



# CANOLA DIGEST



## Canola, prepare to take off

**Airlines are hungry for sustainable fuel and canola oil can be an important feedstock / PG 10**

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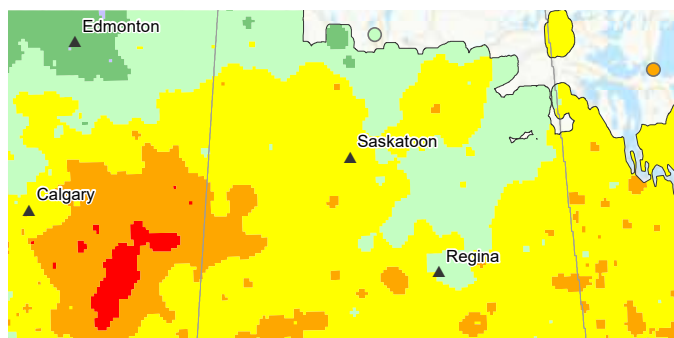


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## Calendar



### Alberta Canola Grower Engagement Meetings

November 21 - High River  
November 23 - Wainwright  
December 12 - Fairview  
December 14 - Westlock  
December 19 - Web broadcast  
[albertacanola.com/events](http://albertacanola.com/events)

### Canola Week, including Canola Discovery Forum

December 5-7 - Calgary  
[canolacouncil.org/event/canola-week-2023](http://canolacouncil.org/event/canola-week-2023)

### SaskCanola Annual General Meeting

January 9, 11:25 a.m.-12:30 p.m.  
Saskatoon  
[saskcrops.com/agms](http://saskcrops.com/agms)

### Alberta Canola Conference & Research Symposium

January 24-25 - Grande Prairie  
[albertacanola.com/events](http://albertacanola.com/events)

### Alberta Canola AGM

January 24, 10:30 am-12:00 pm  
Grande Prairie  
[albertacanola.com/events](http://albertacanola.com/events)

### CrossRoads Crop Conference

January 29-31, 2024 - Calgary  
[crossroadscropconference.ca](http://crossroadscropconference.ca)

### CropConnect

February 14-15 - Winnipeg  
[cropconnectconference.ca](http://cropconnectconference.ca)

### Manitoba Canola Growers AGM

February 15 (at CropConnect)  
Winnipeg  
[canolagrowers.com](http://canolagrowers.com)

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# Right for You

BY JAY WHETTER

**F**arm profitability differences in Canfax's Cow-Calf Cost of Production Network are stunning. Based on 2022 preliminary results, profits for the top third of the network's benchmark farms averaged \$487 per cow. Profits for the bottom two thirds averaged \$29 per cow.

"Those are the averages. A lot of farms in the bottom two thirds are losing money," says Brenna Grant, executive director of Canfax.

Why the huge difference?

It has a lot to do with controlling costs per cow, Grant says. Total costs, including cash, depreciation and opportunity costs, were \$1,340 per cow for the top third of benchmark farms – 25 per cent lower than the \$1,785 per cow average for the bottom two thirds.

More profitable farms focus on all the little things that add up – from winter feed costs, machinery overhead and unpaid labour, Grant says. They also look at productivity and marketing.

Lower costs, more units produced per input cost and higher selling prices are profit-enhancing recipes for any farm – whether producing beef, canola or anything else.

The goal of the Cow-Calf Cost of Production Network is to identify pathways to greater profits, to greater economic sustainability. The network has 63 benchmark farms representing the range of possible scenarios across Canada. Benchmark farms are based on intense data-collection from 225 participating farms across Canada.

"We want to show that profitable farms are out there," Grant says. "This is what will keep people in the industry and hopefully attract new people."

A possible side effect of this information is that people who know they're in the bottom two thirds feel stuck. Discouraged. They see numbers like \$487 per cow and know they can never get there. A key message, Grant says, is that farms don't have to get to \$487. Even small gains can make a big difference. "We want to give people stepping stones to make incremental improvements."

Grant uses the five per cent rule. Taking time to pencil out how to reduce feed cost per pound of gain by five per cent, improve forage yield five per cent, forage quality five per cent and market price by five per cent, for example, can create huge gains in profit. Canola growers might consider how to improve seed survival by five per cent, reduce nitrogen per bushel five per cent, or reduce harvest seed loss. Going from 2 bu./ac. loss to 1.9 bu./ac. loss is a five per cent improvement. If the farm spends 95¢ for every \$1 of units sold, trimming the unit cost of production by five per cent (to around 90¢) will double profits from 5¢ to 10¢.

"Little changes all add up," Grant says.

John Basarab, director of beef operations with Livestock Gentec at the University of Alberta, says numerous surveys in North America have shown the wide variation in herd to herd productivity and profitability. "This is primarily related to adoption of best management practices," he says.

Best practices include genetics.

"The best two ways cattle producers can improve intensity – less feed and less carbon per kilogram of beef – is through cross-breeding and cattle genetics for feed efficiency," he says.

Genetics are equally important to canola profitability. That is why Canola Council of Canada agronomy specialists emphasize that farmers choose canola cultivars best suited to the yield potential and yield robbers unique to each field.

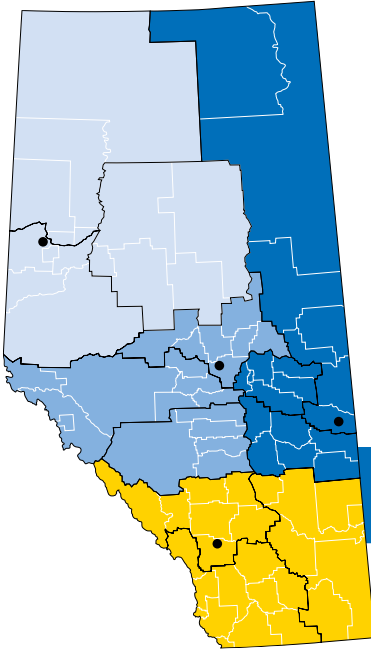
Grant notes that not all practices that would seem, on paper, to increase profits will actually work on every farm. She gives the example of rotational grazing. Feeding intensely in small paddocks of high quality forage has worked wonders for some cow-calf producers. "But it requires water systems, more fences and more labour," Grant says. "Our benchmarking showed that savings from rotational grazing only made sense for about half the farms."

Farms have to run their own numbers on any practice.

The Canfax Cow-Calf Cost of Production Network shows a few things. First, there is no one successful farm model. Second, the range in farm profitability is very wide. Third, farms can significantly improve profitability with a number of small improvements. And fourth, popular practices that seem to make sense may not make sense for you. This winter, set aside time (that's often the hardest part) to figure out what improvements are right for the success of your business. You do you. ✕

*Jay Whetter*

# Alberta Canola Grower Engagement Meetings 2023



Four in-person meetings are scheduled and one online broadcast.

- **Tuesday, November 21: High River**
- **Thursday, November 23: Wainwright**
- **Tuesday, December 12: Fairview**
- **Thursday, December 14: Westlock**
- **Tuesday, December 19: Online broadcast**

For more information and to register visit [albertacanola.com/GEM](https://albertacanola.com/GEM)

Alberta Canola is hosting four Grower Engagement Meetings across Alberta during November and December 2023.

These meetings offer canola growers the opportunity to engage with Alberta Canola directors and staff to gain a deeper understanding of Alberta Canola's activities, programs, and partnerships.

You will hear about research investments, policy positions, advocacy initiatives, and our efforts to inform and educate consumers and educators.

Most importantly, Alberta Canola wants to hear directly from growers on our activities and to learn about any issues or opportunities that Alberta Canola needs to be working on.

## Alberta Canola Conference and 34th Annual General Meeting



## ALBERTA CANOLA

### CONFERENCE & AGM

Join the Alberta Canola Producers Commission for its 34th Annual General Meeting in Grande Prairie on Wednesday, January 24, as part of the Alberta Canola Conference on January 24 & 25, 2024.

Alberta Canola is very excited to bring the Alberta Canola Conference, Annual General Meeting and Research Symposium to the Peace Country.

The Alberta Canola Conference will include speakers discussing global export markets, domestic canola promotion, and how to maximize canola profitability after harvest.

The Research Symposium will identify needs, gaps and future threats to help ensure the research needs of canola growers in the Peace are identified.

The 34th Annual General Meeting of the Alberta Canola Producers Commission will be held on January 24. Eligible producers from across Alberta will be able to join the AGM online where they will be able to ask questions and participate in voting.

Resolutions to be presented at Alberta Canola's AGM **must** be received no less than 10 business days prior (January 9, 2024).

An eligible producer is defined as any producer who has paid a service charge to Alberta Canola since August 1, 2021. An eligible producer can be an individual or be the appointed representative of a corporation, partnership, or organization.

Pre-register for the AGM before January 15, 2024 to ensure your ability to vote. [albertacanola.com/AGM](https://albertacanola.com/AGM)

### Alberta Canola Annual General Meeting

January 24, 2024

### Research Symposium:

January 25, 2024

### Pomeroy Hotel & Conference Centre in Grande Prairie







## Alberta Canola welcomes **Will Holowaychuk** as Policy Analyst



Coming from an active fifth-generation mixed family farming operation, the passion for agriculture was instilled early for Will. This passion has come full circle as we welcome Will to the Alberta Canola team as policy analyst. In this role, he will be dedicated to researching and advocating on behalf of canola producers, with the overarching goal of ensuring the long-term economic and environmental sustainability of canola production and the broader agricultural sector.

Will has a Master of Agriculture (MAG) in Agriculture and Resource

Economics and a Bachelor of Commerce (BCom) in Finance, both from the University of Alberta. Add to that the work experience Will has in technology, banking, and agricultural sectors, he will bring a wide range of skills and experiences to the canola team. We look forward to the contribution he will help make here at Alberta Canola on behalf of canola producers!

Will Holowaychuk can be reached at:  
[will@albertacanola.com](mailto:will@albertacanola.com)  
(780) 660-2454

## Alberta Canola Producer Commission Bylaws

The Alberta Canola Producers Commission's new bylaws came into effect on August 8, 2023.

Our regulations and bylaws define Alberta Canola's authorization and governance, and include information about our mandate, responsibilities, operations, service charges, meetings, regional representation, and nominations and elections.

To learn more and read Alberta Canola's Regulation & Bylaws visit [albertacanola.com/bylaws](http://albertacanola.com/bylaws)



## Explore Canola Through the Adventures of Chase Duffy!

Find more resources at  
[learncanola.com](http://learncanola.com)



# SaskCanola research results

## New nutrient uptake and removal guidelines

Producers in Western Canada now have access to current micronutrient and macronutrient data for 14 annual crops grown on the Prairies.



View the Report  
Summary



Read the Full  
Report



### Funding:

Saskatchewan Canola Development Commission, Alberta Wheat Commission, Prairie Oat Growers Association, Saskatchewan Flax Development Commission, Saskatchewan Wheat Development Commission and Western Grains Research Foundation.

### Researchers:

Fran Walley, Richard Farrell and Gazali Issah, University of Saskatchewan; John Heard, Manitoba Agriculture; and Lyle Cowell, Nutrien Ag Solutions.

Published in March 2023, the report provides growers and agronomists with current crop nutrient uptake and removal data to assist in their crop and fertilizer management planning. Prior to this study, the Canadian Fertilizer Institute (CFI) nutrient removal guideline published in 2001 was an important resource for growers, however, management practices and new varieties pointed to a need for updated information.

Based on measurements taken from straw and seed samples, the study analyzed both nutrient uptake (the amount of nutrients taken into the plant to produce seed yields) and nutrient removal (the amount of nutrients removed from the field when the crop is harvested.) These areas are integral to 4R fertilizer management practices – right source, right rate, right time, and right place – in terms of nutrient

management practices, according to the report, and should be used in conjunction with soil testing.

