farm Management Canada (FMC) and CentricEngine, the research shines a bright light on the crucial roles farm women play in influencing farm success. It also pinpoints critical opportunities where more support for women could lead to a "transformative" industry shift.

Characterizing experience

The study found five main dimensions that influence the experience of women farmers. One of these, participation, "identifies the level and nature of involvement in farm activities," explains FMC executive director Heather Watson. Another, recognition and support, reflects how much farm women feel valued. Two others centre on the challenges and barriers farm women may face in more involvement, having a positive experience in farming and so on, and the nature of their relationships related to the farm business.

The most critical dimension is directly related to those relationships, being the degree of satisfaction farm women have with farm-related communication. From these five aspects, a corresponding distinct set of five patterns of overall experience emerge. (See the sidebar.)

Improving communications

Farm-related communications occur with a wide range of people and encompass longterm, annual and seasonal planning as well as day-to-day farm operations. The study found that the quality of communications that farm women have with others in the industry – family members, other farmers, service suppliers – has a huge impact on their experience. No two experiences are the same of course, and Watson points out that 'some women have issues with only external stakeholders, while others face issues with only family members."

To see how this directly plays out, we asked Pam Bailey, who served on the study steering committee and is vice chair of Manitoba Canola Growers, to share some of her experiences. Like many of her peers, Bailey moved to a new community and married into her husband's farm family. "Not only was there a learning curve for the new job of 'farm employee,' but there was also the after hours time with his family - where often the older generation has more ownership on the farm creating a power dynamic - as well as learning basics, like where to order parts or who do I call about a specific problem," she explains. "And with each of these big changes comes its own set of unwritten rules that the family or existing farm employees or neighbours already know."

An easy way to help farm women with all of this, Bailey says, is to be more clear in communicating. This "actually will benefit everyone in the family or on the farm," she adds.

The study showed quite a bit of bias in communication. That is, "in almost every instance, more than a third of farm women reported that being a woman posed a challenge" in their farming relationships. "Attempts to bypass women under the assumption that a man makes the decisions, condescending language and stereotyped expectations were all mentioned as challenges," says Watson, "in having positive relationships with others."

For her part, Bailey shares that she's had "an unfortunate number of negative interactions in the last year" that support these findings, in the context of having started and being the president of a valueadded farm business. "When my husband and I compare our daily interactions with contractors, bankers and service providers – sometimes with the same people on the same day – they can be very different," she says. "Together and independently,

"If you are unsure how to be more supportive to farm women, simply just ask them."

— Pam Bailey

THE FARM WOMAN EXPERIENCE IN FIVE STATEMENTS

These statements summarize the five distinct patterns of farm women experience, according to FMC's recent study.

CONTENT

"I am doing as much as I want in relation to the farm, and I feel good about it."

INSPIRED

"I am capable of doing what needs to get done and try not to let anything hold me back."

CONSTRAINED

"I feel I am capable of more, but outside forces are keeping me from reaching my full potential."

UNCERTAIN

"I would like to contribute more, but I am not sure of my value and my place in this farm."

OBSTRUCTED

"I would like to contribute more, but there are major roadblocks, both internal and external, holding me back."

A concerted effort to support the needs of farm women will expand opportunities for Canada's entire agriculture sector.



Expanding Opportunities for Canadian Agriculture by Understanding the Experience of Farm Women Read the Full Report at www.fmc-gac.com

we've both done things to improve these interactions to make things easier on our business."

Indeed, Bailey's husband has "had to have conversations with some of these people to remind them why they should be talking to me instead," she explains. "And when he does have to do this, he must do it twice – often by email then again by phone – because they simply don't treat our or his request with respect. It takes time out of both of our days to work around it." Bailey adds that "of course, everyone has their days when they are not their best selves," and "it's easy to only see things from one's own perspective," but at the same time, "it is important to try to see things from someone else's perspective."

