

November 2020

# canola DIGEST

The Source for Canada's  
Canola Growers

## Story about a bridge

THE SECOND NARROWS BRIDGE  
IS AN ESSENTIAL LINK FOR GRAIN  
EXPORTERS ON VANCOUVER  
HARBOUR'S NORTH SHORE. SEE THE  
PLAN TO BOOST ITS CAPACITY.

/ PAGE 10

**INSIDE:**

Trade Commissioners provide  
boots on the ground / PAGE 16

FARMER PANEL: WHO DOES  
YOUR MARKETING? / PAGE 26

4R as a marketing tool to show  
benefits of modern agriculture / PAGE 32



# THE PROOF IS IN THE BIN.



## **InVigor® has done it again.**

The 2020 trial results demonstrate what many growers have known for decades. InVigor hybrid canola has a long history of consistency and performance. But don't just take our word for it. We have the most extensive, replicated localized trial data that says it all.

Check it out at **[InVigorResults.ca](https://InVigorResults.ca)**.

For more information,  
contact **AgSolutions®**  
Customer Care at  
1-877-371-BASF (2273) or  
visit **[agsolutions.ca/InVigor](https://agsolutions.ca/InVigor)**.

**■ BASF**  
We create chemistry

**InVigor®**

**Always read and follow label directions.**

AgSolutions, and INVIGOR are registered trade-marks of BASF. © 2020 BASF Canada Inc.  
John Deere's green and yellow color scheme, the leaping deer symbol, and John Deere are trademarks of Deere & Company.