Conducted from 2020 to 2022, data collection for the study took place across Manitoba, Saskatchewan and Alberta and included barley, corn, durum, oats, spring wheat, winter wheat, canola, flax, soybeans, mustard, chickpeas, dry beans, lentils and field peas. Due to an increase in seeded acres and sample availability, faba beans were added to the study.

More than 2,200 grain and biomass samples were analyzed for macronutrients nitrogen, phosphorus, potassium and sulphur, and micronutrients copper, boron and zinc. A Prairie-wide drought limited the collection of biomasses in 2021, but presented researchers with an opportunity to assess how drought affected nutrient uptake and removal. A comparison of grain samples

collected over the three years determined that while drought has an impact on crop yield, the removal and uptake remained relatively unaffected.

The full report includes data for average grain yields and nutrient removal in terms of pounds per bushel of grain, as well as variability data which was previously only available in a range format.

“The variability in nutrient uptake was interesting,” says Richard Farrell, associate professor, Department of Soil Science, University of Saskatchewan, who was a researcher on the project. “This is important data for producers who want to dig a little deeper and see what additional information they can gain.”

Crop varieties, soil fertility and general growing conditions may affect both nutrient uptake and removal, according to the report.



In addition to the table data available, the **Prairie Nutrient Removal Calculator** was developed as an added resource for producers. The interactive calculator allows growers to input crop type and bushels per acre and receive a breakdown of nutrient data for both the micro- and macronutrients. The calculator is aimed at reducing the risk of underestimating nutrient removal levels and provides an estimated value based on the 75th percentile of survey data.

*i*





## Amalgamation survey feedback



Reminder: Farmers invited to provide input to SaskCanola and SaskFlax through online survey

Since January, SaskCanola has been providing operational services to the SaskFlax board. Resolutions were passed at both Commissions' Annual General Meetings (AGMs) calling for the two organizations to explore options for potential amalgamation.

The next step toward full amalgamation is to gather feedback from canola and flax growers. All Saskatchewan canola and flax growers were sent a notice in the mail in July encouraging them to participate in an online consultation survey (use QR code or visit [saskcanola.com](https://saskcanola.com)); which will remain open to gather input until November 17, 2023.

Based on feedback received to date, an overwhelming majority of respondents support the amalgamation. A general theme among the concerns raised so far is that "flax could get lost in the mix," but on a similar wavelength, other growers suggested "flax issues would be a distraction for canola." Both SaskCanola and SaskFlax boards feel these shared

sentiments can be alleviated with proper governance mechanisms put in place at the onset of the merger.

A consultation document providing background, rationale and process surrounding the potential amalgamation of SaskCanola and SaskFlax has been prepared for farmers to review in conjunction with providing their feedback through the online survey.

Final survey results will be shared and official voting on the proposed amalgamation will take place during both Commissions' AGMs on January 9, 2024 at the Western Development Museum in Saskatoon. Visit [saskcrops.com/agms](https://saskcrops.com/agms) for registration info.

*Both Commissions are producer-led organizations and have similar mandates directed by the Agri-Food Act. SaskCanola is supported by 17,000 levy-paying Saskatchewan canola producers. SaskFlax is supported by 3,000 levy-paying Saskatchewan flax producers.*

i

Survey results will be shared and official voting on the proposed amalgamation will take place during both commissions' AGMs on January 9, 2024 at the Western Development Museum in Saskatoon. Visit [saskcrops.com/agms](https://saskcrops.com/agms) for registration info.



Use this code to access the amalgamation survey. It remains open until November 17.

***A general theme among the concerns raised so far is that "flax could get lost in the mix," but on a similar wavelength, other growers suggested "flax issues would be a distraction for canola." Both SaskCanola and SaskFlax boards feel these shared sentiments can be alleviated with proper governance mechanisms put in place at the onset of the merger.***



L to R: Nirpesh Dhakal (Chemical Engineering), Hansanee Fernando (Plant Science), Berenice Romero (Entomology), Mostafa Hojati (Soil Science)

## SaskCanola invests in next generation of researchers

Every year, SaskCanola awards two, two-year scholarships to students enrolled in graduate programs with canola-related projects. In doing so, our goal is to build research capacity by investing in the future of the canola industry. Congratulations to this year's deserving recipients Nirpesh Dhakal (Chemical Engineering) and Hansanee Fernando (Plant Science)!

Nirpesh is focused on adding value to canola meal by extraction of nutrients in the form of amino acids, vitamins and minerals. These could be used as a "canola meal extract"

in microbial media in industrial fermentations.

Hansanee is developing a systematic yield prediction model by using remote sensing technology to identify factors that drive canola yield, including mapping the long-term stability of canola yield across fields.

Two graduate students – Berenice Romero (Entomology) and Mostafa Hojati (Soil Science) – who received the scholarships in 2022, will also be continuing their studies at the University of Saskatchewan.

# Bold leaders wanted: Help shape the future of canola

Our vision is bold action for canola farmers. We are seeking nominations of Manitoba Canola Grower Association (MCGA) members to run for our board of directors in the 2023-24 election.

Join a board of directors that is committed to driving success for Manitoba canola farmers through research, market development, advocacy and outreach.

We welcome diverse perspectives, backgrounds, farm sizes and geographies on our board, and we encourage anyone who is eligible to consider seeking a nomination.

## Who is eligible to run for election?

Anyone who is a member of [MCGA](#) who is 18 years of age or older and is a resident of Manitoba.

## What is the deadline for nominations?

The nomination period opens November 15, 2023 and closes at 4:30 pm CST on November 30, 2023.

## When is the election period?

If an election is required, the vote by preferential ballot will take place online and by paper ballot in December and January. The successful candidates will be confirmed at our Annual General Meeting in February 2024.

For more information about eligibility, benefits of becoming a director, director job description details or to download a nomination package, call the office (204) 982-2122 or visit [canolagrowers.com](#).



**CALL FOR NOMINATIONS**

Manitoba Canola Growers (MCGA) is seeking members to stand for election to the Board of Directors.

POSITIONS ARE UP FOR ELECTION EACH HOLDING A FOUR-YEAR TERM.

Successful applicants will have the unique opportunity to represent the canola farmers in Manitoba. Manitoba Canola Growers board members play a primary role in making decisions that will affect the future of canola and the agriculture industry in this province.

**NOMINATION DEADLINE:**  
November 30, 2023

## A director's view:

### Why should you join the MCGA board?



#### Jackie Dudgeon: Treasurer

If you want to feel seen, heard and part of a community, you want to be a part of MCGA. It doesn't matter your age, gender or race, you are part of a fantastic team and the truest people are working to make a difference for Manitoba farmers. Everyone

has something to learn and everyone has something to teach. It is a fantastic feeling and rewarding experience.



#### Pam Bailey: Vice President

For me, the greatest value of becoming a director with MCGA is knowing that what we do as directors is helping farmers – in their fields, in their business and in their lives. Being part of MCGA also allows me to stay current with what is happening in the

industry. We have a say in policy and what happens with our farmers' dollars. If you're looking to gain experience or make a difference, if you're eager to witness a change in commodity leadership, or if you're part of a farm and curious about how policy works and its impacts on your farm, please consider putting your name forward for election.



#### Warren Ellis: Director

You should join the MCGA's board of directors to offer a different, but positive point of view to help build the canola industry for the benefit of Manitoba farmers. By joining you also ensure that farmers continue to represent farmers.

This industry does not run itself; farmer input is critical. Directors learn how a professional organization is run, and gain valuable knowledge around better agronomic and crop management techniques for their own farms.





Sustainable Canadian  
Agricultural Partnership

## On-Farm Research Trials

The Canola On-Farm Research Program started in 2022 to study each production decision a canola farmer must make at field-scale in Manitoba, and provide data to help with this decision-making. Three types of field-scale trials were conducted in 2023: nitrogen rate, seeding rate and seed-placed fertilizer trials. MCGA works with research contractors to implement the nitrogen rate and seeding rate as replicated trials and seed-placed fertilizer trials in a non-replicated survey-style.

### Why are these on-farm trials important?

The replicated design, number of site years, and multiple locations allows for increased statistical power in analyzing the results. This means there can be comparison between different treatments because they are not skewed by environmental factors and other variables.

### What does each trial study?

- **Nitrogen Rate Trials (five sites):**  
Are current N rates sufficient for canola production?
  - > Objective: Identify optimal (N) fertilizer application rates based on return on investment and nitrogen use efficiency.
  - > Treatments: Standard rate, reduced rate (75 per cent of standard), higher rate (125 per cent of standard)

- **Seeding Rate Trials (six sites):**  
Are current seeding rates optimizing canola production?
  - > Objective: Identify economic and agronomic optimal seeding rates for canola production and environmental factors influencing this relationship.
  - > Treatments: Standard rate, reduced rate (75 per cent of standard), higher rate (125 per cent of standard)
- **Seed-Placed Fertilizer Trials (21 sites):** Can and/or when can we increase seed placed fertilizer?
  - > Objective: Identify optimal seed-placed phosphorus

fertilizer application rates based on investment and establishment.

- > Treatments: No seed-placed fertilizer, standard seed-placed fertilizer, high seed-placed fertilizer (125 per cent of standard).

### Where can I find the results?

Results from 2022 are posted on our website at [canolagrowers.com/canola-on-farm-research-program](https://canolagrowers.com/canola-on-farm-research-program). Results from the 2023 season will be posted mid November and shared through our communication channels.





The world's airlines are hungry for sustainable aviation fuel, the key pathway to meet their net zero goals by 2050. Canola oil can be an important feedstock to get this new market sector flying.



# Canola, *prepare to take off*

BY JAY WHETTER

**T**he 70,000 foot-pounds of thrust needed to lift a fully loaded Boeing 787 Dreamliner could soon come from canola oil.

The International Air Transport Association (IATA), which represents the world's major airlines, including Air Canada and WestJet, has a goal to reach carbon net zero by 2050. Airlines are looking for sustainable aviation fuel as a way to reduce their carbon footprint. IATA claims that sustainable aviation fuels can reduce CO<sub>2</sub> emissions by up to 80 per cent.

The potential market is huge, but will build slowly. IATA forecasts use of eight billion litres by 2025, which represents less than two per cent of jet fuel demand, and 449 billion litres by 2050. Current global demand for jet fuel from petroleum sources is just above that 449 billion mark.

To put that in perspective, Canada's annual demand for diesel fuel is 20 billion litres per year. Global demand for diesel is over 1,600 billion litres per year. The aviation fuel market, though smaller than the diesel market, is still very large. (See the box for a more detailed market comparison.)

Aviation fuel and diesel fuel are similar. Aviation fuel could actually be used in diesel tractors, but standards are different and specifications more challenging so diesel could not be used in jets. Aviation fuel also has lower density – 775-840 kg per cubic metre at 15°C – compared to diesel at 840-850. This lower density means lower energy per volume, but lower density is essential so aviation fuel does not congeal in very cold temperatures at 35,000 feet.

## Canola and other feedstocks

Sustainable aviation fuel is made from sources other than petroleum. IATA lists potential feedstock as “waste fats, oils and greases, municipal solid waste, agricultural and forestry residues, wet wastes, as well as non-food crops cultivated on marginal land.”

When asked to confirm whether feedstock will include crop-based oils, Nicolas Jammes, IATA's assistant director of environment communications, says “IATA remains agnostic in our feedstock position” as long as the feedstock contributes to the airline industry meeting its net zero target.

David Schick, the Canadian Fuels Association vice president for Western Canada and innovation and regulatory affairs, says canola

***“For farmers, renewable diesel and sustainable aviation fuel are tremendous opportunities to diversify markets. These will be a significant market over time.”***

— David Schick



oil works well for sustainable aviation fuel. So does tallow. “These are dense carbon molecules,” he says.