Bailey shares a frustrating specific experience where this concept broke down. A service provider had a habit of always calling at the end of his day, around 4:30, to get back to Bailey about something she'd emailed him about earlier. Often, she couldn't take those calls because she was picking up their daughter from daycare. "Once I could call him," she says, "he was out of the office for the day, and then I would email him either later that night or next morning, reminding him of daycare pick-up time, only for him to call again at 4:30 the next day and having the cycle repeat. Situations like that are tough when, from my perspective, if he called at another time of day as I requested, it would have improved the relationship – just a simple thing that makes a huge difference."

Reflecting on the study as a whole, Watson says "we need to do better in creating a safe, encouraging, empowering and supportive space for farm women." She applauds actions such as farming organizations making more of an effort to seek out and encourage women to take up leadership roles, but she also says "it would be great to create a national training program focused on understanding and identifying unconscious bias."

For Bailey however, creating a better "space" is as simple as treating all people with respect, and treating them how you wish to be treated. "If you are unsure how to be more supportive to farm women, simply just ask them," she says.

-Treena Hein is an award-winning science writer and educational resource consultant.

Over 40% of Canada's farm women are struggling to access capital for the farm, with 1 in 4 requiring co-signers or verification from men.





Best presentation

In this season of meetings, farm shows and winter planning, Canola Digest asked its six panelists to describe the best presentation they heard in the past year. Who presented? What was the topic? What made it memorable? How is the message significant for your farm?

BY JAY WHETTER

John Bergen Carman, Manitoba



John Bergen is now more engaged in policy, thanks to Dave Carey's presentation at Manitoba Canola Growers' Learn to Lead event last March. Carey is vice president, government and industry relations with Canadian Canola Growers Association, and he works in Ottawa lobbying the government on behalf of canola farmers.

"When I served on boards in the past, my eyes would often glaze over during policy discussions. I never thought too favourably about politics and lobbying," Bergen says. "Then I heard what Dave does and it gave me a new appreciation for jobs like his."

Carey participates in hundreds of meetings per year connecting with Members of Parliament, Senators and government departments to share policy objectives of canola farmers.

After Carey's presentation at Learn to Lead, Bergen sat with Carey at lunch. Bergen talked about a recent invite to attend a meet and greet with Branden Leslie, who was vying for the Conservative nomination for Bergen's federal riding. Carey encouraged Bergen to attend, and tell Leslie, "I'll give you my vote and a donation, but I want you to meet me and my neighbours in my shop once a year to talk." So Bergen did exactly that. "I'd love to," Leslie replied.

Leslie went on to win the nomination and the by-election.

"Now I have a personal relationship with two guys in Ottawa," Bergen says.

This past fall, when the Senate was voting on an amendment to Bill C-234, Bergen asked Carey what he should do. Bill C-234 seeks to exempt farm uses of natural gas and propane from the carbon tax, providing economic relief for critical practices, including grain drying and irrigation, that have no viable fuel alternative. A lot of the work on C-234 is through the Agriculture Carbon Alliance, which Carey founded along with Scott Ross, executive director of the Canadian Federation of Agriculture. The amendment would have removed heating and cooling of barns and greenhouses from the carbon tax exemption, and the amendment, if the Senate supported it, could have delayed final approval of the bill indefinitely. Carey wanted the amendment defeated. Carey encouraged "When I served on boards in the past, my eyes would often glaze over during policy discussions. I never thought too favourably about politics and lobbying. Then I heard what Dave does and it gave me a new appreciation for jobs like his."

— John Bergen

"Think about the experiences you want to have, and deliberately plan to have those experiences at a time of life when they are most fulfilling."

— Margaret Rigetti Bergen to write a few Senators explaining why they should vote against the amendment, and get the un-amended bill moving toward final reading.

Bergen wrote to five senators. In the email he included a photo of his grain dryer at work, with an explanation of how much it costs to dry grain and why the exemption for propane and natural gas would be so valuable to him. Four senators replied, thanking him for his letter. The amendment was defeated.

Bergen's new view of policy is this: Get to know the people who make agriculture policy on your behalf, and be engaged with the decision makers.