# CHECK OUT OUR 2021 INVIGOR HYBRID CANOLA LINEUP.

Hybrid	Hybrid Information	Yield	Growing Zones/ Maturity	Blackleg Rating/ Agronomic Trait
<b>NEW</b> <b>InVigor<sup>®</sup></b> <b>L357P</b>	A 300 series Pod Shatter Reduction hybrid that fits in non-clubroot areas for growers looking to push for high yields with very strong standability. Also features exceptional blackleg resistance.	<b>112.9%</b> of the checks (InVigor L233P and Pioneer <sup>®</sup> 45H33) in 2018/2019 WCC/RRC <sup>1</sup> trials <b>109.7%</b> of InVigor L233P (n=39 trials, 2018/2019)	<b>Mid to long</b> growing zones ½ day later than InVigor L252	<b>R</b> (resistant) Pod Shatter Reduction
<b>NEW</b> <b>InVigor<sup>®</sup></b> <b>L340PC</b>	The 300 series hybrid for growers that want it all. A high-yielding, mid-maturing, Pod Shatter Reduction hybrid that offers 1st generation clubroot resistance <sup>2</sup> and strong standability.	<b>108.9%</b> of the checks (InVigor L233P and Pioneer <sup>®</sup> 45H33) in 2019 WCC/RRC trials <b>107.8%</b> of InVigor L233P (n=16 trials, 2019)	<b>All</b> growing zones 1 day earlier than InVigor L252	<b>R</b> (resistant) Pod Shatter Reduction 1st generation clubroot resistance
<b>InVigor<sup>®</sup></b> <b>L345PC</b>	Offers a significant jump in yield potential over InVigor L233P and features our patented Pod Shatter Reduction technology plus 1st generation clubroot resistance.	<b>111.9%</b> of the checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2017/2018 WCC/RRC trials <b>111.4%</b> of InVigor L233P (n=28 trials, 2018)	<b>All</b> growing zones 1 day earlier than InVigor L252	<b>R</b> (resistant) Pod Shatter Reduction 1st generation clubroot resistance
<b>InVigor<sup>®</sup></b> <b>L352C</b>	Offers yield potential that exceeds InVigor L252. Along with outstanding yield, it also features 1st generation clubroot resistance. Ideal for growers that prefer to swath.	<b>108.6%</b> of the checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2017/2018 WCC/RRC trials <b>104%</b> of InVigor L252 (n=28 trials, 2018)	<b>All</b> growing zones	<b>R</b> (resistant) 1st generation clubroot resistance
<b>InVigor<sup>®</sup></b> <b>choice</b> <b>LR344PC</b>	InVigor Choice hybrid with Pod Shatter Reduction and clubroot resistance. Features both LibertyLink <sup>®</sup> technology system and TruFlex <sup>™</sup> canola with Roundup Ready <sup>®</sup> Technology. Perfect for growers looking for high-yielding InVigor genetics with the flexibility of Liberty <sup>®</sup> herbicide or Roundup <sup>®</sup> herbicide applications.	<b>104.1%</b> of the checks (InVigor L233P and Pioneer <sup>®</sup> 45H33) in 2018 WCC/RRC trials <b>103.6%</b> of InVigor L233P (n=12 trials, 2018)	<b>All</b> growing zones	<b>R</b> (resistant) Pod Shatter Reduction 1st generation clubroot resistance LibertyLink technology system and TruFlex <sup>™</sup> canola with Roundup Ready <sup>®</sup> Technology
<b>InVigor<sup>®</sup></b> <b>L233P</b>	This strong performer was grown on more acres in Western Canada than any other canola hybrid in 2019 & 2020.* Featuring patented Pod Shatter Reduction technology, this very early-maturing, high-yielding hybrid provides the harvest flexibility you can count on.	<b>108.8%</b> of checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2014/2015 WCC/RRC trials	<b>All</b> growing zones	<b>R</b> (resistant) Pod Shatter Reduction
<b>InVigor<sup>®</sup></b> <b>L234PC</b>	This early-maturing Pod Shatter Reduction hybrid with 2nd generation clubroot resistance is a great fit for known affected areas. Grow it after two cycles of growing 1st generation clubroot-resistant hybrids or when clubroot symptoms are noticed (whichever comes first).	<b>104%</b> of the checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2017 WCC/RRC trials	<b>All</b> growing zones	<b>R</b> (resistant) Pod Shatter Reduction 2nd generation clubroot resistance
<b>InVigor<sup>®</sup></b> <b>L255PC</b>	InVigor L255PC offers Pod Shatter Reduction, 1st generation clubroot resistance and separates itself from other hybrids due to its very impressive standability. A great fit for growers in the mid to long growing zones.	<b>109%</b> of the checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2016 WCC/RRC trials	<b>Mid to long</b> growing zones	<b>R</b> (resistant) Pod Shatter Reduction 1st generation clubroot resistance
<b>InVigor<sup>®</sup></b> <b>L241C</b>	You can expect strong standability and high yields from this mid-maturing hybrid with 1st generation clubroot resistance. Well suited to all clubroot-affected regions of Western Canada and for growers that prefer to swath.	<b>102%</b> of the checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2012/2013 WCC/RRC trials	<b>All</b> growing zones	<b>R</b> (resistant) 1st generation clubroot resistance
<b>InVigor<sup>®</sup></b> <b>L252</b>	A consistent top performer, InVigor L252 continues to offer incredible yield performance and strong standability with mid-season maturity. For growers that prefer to swath.	<b>110%</b> of the checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2011/2012 WCC/RRC trials	<b>All</b> growing zones	<b>R</b> (resistant)
<b>InVigor<sup>®</sup></b> <b>L230</b>	Early-maturing InVigor L230 displays outstanding yield potential with excellent standability. This hybrid is ideal for growers who prefer to swath.	<b>103.9%</b> of the checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2014/2015 WCC/RRC trials	<b>All</b> growing zones	<b>R</b> (resistant)

\*Source 2019 & 2020 BPI (Business Planning Information) data  
Results may vary on your farm due to environmental factors and preferred management practices

<sup>1</sup> Western Canadian Canola/Rapeseed Recommending Committee (WCC/RRC) trials.