The disadvantage for canola oil, Schick says, is cost. “Airlines are conscious of fuel prices. They want to meet sustainability goals but need to keep fuel costs low,” he says. He adds that biofuels could also use canola oil that doesn’t meet food specifications. “Refineries don’t care.”

In time, sources other than first-use vegetable oils will likely account for most of the supply. Schick says any biomass that has carbon can be converted into a liquid fuel. This can include sawdust and chaff. IATA says sustainable aviation fuels can also be produced through a process that captures carbon from the air. However, none of these alternatives is commercially available at scale. Canola oil and other plant-based oils are high quality, energy rich and available in sufficient quantity to kick off the process.

Canada does not currently have any commercial production of sustainable aviation fuel, although “people are actively working on it,” Schick says. New renewable diesel facilities announced or under construction all have the potential to produce aviation fuel.

We know that Canadian canola will have access to the U.S. sustainable aviation fuels market. The U.S. Environmental Protection Agency (EPA) announced a year ago that sustainable aviation fuel and renewable diesel made from canola oil will qualify as “advanced biofuels” under the U.S. Renewable Fuel Standard program.

“It’s a gratifying outcome after many years of engagement and outreach with the EPA, in collaboration with the Canadian Oilseed Processors Association (COPA), the U.S. Canola Association and several other organizations, that canola is now recognized as an advanced biofuel in the United States,” says Chris Davison, president and CEO of the Canola Council of Canada.

“For farmers, renewable diesel and sustainable aviation fuel are tremendous opportunities to diversify markets,” Schick says. “These will be a significant market over time.” ✖

— Jay Whetter is the editor of *Canola Digest*.

## Global fuel demand

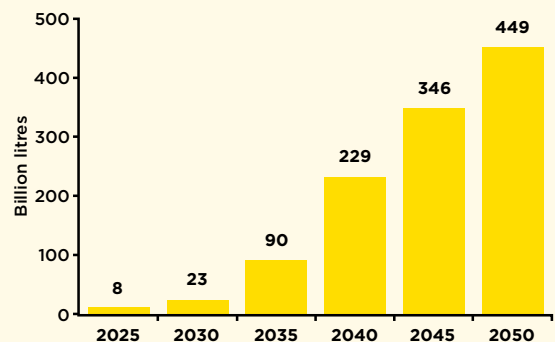
The world extracted 99.92 million barrels of oil per day (mb/d) in 2022, according to data from the International Energy Agency (IEA). The United States is the biggest oil producing nation in the world, accounting for 17.85 mb/d, on average, in 2022. Russia is second and Saudi Arabia is third. Canada is fourth, producing 5.76 mb/d in 2022.

Global demand basically matches production – it all gets used. The best year for an accurate reflection of petroleum demand is 2019, the last full year before the pandemic slow down. In 2019, petroleum demand included 28.3 mb/d of diesel fuel, 26.7 mb/d of gasoline and 8.0 mb/d of jet fuel. IAE predicts that global demand for gasoline and diesel will start to drop through this decade, while demand for jet fuel will continue to increase.

A barrel is 159 litres, so 8.0 mb/d of jet fuel is equivalent to 464.3 billion litres per year.

Currently, sustainable aviation fuel supplies far less than one per cent of global jet fuel demand. The International Air Transport Association (IATA) forecasts sustainable aviation fuel to reach eight billion litres by 2025 (still less than two per cent of total fuel use) and 449 billion litres by 2050 (which could be most of the total fuel use.)

## Sustainable aviation fuel needed to meet net zero



The International Air Transport Association (IATA), which represents the world’s major airlines, has a goal to reach net zero carbon emissions by 2050. This graph shows the expected global increase in sustainable aviation fuel required to meet net zero.

Source: IATA



# Southern U.S. tests canola as a double crop

BY JAY WHETTER

Corteva, Bunge and Chevron are promoting winter canola as a double crop for soybean and cotton growers in the southern U.S. It will supply oil into Chevron's renewable diesel program.

**T**hree big companies have joined forces to introduce winter canola as a double crop for soybean and cotton growers in the southern United States. Corteva provides the seed. Bunge works with the farmers and processes the seed into oil and meal. Chevron makes the oil into renewable diesel.

Cotton and soybeans represent the typical two-crop rotation in the target states of Louisiana, Tennessee and Mississippi. Winter canola, as the plan goes, is a go-between – a cover crop that captures carbon and provides a promising new market. Farmers will plant canola in late September, early October and harvest in the spring.

“This is a particularly exciting double-cropping system,” says Tom Greene, senior director of external innovation investment at Corteva Agriscience. “Winter canola provides the attributes of a cover crop with significant value capture.”

After a small pilot project last winter, the program launched this fall with a set of growers under grain purchase contract with Bunge. “We are targeting up to 8,000 acres with broader contract opportunities expected for the 2024-25 growing season,” Greene says. “We will scale up over the coming years. There are 10 million acres available for a double-cropping option like this.”

Corteva brought in winter canola cultivars from its European program. Through a collaboration with Kansas State University, Corteva identified two promising hybrids for this project. Next step, Greene says, will be a seed product development program in the Southern U.S. to more precisely select traits and agronomic characteristics for best performance in the region.

Winter canola yield potential for the target states is 30 to 40 bu./ac., Greene says.

After harvest, Bunge will process the canola at its soybean and softseeds facility at Destrehan, Louisiana. From there, the oil goes to Chevron's Renewable Energy Group refinery at Geismar, Louisiana.

Chevron is expanding the Geismar facility to 340 million gallons per year, up from 90 million currently. The expansion should be operational by 2024.

Canola oil has a good fit for Chevron's renewable diesel program. “At Chevron, we definitely do evaluate feedstock based on carbon

intensity score,” says Ross Allen, external affairs advisor for Chevron.

“The advantage for canola really comes down to oil content in the seed.” Canola seeds are 42 to 45 per cent oil. Soybeans are around 20 per cent oil. Chevron also likes that this double crop of canola is a new source of feedstock, so not taking away from current food uses. “Because this is a new second crop for these growers, it entirely eliminates the food

versus fuel debate,” Allen says.

Demand for biofuel currently outstrips supply, and demand will continue to go up. “We wake up every morning short of feedstock,” Allen says.

“This winter canola project is a nice convergence of opportunity and necessity,” Greene adds. 🌻

— Jay Whetter is the editor of *Canola Digest*.

***“This is a particularly exciting double-cropping system. Winter canola provides the attributes of a cover crop with significant value capture.”***

— Tom Greene



# How we'll handle more oil, more meal

BY JAY WHETTER

Canola processing expansion on the Prairies means Canada will be adding more value at home. It also means moving more oil and meal, less grain. Are we ready?

**T**he short answer is yes. Brian Conn, Louis Dreyfus Company's country manager for Canada, says most of the companies expanding or building new facilities are already processing canola in Western Canada.

They know what they're doing. "The industry is well-equipped to handle the expansion," he says.

This is, however, contingent on rail service, says Chris Vervaeke, executive director with the Canadian Oilseed Processors Association. "Regulatory measures such as extended interswitching, which allows shippers access to an alternate carrier, are important tools to breed some semblance of competition in the system and compel better performance from the railways," he says.

Conn describes how oil and meal move from the Louis Dreyfus facility. The company leases a fleet of tanker train cars to move oil by rail from Yorkton to food and energy customers in Canada, the U.S. and Mexico. "Ninety per cent of our oil goes south, and north-south movement of oil can be more challenging than east-west transport of grain," Conn says. "Cars often have to interchange with other U.S. carriers, so it makes for more in-depth arrangements."

***"The direction and magnitude of these flows may change over time, but we do not foresee disruptive supply chain challenges in meeting market needs."***

— Gabe Afolayan

For meal, processors press the meal flour into pellets on site. Pellets are cylinders the diameter of a soybean. They handle about the same as bulk grain.

"There are some challenges with handling canola meal," says Chad Thomson, export merchant for Parrish & Heimbecker, a company that moves a lot of meal. "For example, pellets breaking down or sticking together in rail cars. But, for the most part, canola meal can be shipped out reliably from export terminals into vessels or via containers to destination customers."

Conn doesn't expect any bottlenecks as canola exports from the Prairies move from mostly grain to more oil and meal. "Established market players have been doing this for decades."

Gabe Afolayan agrees. "The Canadian infrastructure is well-equipped to handle bulk commodity shipments of varying types," says the Cargill softseeds commercial leader. "The direction and magnitude of these flows may change over time, but we do not foresee disruptive supply chain challenges in meeting market needs."

## Update on the expansions

Louis Dreyfus announced April 2023 that it will more than double its processing facility at Yorkton, Saskatchewan, expanding capacity to over two million tonnes of canola seed per year. Earthworks are underway and some concrete will be poured this fall. The goal, Conn says, is to have it operational by the fourth quarter of 2025.

Richardson International is also more than doubling its Yorkton facility, to 2.5 million tonnes per year. Kelcey Vossen in the Richardson communications department says the company anticipates the expansion will be online in early 2024.

Cargill is building a new canola processor at Regina. "We continue to make progress on building the facility," Afolayan says.

Federated Co-operatives and AGT also plan to build a canola processor at Regina. Brad DeLorey, director of communications and public affairs with Federated Co-operatives says, "The project is progressing well. We are currently in the Front-End Engineering and Design (FEED) phase. This phase will continue over the next several months."

Viterra does not have anything to report about its announced plan to build at Regina. The company is in merger talks with Bunge, which already has a number of canola processing facilities across the Prairies.

Meanwhile, Imperial Oil is building the largest renewable diesel refinery in Canada, at Strathcona, Alberta. "We are still considering a range of feedstocks, including canola," says Lisa Schmidt, media relations with Imperial. The company has started facility construction, "with key contractors mobilizing to site," Schmidt says. 🌻

— Jay Whetter is the editor of *Canola Digest*.



Canola processors press the meal flour into pellets on site. They handle about the same as bulk grain.

Photo credit: Louis Dreyfus Company

# Promoting canola meal in China's dairy capital

BY CHARLES QIN

At the influential Inner Mongolia Dairy Expo this year, the Canadian government's Trade Commissioner Service team co-hosted a seminar to promote canola meal in dairy rations.

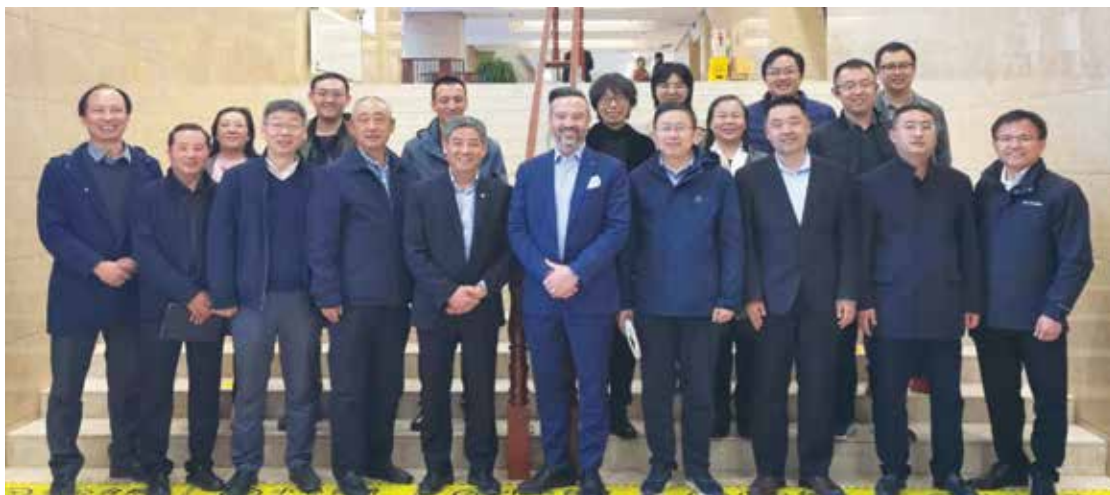
Inner Mongolia is the dairy capital of China. In March 2023, the Canola Council of Canada attended the Inner Mongolia Dairy Expo and participated in a dairy nutrition seminar held adjacent to the expo. Inner Mongolia Agricultural University and the Canadian government's Trade Commissioner Service team, based at the embassy in

Beijing, co-hosted the seminar. Over 20 dairy nutritionists, technical directors and industry attendees joined the program, which included technical presentations and free discussion.