Margaret Rigetti Langbank, Saskatchewan



Margaret Rigetti listened to a podcast with author Bill Perkins, who wrote Die With Zero: Getting all you can from your money and your life. She liked the conversation, so listened to the audiobook this past harvest.

"The book provides a framework for approaching personal finances and life decisions. I'm now using time buckets as a simple tool to plan my life in broad strokes," Rigetti says. "Think about the experiences you want to have, and deliberately plan to have those experiences at a time of life when they are most fulfilling. I didn't backpack in Europe in my 20s and it wouldn't be the same doing that now in my 40s – so I guess can't have that experience. I did however have a college experience, and the memories created during those years continue to pay a dividend."

The book is not about farm succession, but that's where Rigetti's mind went. "If I want the next generation to be part of the farm, what choices do I need to make today to deliberately move toward that?" she says. "I was given farm assets when they could really make a difference in my life, and I want to do the same. Plus farming with the next generation is an experience I definitely want to have!"

The book premise is about optimization – how to maximize fulfillment and minimize waste. "If you farm long enough, you'll probably die with nothing," she jokes. For Rigetti, the main message was about deliberate steps toward self discovery and finding meaning in life. She says that the farm has helped her find meaning and she expects that to continue. "I'm entering a phase of life where mentoring will be important."

Jeff Frost Olds, Alberta



Jeff Frost heard futurist Bob Treadway at the Alberta Canola Leaders event in March 2023. Treadway, a popular presenter at canola leadership events, says survival in business depends on being broad-minded enough to forecast all the things that could happen.

He encourages farmers to look at the big picture, and pay attention to trends that may change markets and force new business practices.

"Do not try to predict. This is dangerous," Treadway says. "You want to be able to see around corners and forecast the things that might profoundly affect the future of the business."

This resonated with Frost. He particularly liked Treadway's example of NASA's plan to put a man on the moon. "It seemed like an astronomical goal, but if you work back and identify all the major steps required to achieve that goal, you can visualize what needs to get done," Frost says.

Based on Treadway's recommendations, Frost pays attention to what consumers want, and what that might mean for the farm.

Cheryl Westman Vermilion, Alberta



The Alberta Canola board of directors had governance training with Rob DeRooy, vice president of Governance Solutions. DeRooy explained director responsibilities and board duties.

DeRooy described five board types. At one end of the spectrum is a hands-off board. Management essentially runs everything, and the board is distant from what was happening. At the opposite end is a hands-on board that manages and operates the organization. Through an exercise during the training session, the Alberta Canola board discovered it is a "governance" type of board. "A governance board is active, it likes to provide direction to staff," Westman says. "That's good. You want a board that's engaged. Staff like to have a board that provides direction for them."

Governance type boards find a healthy balance. "They provide high-level direction to the organization," DeRooy says, "and then provide sufficient oversight to gain confidence that the organization is following that direction, thriving and being a good corporate citizen."

DeRooy told Alberta Canola directors that board members need to be accountable, and put their best self forward. "That means reading the meeting material ahead of time so I can be more engaged," Westman says. "It means offering to help, which can improve relationships with staff."

"If you work back and identify all the major steps required to achieve that goal, you can visualize what needs to get done."

Jeff Frost

"A governance board is active, it likes to provide direction to staff. That's good. You want a board that's engaged. Staff like to have a board that provides direction for them."

– Cheryl Westman

"I wanted to know how the bigger farmers are doing? Are they making a lot more money? Is it worth getting bigger?"

– Evan Michel

Andrea and **Sheldon Guthrie Reston**. Manitoba



Sheldon Guthrie attends a lot of events throughout the year, especially those that offer credits to maintain his Certified Crop Adviser (CCA) designation. "Manitoba Agronomists Conference is a must do," he says.

University of Manitoba hosts the Manitoba Agronomists Conference every December. The event is live-streamed and also recorded for later viewing. Organizers will post the 2023 conference webcast in February.

"The conference provides valuable information and a fair number of credits from a CCA standpoint," Sheldon says. He takes advantage of the live-stream and attends virtually. The Guthries have fibre optic cable delivering farm connectivity with "speed and consistency." "This has been a nice result from Covid. We can access a lot of valuable information without having to travel," he says.