Trevor Yu, agriculture consular from Embassy of Canada in Beijing, gave the opening remarks. Yu noted that 30 years ago, with financial support from the Canadian International Development Agency, Canadian dairy experts visited dairy farms many times in Inner Mongolia and elsewhere in China, providing technical support to local dairy farmers. Yu then said, "Canola remained Canada's largest agricultural export to China in 2022. In North America, canola meal is widely used as a quality protein source for dairy cows supported by scientific evidence, feeding canola meal as daily rations can increase milk production by one kg per cow per day."

Professor Sumei Yan, a senior scientist in dairy nutrition from Inner Mongolia University, presented data from their long-term trial of canola meal in dairy rations. The study included rumen bioavailability, digestibility, feeding rate, milk yield and milk quality.

"Results from our research remained consistent with reports from international journals or publications – canola-meal-fed dairy cows increased milk production, and slightly raised milk fat and milk protein contents with comparison to the control," Yan said. "Replacing soybean meal and cottonseed meal with canola meal may increase milking capacity and higher economic return."



↑ Attendees at a canola meal seminar hosted adjacent to the Inner Mongolia Dairy Expo earlier in 2023. Sophia Yuan (second row, to the right of the central railing), trade commissioner from Embassy of Canada in Beijing, welcomed the invitees and emceed the seminar.

The improvement of performance may relate to rumen bypass amino acids from canola meal."

Professor Ming Xu from Inner Mongolia Agricultural University shared his experience using canola meal in diets for dairy. He says canola meal, which has high rumen undigestible protein, high dry matter intake and high neutral detergent fibre, could be used to feed cows during all stages of lactation.

Attendees at the seminar represent 1.1 million dairy cows and over one million tonnes of ruminant feed. Professionals from Mengniu, Yili, Modern dairy, Youran livestock and local producers raised the concerns of quality and consistent supply.

As the Canola Council of Canada canola meal representative in Asia, I addressed questions with analysis data and provided differentiation between traditional rapeseed meal and typical double-low rapeseed meal. ✿

—Charles (Guoqing) Qin has a Ph.D. in livestock nutrition and is the Canola Council of Canada's canola meal representative in Asia.

***"Results from our research remained consistent with reports from international journals or publications – canola-meal-fed dairy cows increased milk production, and slightly raised milk fat and milk protein contents with comparison to the control."***

— Sumei Yan

## Canola meal makes more milk

	Four different diets			
Canola meal inclusion, %	0	7.89	15.8	23.7
Soybean meal inclusion, %	17.0	11.3	5.65	0
Dry matter intake, kg/day	25.8	26.9	27.3	27.7
Energy corrected milk, kg/day	44.0	45.0	45.6	46.2

In a recent study, Chaouki Benchaar, research scientist with Agriculture and Agri-Food Canada in Sherbrooke, Quebec, provided dairy cows with diets containing canola meal and soybean meal at various inclusion rates. When canola meal replaced some or all of the soybean meal, dry matter intake and energy corrected milk production both increased.

### Chinese canola meal customers visit Canada

Representatives from companies C&D and Mingsui, China's two largest importers of Canadian canola meal, visited Canada in early July. Canola Council of Canada took them on a tour of Charles Fossay's canola farm near Starbuck, Manitoba. Fossay is a director with the Canola Council of Canada. For the companies, this was their first time seeing Canadian agriculture in action and experiencing canola fields in bloom. The CCC plans to continue fostering relations with these two companies. China represents a market of significant importance for Canadian canola meal. The CCC saw record exports of canola meal to China in the 2022-23 crop year and anticipates further increases in meal export volumes as canola processing expansion takes place in Canada.

Manitoba canola grower Charles Fossay demonstrates canola roots to a representative from C&D, a large Chinese importer of Canadian canola meal. ↓



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# Canola in Saskatoon for the Tri-National Accord

BY TENESHA LAWSON AND TROY SHERMAN

The CCC and CCGA participated in the annual Tri-National Accord, which brings together state and provincial agriculture leaders from Canada, the U.S. and Mexico to discuss agricultural trade and development issues.

**For the first time**, industry organizations, including Canadian Canola Growers Association (CCGA) and the Canola Council of Canada (CCC), were invited to participate in the annual Tri-National Accord. The 2023 Accord, the 32nd annual, brought state and provincial agriculture leaders from Canada, the United States and Mexico to Saskatoon in August to discuss agricultural trade and development issues.

“The Accord provided an excellent platform to collaborate with our trading partners, and highlight the importance of CUSMA [Canada-United States-Mexico Agreement] to farmers in Canada, the United States and Mexico, and discuss how to enhance trade and access to the innovations needed to grow high-quality, sustainable crops for North America and the world,” says Janelle Whitley, CCGA’s senior manager, trade and marketing policy.

CUSMA is the trade agreement that ensures tariff-free trade and strong economic ties among the three countries.

CCGA and CCC took the opportunity to use the Tri-National Accord to build relationships with two of canola’s top export markets and highlight the importance of clear, predictable rules of trade. Particularly, during government-industry roundtables, both canola organizations spotlighted the importance of canola to the economy and the integrated North American market. Other key themes, included:

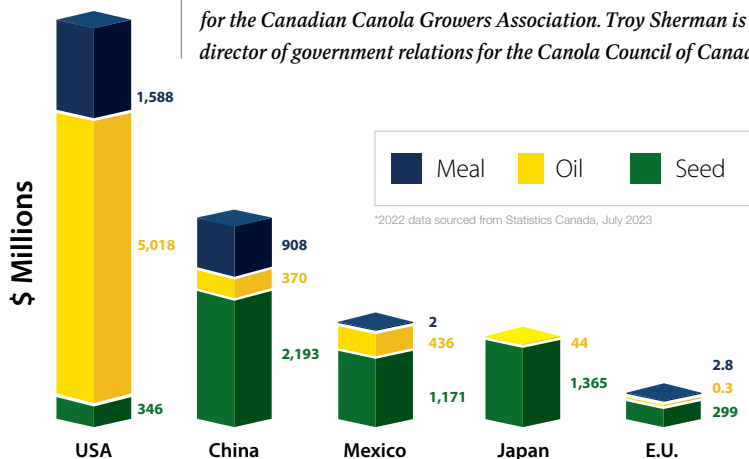
- The instrumental role of CUSMA. The U.S. and Mexico are top markets for Canadian canola and canola-based products.
- Timely, science-based, predictable regulatory frameworks to support innovative seed varieties, chemistries and beneficial management practices to help canola farmers further sustainability.

↑ The three signatories were Blayne Arthur (left), Oklahoma’s Secretary of Agriculture, David Marit (centre), Saskatchewan’s Minister of Agriculture, and Octavio Jurado, CEO of the Mexican Association of Secretaries of Agriculture Development.

- Modern farming practices, which preserve the competitiveness and viability of Canada’s agriculture sector to meet growing consumer demand.

“The North American market is vital for the Canadian canola industry. With canola exports to the U.S. and Mexico totalling approximately \$8.6 billion in 2022, working with our partners to ensure a robust, transparent and timely science-based regulatory system as part of a predictable North American trading environment is essential to our long-term success,” says Chris Davison, CCC president and CEO. “The Tri-National Accord provides a unique venue to work with subnational partners across our three countries to advance Canadian canola industry priorities.” ✿

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



The U.S. and Mexico rank one and three on the list of Canada’s top canola markets. The U.S. imported almost \$7 billion in canola oil, meal and seed in 2022. Mexico imported around \$1.6 billion, mostly seed.

# We don't sell canola to models.



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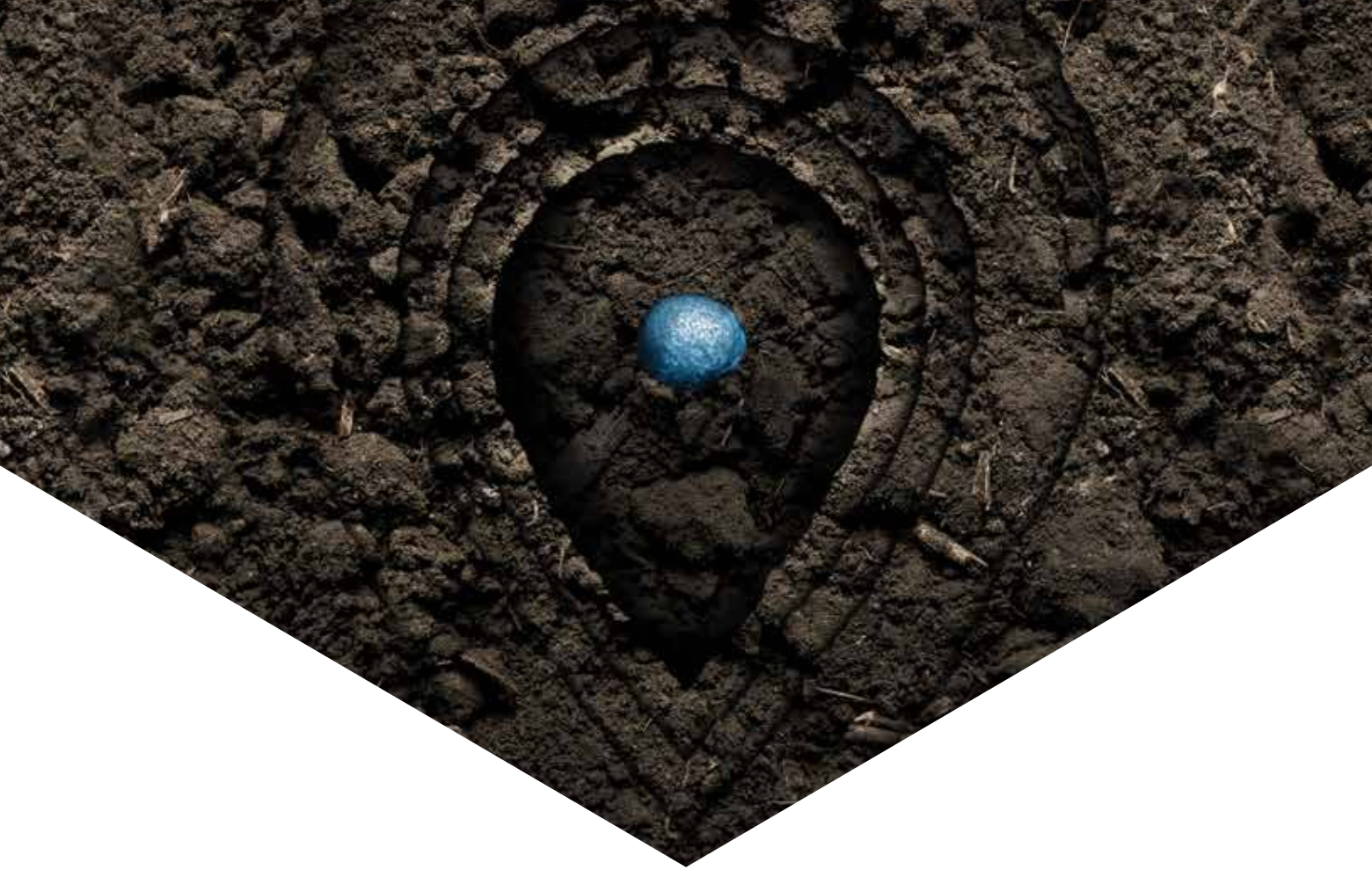
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In today's rapidly evolving agricultural landscape, making informed seed purchase decisions is crucial for maximizing yields and profitability. Traditional methods of selecting seeds based on intuition or previous experience may not always yield optimal results. However, by leveraging the power of harvest data and trial results, farmers can gain a competitive edge and make data-driven seed purchase decisions that drive success.

Proven® Seed has the largest retail trial program in Western Canada and access to the leading data tools and resources to help you explore the benefits and possibilities of using harvest data and trial results to enhance your seed selection process.

### Make the most out of harvest data

One of the greatest assets in modern agriculture is the availability of vast amounts of digital data. With precision farming technologies and real-time monitoring tools, farmers can capture detailed insights about their fields, including yield metrics, soil quality, and environmental conditions. By analyzing this harvest data, farmers can identify trends, patterns, and correlations that reveal the performance of different seed varieties under specific conditions. Combining historical harvest data with genetics information can help identify the seeds that consistently deliver superior results, ultimately leading to more profitable seed purchases.

### Unlock the potential of trial results

Another valuable resource for seed selection is trial results. Proven Seed conducts hundreds of extensive trials of their hybrids and varieties across diverse locations and conditions, providing farmers with valuable information to inform their local seed purchase decisions. Trial results give farmers a comprehensive understanding of how different seeds perform in various environments, allowing them to select the varieties that suit their specific needs and challenges. By considering trial results, farmers can minimize risks and ensure the likelihood of greater returns on their investment.

### Turn data into a decision-making tool

To truly harness the power of harvest data and trial results, farmers should embrace advanced data integration systems like Echelon™ from Nutrien Ag Solutions®. Aggregated platforms and data analytics tools empower farmers to integrate various sources of information, including harvest data, trial results, and other relevant data sets. By centralizing and analyzing this data, farmers can access comprehensive reports and insights, enabling them to compare and evaluate different seed varieties effectively. These data-driven decision-making tools reduce uncertainty, enabling more confident and informed seed purchase decisions.

### Partnering with seed experts

While the availability of data is instrumental, it's essential to collaborate with seed experts who possess in-depth knowledge and expertise in seed genetics and performance. Proven Seed and Nutrien Ag Solutions can offer valuable insights, interpreting trial results and harvest data to guide farmers in making the most suitable seed purchase decisions. By partnering with seed experts, farmers benefit from tailored recommendations based on specific fertility requirements, geographic location, and farming practices, further increasing the likelihood of successful seed purchases.



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# Canola, Personified



Please meet our new friend, Canadian Canola. She is the face of a new promotional campaign to show Canadians how they can use canola every day and what canola means to the Canadian economy

Canadian Canola, in human form, connects with Canadians in a warm, approachable fashion, sharing interesting facts about canola's versatility and value to the Canadian economy.

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## **Long brown wavy hair, a bright,**

curious personality, loves maple syrup and hockey, and wears jeans and her favourite canola field T-shirt – Who is this mystery person? Why she's Canadian Canola! Canadian Canola is the face of a new promotional campaign geared to show Canadians how they can use canola products every day and what canola means to the Canadian economy.

"Hello, I'm Canadian Canola, and I've become somewhat of a global celebrity," she says while walking through an airport in a new video launched this month. While signing autographs and waving at the paparazzi, she highlights a few common uses for canola – not just as a healthy food ingredient. "The world can't get enough of my sustainable Canadian goodness."

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 creative elements.



The video plays up the celebrity vibe. Canadian Canola plays the hero, signing autographs and waving to photographers.

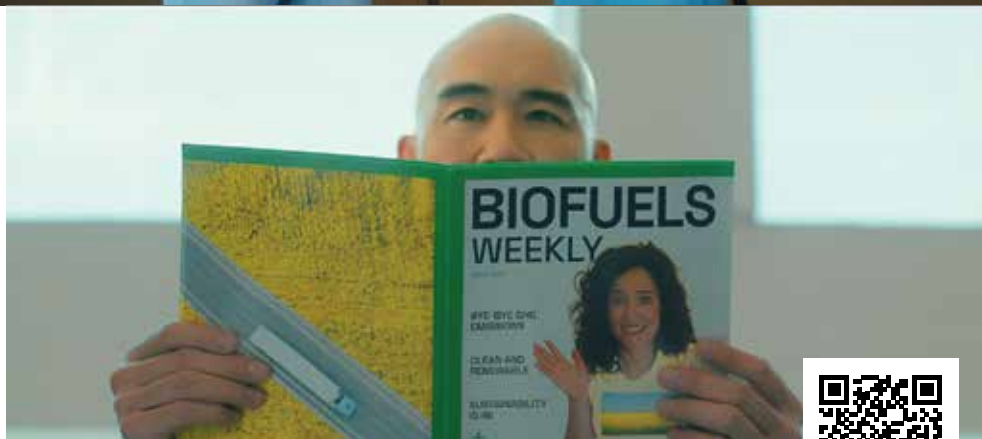


“We want Canadians to get excited about our new Canadian Canola character, follow her on social media and share posts with their friends and family,” says Lynn Weaver, market development manager with SaskCanola.

Canadians first met the personified version of canola August 19. She spent that week talking with people on the streets of Toronto about little-known canola facts before taking a break for harvest. You can find those videos on YouTube, Instagram, Twitter and Facebook through the @hellocanola handle.

The full *Hello Canola!* campaign ramps up this month with a campaign hero video, [hellocanola.ca](http://hellocanola.ca) website, digital advertising and social media engagement.

The goal is to bring the overall narrative of canola’s impact across the globe into other channels and activations such as media, influencers, and strategic partnerships over the coming years. “Ultimately, we want to move Canadians from apathy to love of Canadian canola, especially in the largest cities where we have room to grow,” Weaver says. 🌻



***“Ultimately, we want to move Canadians from apathy to love of Canadian canola, especially in the largest cities where we have room to grow.”***

— Lynn Weaver

**i**

#### Get social

The provincial canola associations encourage all canola growers to follow @hellocanola and comment, like and share posts featuring the Canadian Canola character and other content. Hello Canola! will be active on:  
Twitter (X) | Instagram | YouTube | Facebook

↑ The new hero video launched this month makes a nod to canola-based products, including biofuel – low carbon, renewable and used around the world.



# *Brutal truths* about farm communication

BY KELLY DOBSON

Inner conflict makes clear communication difficult, and when speaking about high stakes and complex matters, just about impossible. Effective communication in business starts with a clear understanding of where you want the business to go.

## **In working with seven cohorts**

of the National Farm Leadership Program, I have come to understand the critical role that communication plays in the success of families and businesses, and how challenging teaching effective communication can be. This article is a summary of these experiences.

### **BRUTAL TRUTH #1:**

**Teaching communication alone rarely makes people better communicators.**

If it were merely a skills challenge, well-delivered workshops would generate better long-term communication improvements than they do. People may show temporary improvement after a workshop, but soon revert to their old ways.

When put to the test, most people cannot clearly state what they want, and the frustration of trying has many people believing they can't change. It's not uncommon to hear, "That's just who I am". Our core tendencies are part of who we are, but personality is plural. We are way more than our default "reactive tendencies" and thanks to neuroplasticity, we are capable of self innovating so we can show up the way we know we can, when and with whom we most need to, and talk about the issues that matter most.

We still teach communications through the National Farm Leadership Program, but only when people are ready. People are ready when they

can clearly articulate what they want and can focus on outcomes instead of problems. This can be surprisingly difficult. Psychologically, our default focus is set to identifying what we don't want, what we don't have and what we don't like. Yup, backwards. This negative approach is our nervous system's default setting, but we're capable of switching to an outcome orientation.

### **BRUTAL TRUTH #2:**

**The capacity to work through my thoughts and make up my mind is ground zero for high impact leadership and engagement.**

Most people find communication challenging because they're conflicted. A part of them wants to act, another says, "Don't". Inner conflict makes clear communication difficult, and when speaking about high stakes and complex matters, just about impossible. Nearly 100 per cent of all participants and coaching clients work with me in part because the chronic inner drama created because of not "knowing their mind" makes it impossible to declare what they want and act.

Here are few inner conflicts common among farmers:

- "One part of me wants to tell my parents that their unwillingness to discuss and formalize their transition out of this business is making it impossible to plan for the future, but another

**i**

**If you're interested in the National Farm Leadership Program, scan to apply.**



of me is afraid to say anything because I'm afraid it will cause a blow out."

- "One part of me wants to get into a new business, but I'm afraid what my neighbors and family will say."
- "I'm angry at my employee, but I'm not going to say anything because I'm worried he might quit."

Knowing how to effectively work through inner conflict is a hallmark of high performance and is a focus within the National Farm Leadership Program.

**BRUTAL TRUTH #3:**  
**Life is much more complex than it was when we were young. People need to reorganize how they think.**

Success in agriculture runs on high functioning interdependent relationships whose currency is communication. This wasn't the case in our early lives, so we didn't need to organize ourselves to thrive in complexity. But we need to.

These interdependent relationships include the growing group of advisors that modern farms use. The conversations are more complicated than ever and require a level of vulnerability and transparency from the farmer that is unprecedented in my opinion. The number one complaint I hear from advisors is that farmers won't buy advice that will add value to their farms. Putting that value proposition aside, many farmers are just not able to engage with advisors effectively. The fact is most people (two thirds to three quarters of the

general population) struggle to think independently and act strategically. Charting their own path, independent of what their peers are doing, requires them to self-innovate – to think and behave to their potential. Most people just aren't there – yet. The “yet” is an open possibility if they're willing to go down a path of personal and professional development.

People often say they want more confidence, or to communicate effectively, or to stop employee turnover. All those things at their source are usually about how the farmer “shows up” with family, employees, advisors, and vendors. What they really want is a life and business where people tell the truth about what's really going and where people want to hear that truth – no drama, just clarity, learning and partnership. All of this is possible, and it starts with them.

**BRUTAL TRUTH #4:**  
**When it comes to personal innovation, the juice is worth the squeeze.**

Meta analysis of a large data set has shown that communication (relating skills) is a differentiating set of skills between high performing people and low performing people. Strengths such as intelligence, creativity, technical

***People often say they want more confidence, or to communicate effectively, or to stop employee turnover. All those things at their source are usually about how the farmer “shows up” with family, employees, advisors, and vendors.***

knowledge, and passion show up for both high and low performing people. In other words, by the numbers, just having these strengths doesn't explain why some people are significantly more effective than others. Know what does? The capacity to relate to others and communicate clear outcomes and vision. Poor leaders don't do this. High impact leaders do, and with whopping margins. Communication has a multiplying effect because of how it impacts the behavior of others. That's leadership.

Does it really matter? One legendary study showed that the top 10 per cent of leaders who could communicate clear outcomes and vision produced nearly twice the profits of the middle 80 per cent combined. Oh, and they were running identical business units.

As a start, rate yourself between 1 and 5 on the following statements. This will give you a chance to reflect on how you relate to others:

- I prioritize connecting with others in a caring way.
- I prioritize mentoring and developing others.
- I am collaborative.
- I promote teamplay.
- I confront others to resolve challenges.
- I share my vision and clarify desired outcomes.

I tell everyone who pleads that they're “just not a people person” that they don't need to be amazing, they just need to be effective. New methods we're using in the National Farm Leadership Program are leveraging people's capacity to adapt and is empowering people to show up authentically in ways they didn't think they could. It makes all the difference.