"There is so much to learn," Andrea says. "Investing time in events and hearing all different speakers is valuable and important to gain knowledge or a new perspective or open your mind on an unfamiliar topic. The most important thing is getting off the farm, virtually or in person, to take them in."

Evan Michel St. Gregor, Saskatchewan



Evan Michel had a one-on-one benchmarking session with an MNP farm management consultant. Michel was planning a farm expansion and wanted to go over the numbers before making the final decision. "I wanted to know how the bigger farmers are doing? Are they making a lot more money? Is it worth getting bigger?" Michel says. The benchmarking exercise helped him answer these questions, and he went through with the expansion.

Michel provided his farm numbers and the consultant compared Michel's cost of production and other farm performance indicators with producers in his area. "We didn't see the farm names, but it was nice to see real numbers from local farms that were bigger and the same size as ours."

He also wanted to see the numbers on running older equipment, which he does, compared to buying new equipment every year. "I wanted to know if my time spent fixing was profitable," he says. "The numbers showed that for us it definitely paid to run older equipment."

Michel won't do benchmarking every year, but he will probably do it every three to five years, especially if he's looking at another farm expansion.

-Jay Whetter is the editor of Canola Digest. 😕

How will you improve mental health in 2024?-

Canola grower organizations fund farmer mental health initiatives. They encourage you to take advantage of the resources available. **Find a quiet place this winter, set aside the time and make a phone call.**

he Do More Ag Foundation focuses on farmer mental health across Canada, striving to change the culture in agriculture and supporting all in their mental health wellbeing.

Do More Ag programs include AgTalk, a peer to peer support program. Wellness tips include various videos and articles, including "Unlocking conversations: Effective ways to ask about mental health." Here is a summary of the article:

Asking someone how they are doing goes beyond a mere greeting—it opens the door to meaningful conversations, including those about mental health. Here are tips on how to start the conversation:

- Be genuine and attentive. When asking how someone is doing, maintain eye contact, and use a warm and caring tone.
- Use open-ended questions. This allows for deeper discussions.
- Express empathy and validate their feelings. Acknowledge their experiences and assure them that their feelings are valid and heard.
- Share your own experiences. By opening up about your own mental health journey, you encourage others to feel comfortable doing the same.
- Create a judgment-free zone. Assure the person that their thoughts and emotions won't be criticized or dismissed. Avoid unsolicited advice or judgment. Simply listen with an open heart.
- Be patient and understanding. People may take time to open up about their mental health struggles. Reassure them that you're there for them.

Visit **DoMore.Ag** and find this article and others under the "Learn" tab. Click on Wellness Tips. The "Find Support" tab has mental health and crisis lines for every province.

Canola supported provincial programs

The grower organizations make financial contributions to mental health programs specific to their provinces.





SaskCanola is a proud sponsor of the Canadian Centre for Rural and Agricultural Health, which oversees the Agricultural Health and Safety Network. This includes farm health and safety programming to rural schoolchildren, and rural clinics to assess farmers' hearing capacity, respiratory system and mental health status. Visit cchsa-ccssma.usask.ca/aghealth/index.php or call 1-306-966-6644

SaskCanola also provides financial support to the Farm Stress Line. Which provides expert support and crisis counselling 24-7. Call

the toll free stress line at 1-800-667-4442 or visit farmstressline.ca to

Alberta







AgKnow aligns with Alberta Canola's commitment to support farmers not only in their agronomic endeavors but also in fostering resilience and well-being. The organization strives to create a supportive environment that encourages open dialogue and de-stigmatizes seeking help for mental health challenges.

Visit agknow.ca or call 780-678-5984.

Manitoba

Manitoba Canola Growers is pleased to support the Manitoba Farmer Wellness Program. The program facilitates confidential, no-cost access to farmer-focused counsellors who understand the stress of farming. Visit **manitobafarmerwellness.ca** or call **204-232-0574.**





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