— Kelly Dobson is president of LeaderShift Inc. and head coach of the National Farm Leadership Program. Apply at [leader-shift.ca/nflp](http://leader-shift.ca/nflp). Email [kelly@leader-shift.ca](mailto:kelly@leader-shift.ca).

***One legendary study showed that the top 10 per cent of leaders who could communicate clear outcomes and vision produced nearly twice the profits of the middle 80 per cent combined.***





SaskCanola, Alberta Canola and Manitoba Canola Growers, through their representation in national organizations, work together to enhance the trade of canola seed, oil and meal around the world.

# Grower directors work for **stable and open trade**

**N**inety per cent of Canadian canola is exported as seed, oil or meal. That is why stable and open trade is a pillar of the Canola Council of Canada (CCC) strategic plan and a key policy objective of Canadian Canola Growers Association (CCGA).

Farmers on the boards for SaskCanola, Alberta Canola and Manitoba Canola Growers also sit at the CCC and CCGA board tables. These dedicated directors provide the essential farmer voice needed when working to advance stable and open trade.

Pam Bailey, vice president of Manitoba Canola Growers and CCGA director, says farmers are the best people to speak for farmers. “When farmers meet directly with customers from around the world, we can explain how we work to be reliable, sustainable, high-quality suppliers of canola,” Bailey says. “It is hard to replicate this grassroots connection from the farm gate to the end user.”

Here are a few CCC and CCGA trade activities that benefit from the farmer voice:

**The biofuels opportunity.** A year ago, the U.S. Environmental Protection Agency (EPA) announced that renewable diesel, sustainable aviation fuel and other biofuels made from canola oil will qualify as “advanced biofuels” under the U.S. Renewable Fuel Standard program. This gives canola oil a pathway into the U.S. market. The CCC worked with the Canadian Oilseed Processors Association (COPA) and the U.S. Canola Association to achieve this level playing field with other oilseeds.

“We have advocated for increased use of renewable fuels because it has the ability to drive our economy forward,” says Christine McKee, director with Alberta Canola and CCGA. “It means more jobs, creates another market for our crops, increases farmers’ revenues, and helps to ensure long term price stability.”

**Potential in the Indo-Pacific.** The 40 nations of the Indo-Pacific represent the fastest-growing economic region in the world. The CCC

joined forces with other value chain organizations to promote market access and a more strategic, coordinated approach to growing and diversifying exports to the region. A result of this work is the plan to open a new Canadian Indo-Pacific Agriculture and Agri-Food Office in the region.

“Adding the Indo-Pacific office gives Canada and Canadian farmers a chance to enhance existing relationships and create new ones,” says Dean Roberts, director with SaskCanola, CCGA and CCC boards.

**International MRLs.** When it comes to maximum residue limits (MRLs) for pesticides, not all countries approve and set these limits at the same time or same level. This can pose a trade risk for canola and delay farmers’ access to crop protection products. Codex provides an international standard for MRLs. CCGA is part of the Coalition for an Enhanced Codex, which supports global standards to facilitate trade.

***“Adding the Indo-Pacific office gives Canada and Canadian farmers a chance to enhance existing relationships and create new ones.”***

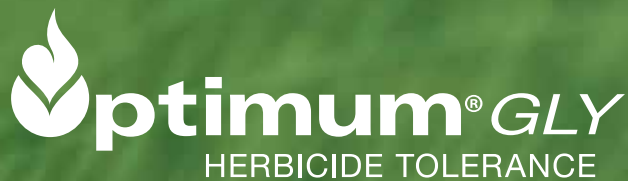
— Dean Roberts

“As farmer directors, we can show decision-makers how international and predictable standards for MRLs would help us,” says Dean Roberts. “We market our crops for 12 months after harvest and if MRLs change

unexpectedly in that time, we’re stuck. We can’t un-use anything we already applied to the crop.”

Justin Nanninga, director for Alberta Canola and the CCC, says when farmer directors meet with governments or foreign delegations to advocate and raise awareness of Canadian canola, they do this for the benefit of Canadian farmers. “Building relationships to grow more export markets for canola, canola oil and meal is vital to maintaining a diversified marketing strategy,” he says. ✖





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# Canola market snapshot— Lower supply

BY JAY WHETTER

Lack of moisture hurt average Canadian canola yields in 2023. Statistics Canada, in its September estimate, put production at 17.4 million tonnes. Average for the previous five-years, which includes the 2021 drought year, is 18.6 million.

**L**ow in-season rainfall withered average Canadian canola yields in 2023. Statistics Canada production estimates, released mid September based on August satellite imagery and agroclimatic data, put Canadian canola production at 17.4 million tonnes for 2023. That is down from 18.7 million in 2022 and the 2018-22 average of 18.6 million.

The general rule is that canola needs an inch of available moisture for every four bushels per acre of yield. Therefore, a 50-bushel crop needs about 12 inches of moisture, supplied from soil reserves and in-season rainfall.

Of the eight locations analyzed for this article, some had decent growing season rainfall and one, Camrose, actually had 12 inches. (See Table 1.) North central Alberta is, historically, a very good canola growing area and general yields should be OK in that region. For some areas of the Prairies, canola tapped into good soil moisture reserves to produce higher than expected yields given the rainfall. Central and eastern Manitoba, for example,

Other areas, especially the southwest Prairies, had low rainfall combined with extreme heat. Heat increases evaporation from leaves and soil and damages flowers and pollination. Days over 30°C at flowering will reduce canola yield, and yield drops with each day over 30°C.

StatCan, in its September report, forecast average Canadian canola yields at 35.0 bushels per acre, down from 38.8 in 2022. (See Table 2.) The Canadian average yield for the five years from 2016 to 2020 was 41.6. Yield for 2021, the drought year, was 27.4.

Yield estimates for 2023 by province are 32.8 for Saskatchewan, 37.8 for Alberta and 38.2 for Manitoba. Harvested area is forecast at 21.9 million acres, up three per cent from 2022.

Globally, the USDA Foreign Agriculture Service (FAS), in its September 2023 *Oilseeds: World markets and trade* report, estimates 2023-24 canola and rapeseed production at 85.2 million tonnes. This is down over three million from last year, mostly because of Canada's reduced production.



StatCan will release its final survey-based production estimates for 2023 on December 4, 2023. Scan to find the report.





***The USDA Foreign Agricultural Service estimates 2023-24 global canola and rapeseed production at 85.2 million tonnes. This is down over three million from last year, mostly because of Canada's reduced production.***

Rainfall is often highly variable from one field to the next field and even within fields, so rainfall for these locations provides just a snapshot of the Prairies situation through the 2023 growing season. ↓

**Table 1:** 50-bushel canola crop needs 12 inches of available moisture

	2023 in-season rainfall (mm) for select locations across the Prairies					Inches, approx.
	May	June	July	August	TOTAL	
Carman, Manitoba	17.4	25.1	23.9	59.1	125.5	5"
Dauphin, Manitoba	45.8	65.2	19.3	69.4	199.7	8"
Nipawin, Saskatchewan	35.7	34.6	49.6	72.7	192.6	8"
North Battleford, Saskatchewan	32.3	40.2	38.1	32.5	143.1	6"
Regina, Saskatchewan	37.1	74.8	23.1	35	170	7"
Brooks, Alberta	12.6	16	17.4	13.1	59.1	2.5"
Camrose, Alberta	20.8	113.1	113	50.2	297.1	12"
Peace River, Alberta*	72.4	10	91.5	34.1	208	8"

\*The Peace River weather station recorded almost no rain (a few mm here and there) from May 23 to July 22, a critical period for canola growth  
Source: Government of Canada [https://climate.weather.gc.ca/historical\\_data/search\\_historic\\_data\\_e.html](https://climate.weather.gc.ca/historical_data/search_historic_data_e.html)

### **Soybean production up**

Meanwhile, global soybean production continues its boom. FAS, in the same September oilseeds report, put 2023-24 soybean production at 401.3 million tonnes, up over 30 million from 2022-23.

The top three soybean producing countries are Brazil, the U.S. and Argentina. Brazil is forecast to produce 163 million tonnes of soybeans in 2023-24 (next spring's harvest), up 35 million tonnes over the past five years. The U.S. crop (this fall's harvest), at 113 million tonnes, is below last year but in line with its five-year average. Argentina is forecast to return to trend after a poor harvest earlier this year.

StatCan estimates Canadian soybean production at 6.7 million tonnes, up 2.7 per cent from 2022. Average yields are 44.2 bu./ac, down from 2022, while harvested acres, at 5.6 million, are up.



While Ontario leads the country with 4.0 million tonnes, Manitoba retains second place, slightly ahead of Quebec. StatCan estimates Manitoba soybean production at 1.4 million tonnes in 2023, up 4.5 per cent from 2022. Manitoba yield estimates are down 25 per cent, at 32.1 bushels per acre.

Overall global oilseed production (not including palm oil), as estimated in the FAS September report, was 630 million in 2022-23 and will be 661 million in 2023-24.

Olive production down

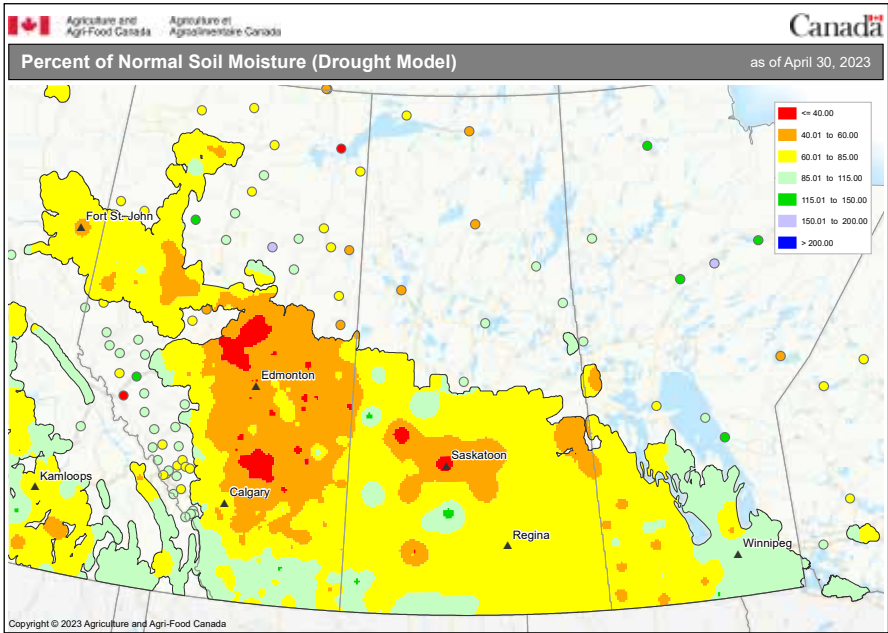
While olive oil represents a tiny fraction of global vegetable oil production, it has outsized space on store shelves. People selling bottled canola oil pay attention to olive oil. In its September 2023 report, FAS led with an update on crazy olive oil prices driven by weather-driven production issues around the Mediterranean. FAS reported olive oil prices at US\$8,900 per tonne (Cdn\$12,000) in August, surpassing the previous record of US\$6,242 set in 1996.

International Olive Council (IOC), in its September price report, confirms the rapid rise. At Bari, Italy, IOC has extra virgin olive oil prices at €900 per 100kg (Cdn\$13,000 per tonne) – more than double the year-ago price. By comparison, the 2022-23 average price for Canadian canola oil was Cdn\$2,034 per tonne, up \$150 from last year and almost double the previous five-year average.

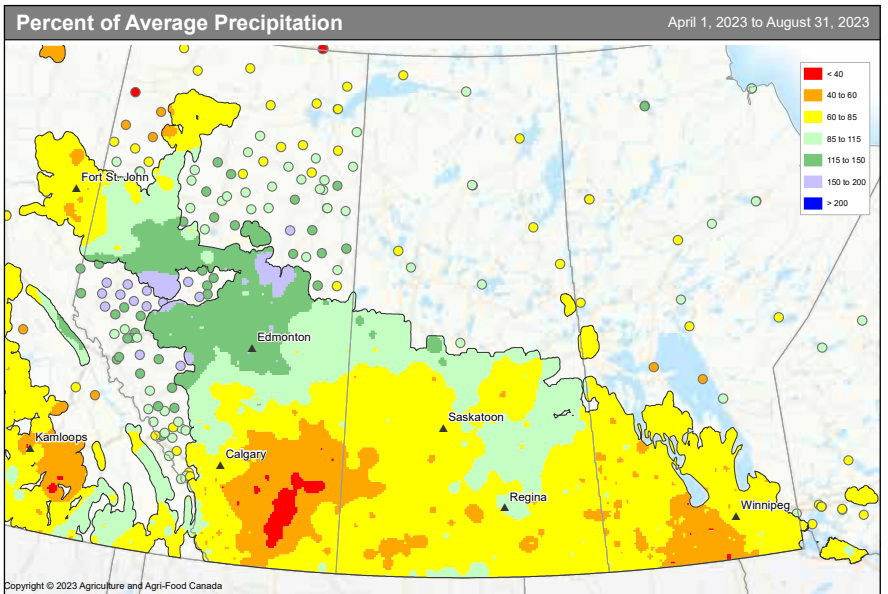
Global olive oil production was 2.5 million tonnes for 2022-23 crop year, down from 3.3 million in 2021-22. Spain, by far the largest producer, saw production drop by half to 780,000 tonnes in 2022-23, according to IOC figures.

Olive oil prices show “no sign of easing,” FAS says. 🌻

— Jay Whetter is the editor of Canola Digest.



↑ This map shows a snapshot of the soil moisture on April 30, 2023, given as a percent of normal. Eastern Manitoba had a good amount of soil moisture, which saved yields despite much lower than normal in-season rainfall.



↑ Alberta had the full range of in-season rain, with much lower than normal in the south and well above normal in the north-central region. Saskatchewan was mostly dry. Manitoba was dry.

Canola yield and production are not trending in the right direction. Lower than required moisture was a major factor for many regions in 2023. Globally, supply of oilseeds and vegetable oils continue to trend upward. ↓

Table 2: Production and yield trends						
	2018	2019	2020	2021	2022	2023 (est.)**
Canada canola production (million tonnes)	20.7	19.9	19.5	14.2	18.7	17.4
Canada canola yield (bu./ac.)	40.6	41.9	41.8	28.4	38.8	35.0
Global canola/rapeseed production (million tonnes)	72.9	70.3	74.7	75.8	88.6	85.2
Global soybean production (million tonnes)	362.4	341.2	369.0	360.1	370.1	401.3
Global major oilseeds production* (million tonnes)	600.9	582.0	608.9	611.7	629.7	660.9
Global major vegetable oil production* (million tonnes)	203.8	207.6	207.0	207.9	216.4	222.8

\*Oilseeds production does not include palm, which is not considered an oilseed. Vegetable oil production includes palm oils. / \*\*September 2023 reports. Global estimates include anticipated southern hemisphere crops that will be harvested next spring. For example, USDA Foreign Agriculture Service uses crop year headings “Ex. 2023-24” to account for next-spring harvests in the southern hemisphere. / Source: Statistics Canada for Canadian canola data. USDA Foreign Agriculture Service for global data.



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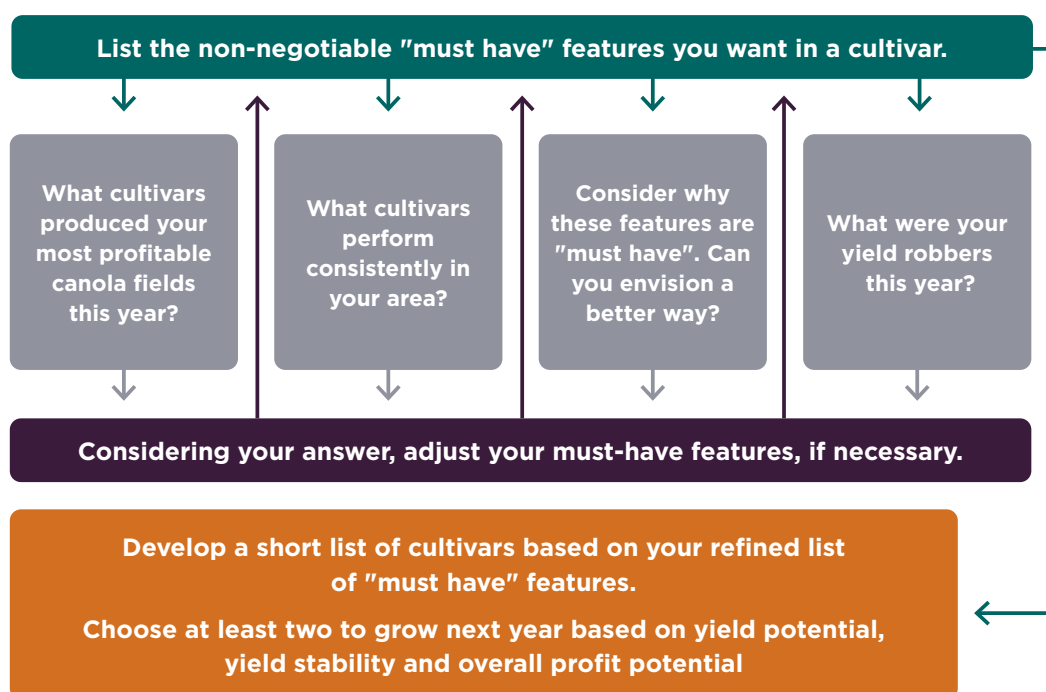
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<sup>1</sup> Compared to John Deere Generation 4 Displays.

# Do you want the best? *Or the best for you?*

Canola growers can increase yield and improve profitability with cultivars that suit local growing conditions, the specific farm system and challenges unique to each field. Use our decision tree to think through cultivar selection for 2024.

**With all the choices canola growers make** in a season, decision fatigue can set in when it comes to seed selection. To keep it simple, farms often stick with what worked last year. But is that the best choice? Could farms be leaving profit on the table? Our simple decision tree can make the decision process more refined and less tiresome.



## Decision tree, step by step

### Step 1. List your “must have” traits

Write down the traits essential to your system. These could be herbicide tolerance, days to maturity, pod shatter tolerance, specialty oils, disease resistance and others. The section below describes each option.

### Step 2. Calculate which cultivars produced your most profitable canola fields this year

Look at yield, quality, seed prices, in-season input requirements, harvestability, fertilizer use efficiency and any other factors that influence profitability and the overall growing experience. Can you pin higher profitability on any specific features related to seed or seed treatment? Change your “must have” list accordingly.

### Step 3. Look beyond the current year and beyond the farm gate

Some cultivars yield consistently at or near the top in any conditions. Review results over the past few years on your farm. Ask neighbours and local seed suppliers for their thoughts. Check seed company trial results. Change your “must have” list accordingly.

### Step 4. Critically examine your “must have” list

Try to envision a better way to grow canola. Think about what other farmers are doing, what local research organizations have shown, what end users are buying, and for what price. Honestly evaluate your system. Change your “must have” list accordingly.

### Step 5. Note the top yield robbers on the farm

If certain pests, such as blackleg, clubroot and flea beetles, consistently reduce canola yield on the farm, look at new sources of



resistance and seed treatments to manage those pests. If drought or heat were big yield robbers, ask seed companies if they have cultivars that seem to perform better under these environmental stresses. Change your “must have” list accordingly.

### Step 6. Develop a short list

Use your refined list of “must have” features to create a short list of cultivars. Choose at least two to grow next year based on yield potential, yield stability and overall profit potential.

## Common canola traits

### Disease resistance

- **Clubroot resistance.** As clubroot populations become more diverse in fields, and as seed companies release new resistance genes, farms may see a benefit in rotating resistance sources.
- **Blackleg resistance.** In fields with yield-robbing levels of blackleg, use cultivars with a blackleg resistance group (RG) that works against the common blackleg races in that field. A stubble test will identify the dominant blackleg races in a field and provide tips for RG selection.
- **Other disease resistance.** Some cultivars may have higher verticillium tolerance than others, but no verticillium stripe resistance rating system exists for canola. Some cultivars may also have higher levels of sclerotinia stem rot tolerance. Ask seed companies.

### Pod shatter resistance

The official canola shatter ratings of 1-9 represent a cultivar's pod shatter risk relative to designated checks. The higher the number, the greater the pod shatter resistance. Cultivars with pod shatter tolerance are better suited to late swathing and straight combining, which can improve yield and provide more flexibility on harvest timing.

### Days to maturity

Cultivars with shorter days to maturity could be more profitable on fields often seeded late because of drainage issues, in the Brown soil zone where intense summer heat can reduce yields, and as a strategy to spread out harvest.



For the complete version of this article, including valuable links, please read “Choose the right cultivar for each field” in the Plant Establishment section at [canolawatch.org/fundamentals](http://canolawatch.org/fundamentals).

## Herbicide tolerance system

What herbicide tolerance (HT) system best controls the major weeds in each field and best meets the whole-rotation needs of the farm? Cultivars stacked with both glyphosate and glufosinate tolerance can be particularly effective on wild oats. Farmers who list glyphosate tolerance as a must-have trait and who also have glyphosate-resistant kochia may consider a cultivar with stacked HT systems.

### Specialty markets

Cultivars with specialty oils provide a different marketing opportunity along with premiums, specified delivery dates and on-farm pick up.

### Other considerations

- **Seed treatment.** Getting the greatest value from seed treatment will require some thought about field histories for insects and disease.
- **Lodging score.** If you want to increase nitrogen rates, consider cultivars with high lodging resistance.
- **Weather resilience.** Seed companies may have insight into which cultivars perform best in low moisture, high moisture, high heat and other weather scenarios you often encounter.

## Bottom line: Grow more than one cultivar

Growers often want to experiment with at least one new cultivar each year. Rather than put that cultivar in its own field, consider seeding a block through the middle of a field of the farm's current favourite cultivar. That way the two cultivars get a head to head test in the same field with the same soil type, weather and field history.

If a farm grows only one canola cultivar and has an issue with performance, they may not be able to determine whether a different set of genetics might have helped in their scenario. With two or more cultivars, performance can be compared and analyzed. ✖

### Tip for an easy trial

Growers often want to experiment with at least one new cultivar each year. Rather than put that cultivar in its own field, consider seeding a block through the middle of a field of the farm's current favourite cultivar. That way the two cultivars get a head to head test in the same field with the same soil type, weather and field history.

Through this process, farms do their own phenotyping to analyze genetic performance based on local growing conditions.



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Funding for Canola 4R Advantage is provided by Agriculture and Agri-Food Canada through the Agricultural Climate Solutions – On-Farm Climate Action Fund.

# Loss range wider for auto-adjust combines

BY TARYN DICKSON

A PAMI survey of combine losses in 2022 looked at 22 combines, half with auto-adjust capabilities and half manual adjust. Average losses were similar, but auto-adjust combines had more variability in loss levels.

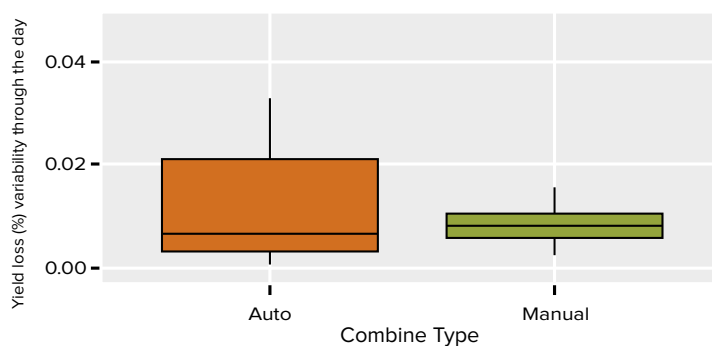
**PAMI ran an on-farm survey** of combine grain loss in canola in 2019, reporting that temperature, relative humidity and weather conditions had a significant impact on the 1.3 bu./ac. losses (2.8 per cent of total yield) out the back of the combine. More specifically, lower temperatures (below 23°C), higher relative humidity (above 45 per cent) and cloudy weather were associated with significantly higher combine losses.

However, canola's relatively small seed weight compared to material other than grain during threshing makes setting a combine for canola more challenging than large-seed crops, like corn.

To minimize losses, project outcomes suggested adjusting any combination of fan speed, rotor/cylinder speed, concave clearance, sieve openings and ground speed of the combine. To ensure each adjustment is effective, losses need to be checked (manually and/or with the yield loss monitors) after each change. This requires a bit of time and effort – at a crunch time in the season.

## Building on that study

Further examining this topic, PAMI's 2022 "Quantifying combine auto-adjusting capabilities in canola" study investigated the impact of weather conditions throughout a harvest day and the methods used to adjust combine settings to minimize losses. The research included 22 combines representing four brands and 14 different models – half of the combines had auto-adjusting capabilities and half were manual adjusting. Researchers evaluated combine losses from straight cut (14 fields) and swathed canola (eight fields) from 13 growers throughout Saskatchewan and Manitoba. PAMI researchers used drop pans to take samples (three repetitions) at three times throughout the day. They did not provide this data to farmers during the testing.



↑ This shows the variability in losses within a harvest day for each type of combine – manually adjusted and automatically adjusted. The thin black lines show the minimum and maximum values. Coloured boxed show the middle (25 to 75 per cent) range of results. The dark black line is the average result. Combines with automatic adjustment have a slightly lower average loss but a wider range of variability throughout the day. Note: 0.02 = 2%.

## Findings:

- Average combine losses ranged from 0.1 bu./ac. to 10.6 bu./ac.
- As average daily temperatures increased, yield loss variation increased significantly. But variation of temperature and humidity throughout the day did not significantly impact the variability of percentage yield loss throughout the day.
- Researchers observed no significant difference between losses in: swathed and straight cut operations, different ground speeds tested, or calendar date (ranging from September 9 to October 10).
- Interestingly, while there was no significant difference between losses in auto-adjusting and manual-adjusting capabilities, there was much less variation in the losses for the manual adjusting combine types than the auto-adjusting types.

This indicates that checking for losses is important and auto-adjusting combines still need calibration and monitoring to ensure that they are properly responding to changing conditions. Overall, you need to know what is happening to make informed management decisions and any method of checking for losses is better than not checking at all. ✖

—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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# What do *you* want?

BY JAY WHETTER

Canola Digest asks challenging questions for this panel: What is your long-term vision for agriculture in general? What is your long-term vision for the farm? The six panelists emphasized the importance of family, technology and soil health.



## Margaret Rigetti

Langbank, Saskatchewan

**M**argaret Rigetti finds it hard to imagine the future. “Earlier generations couldn’t imagine where we are now. They just kept adapting,” Rigetti says. “The general principles are to embrace innovation and involve family. Any business requires the energy of youth to keep going.”

Rigetti will always remember the day back in 2003 when her uncle came to her and said, “From now on, you can do the marketing.” She had never thought of taking over the marketing. It wasn’t on her radar. “He was getting tired of it, so he gave me the job and mentored me.” Rigetti has been the farm’s marketing lead ever since.

“I was always told there were opportunities on the farm for me, which was maybe an extra important thing for me as a girl to hear,” she says.

Rigetti has three children – two sons and a daughter. “I just had a conversation with my daughter. I told her she would be running the grain cart,” Rigetti says. “She was nervous, but I said ‘you can do it and we need you to do it.’” The two sons are also involved.

“We’ve found success in grain farming. Is that where my children will find success? Maybe.”

A big question Rigetti has for farming in general is whether agriculture will be allowed to innovate. “The Prairies have seen incredible positive changes as a result of technology,” she says, giving glyphosate, herbicide-tolerant canola and zero-till drills as examples. “Will agriculture be able to reach its full potential without too much outside interference, misinformation and disinformation?”

***“I was always told there were opportunities on the farm for me, which was maybe an extra important thing for me as a girl to hear.”***

— Margaret Rigetti

***“I hope fertilizer reduction targets stay voluntary. We have ways to get better, like trying not to broadcast nitrogen in the fall.”***

— Jeff Frost



## Jeff Frost

Olds, Alberta

**T**he global population is still increasing, and people still need to eat, so Jeff Frost says farmers will need to continue to increase yield – especially as land is lost to degradation and urban sprawl. His concern is mandatory cuts to fertilizer use.

“I hope fertilizer reduction targets stay voluntary,” he says. “We have ways to get better, like trying not to broadcast nitrogen in the fall. We also have variable rate application and 4R practices that can reduce emissions.”

His vision for the farm is to have a stable land base. They rent a “decent amount of land” which could end up being sold or rented to someone else, he says. Buying more land would make the farm more stable, as long as they can cash-flow the cost, he says. That is a risk. “When prices go back to pre-covid levels, like \$3 barley or \$5 wheat, that could change things quickly if we buy land at high prices and six to seven per cent interest.”

He keeps in mind the saying, “if you’re not growing, you’re shrinking,” but this doesn’t just mean buying more land. The farm could do better on the land it has. “We’re strictly crops, so it would be nice to find another income stream, like manufacturing or a seed cleaning plant,” he says.

Frost has an off-farm job that adds income stability. He started a company in 2016 that provides non-destructive scans of oil and gas pipelines. It checks joints and insulation for wear. He sold the company in 2020 but stayed on as a manager. His vision is to eventually get to full-time farming. “I’m juggling both right now, but farming is number one and one day I will be strictly farming.”



## Andrea & Sheldon Guthrie

Reston, Manitoba

**A**ndrea and Sheldon Guthrie see the future of agriculture in the land itself. “Land is backbone of any farm, and you get out of it what you put in,” Andrea says. “We want to improve our land’s ability to produce food.”

To do that, they try to be as up to date as possible on best practices. They attend events with different speakers so they can get a range of perspectives. They train to improve their skills. Sheldon recently got his 4R designation, for example.

“The training to get certified reassured me that we’re following the right fertilizer practices,” he says. For example, they apply all fertilizer in the spring. They also soil test regularly, and Sheldon does his own analysis of the raw test results. “I want to make sure we’re using the right product applied at the right rate and right time for each field,” he says.

“After a drought year like this, we’ll be interested to see what’s left in the soil this fall,” Andrea adds.

The Guthries also help the soil with a diverse crop rotation that includes canola, wheat, peas, soybeans and corn.

Part of Andrea’s broader vision would be a public that values what farmers do for the land. “We take care of the land like we would our humans,” she says. “We don’t do anything deliberately to hurt it.”

***“The training to get certified reassured me that we’re following the right fertilizer practices.”***

— Sheldon Guthrie

***“Having never used the technology [variable rate] I am excited about how my practices will change and what I will learn from it.”***

— Evan Michel



## Evan Michel

St. Gregor, Saskatchewan

**W**hen asked about his vision for the farm and for agriculture in general, Evan Michel’s first thought is technology, specifically for variable rate applications.

“I run Climate FieldView in all of our equipment now,” he says. “The satellite imagery collected throughout the year gives me field maps that match up with combine yield maps pretty closely. FieldView brings all the data into one point, and helps me identify any problem areas with a field.”

He now has a variable-rate capable drill and next year will be his first year applying variable-rate fertilizer. “Having never used the technology, I am excited about how my practices will change and what I will learn from it,” he says, referring to fertilizer rates, yield and overall profitability.

FieldView helps him farm better, he says, by tracking all activities on one app. He does a lot of trials, often splitting a quarter section in half – spraying one half and not the other. With the map, he knows exactly where the line is so can look for visual differences throughout the growing season and check for yield and profit differences using the combine yield map. “You can do all sorts of trials, but if you don’t get quality data at the end, the trial is irrelevant,” he says. “I found FieldView really helpful for that.”

Looking to the future, Michel says a big objective will be to maintain soil health. “We will keep pushing fertilizer rates to get bigger crops and get the most out of the soil,” he says. With pulses, he may need longer breaks between crops to manage diseases like aphanomyces.

Michel expects to keep growing with the times. “I don’t really envision getting smaller any time soon, but we have to figure out if we want to deal with more equipment and more staff in order to take on any major growth.”





## John Bergen

Carman, Manitoba

John Bergen wants people to “invest in their relationship” with primary producers so they can understand where their food comes from and the farmer’s approach to food production. “Farmers have more in mind than just the bottom line. Soil health and environmental health are important to us,” Bergen says.

His concern is that farm practice will be driven more by what people perceive as right, not what science says is right. People need to know the trade offs. For example, Bergen uses tillage to manage weeds and break down heavy residue. He can reduce some tillage, saving diesel fuel and reducing emissions, but it could mean he has to apply more herbicide to control the weeds. He would like people to understand the challenging trade offs that farmers face.

As for the farm, Bergen has a 16-year-old son who is “very interested” in farming. “I’m really enjoying his youth and excitement,” Bergen says. The son asks a lot of questions, forcing dad to explain why they do this or that.

Expanding to accommodate the next generation may not mean buying more land. “It may mean increased value for the crops we grow, or increasing profit by mitigating weather risks through irrigation, drainage or grain drying,” Bergen says. “Right now, I’m looking at upgrades with an emphasis on quality of life.”

He gives the example of an easy-to-use grain drying system. His daughter was playing softball at provincials in Brandon and Bergen had oats that were close to ready. So he combined the oats at 18 per cent moisture and put them through the dryer. The alternative was to let them air dry, wait for good harvest days and probably miss his daughter’s softball games. “I’m not saying I invested in a dryer just to watch softball,” Bergen says. “Obviously, there are many other benefits. More control over when I harvest – so I can watch softball – is just one.”

This also sends a positive message to the next generation.

***“I’m not saying I invested in a dryer just to watch softball. Obviously, there are many other benefits. More control over when I harvest – so I can watch softball – is just one.”***

— John Bergen

***“Farmers are great at adapting to new ideas. We also need to educate the public to show how these new technologies can help.”***

— Cheryl Westman



## Cheryl Westman

Vermilion, Alberta

Technology is going to keep us moving forward, Cheryl Westman says. “We don’t have a choice when it comes to what consumers want, so we may need to be ready to adopt other solutions for insect and weed control, and for fertilizer.”

She gave the example of new technology that zaps weeds with a jolt of electricity, and fertilizer advancements, such as enhanced efficiency products and placement methods, that get nutrients into the plant without leaching into water ways or loss to the atmosphere.

“Farmers are great at adapting to new ideas,” Westman says. “We also need to educate the public to show how these new technologies can help.”

On her own farm, part of her job is to prepare her three children to be flexible and ready to adapt, and how to move forward with technology. “We have two girls who love cows and a son more interested in crops and equipment,” Westman says. “I’m interested to see where they want to take those interests.” ✕

— Jay Whetter is the editor of *Canola Digest*.



Polymer-coated ESN is one enhanced efficiency fertilizer technology Cheryl Westman could use to reduce nutrient loss.



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