<sup>2</sup> InVigor L340PC, InVigor L345PC, InVigor L352C, InVigor Choice LR344PC, InVigor L255PC and InVigor L241C all contain the same clubroot resistance profile. InVigor L234PC contains this resistance profile plus second generation clubroot resistance to additional emerging clubroot pathotypes to help combat the evolving clubroot pathogens.

Roundup Ready<sup>®</sup>, Roundup WeatherMAX<sup>®</sup> and TruFlex<sup>™</sup> are trademarks of Bayer Group, Monsanto Canada ULC licensee. © 2020 Bayer Group. All rights reserved.

<sup>®</sup>, <sup>™</sup>, <sup>SM</sup> Trademarks and service marks of DuPont, Pioneer or their respective owners. © 2020 Corteva.

All other products are trademarks of their respective companies



## Results that speak for themselves.

The results from the InVigor® Demonstration Strip Trials show what growers have known for over 24 years – InVigor continues to raise the bar. Go to **InVigorResults.ca** for:

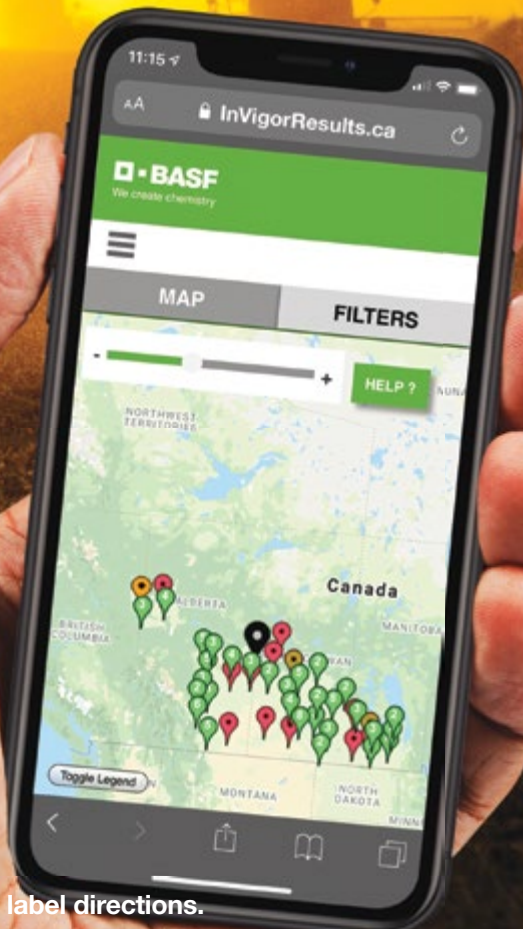
- Localized, replicated trial results from your area
- Results for InVigor patented Pod Shatter Reduction canola hybrids and swath hybrids
- Comparisons of clubroot-resistant hybrids
- The ability to save and/or share trial data

Be sure to check back often as we continue to update results throughout the rest of the season. Check out **InVigorResults.ca** now.

To learn more, visit **agsolutions.ca/InVigor** or call **AgSolutions®** Customer Care at 1-877-371-BASF (2273).

**BASF**  
We create chemistry

**InVigor®**



**Always read and follow label directions.**

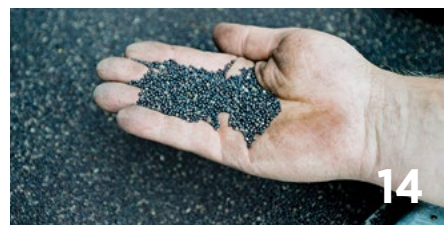
AgSolutions, and INVIGOR are registered trade-marks of BASF. © 2020 BASF Canada Inc.



10

## STORY ABOUT A BRIDGE

The Port of Vancouver is the major gateway for canola exports to Asia. For three major grain terminals on Vancouver Harbour's north shore, including the brand new one from G3, all of their grain passes over the single-track Second Narrows Bridge. That bridge is a symbol for a complicated rail infrastructure pinch point and the master plan to fix it.



14



16

14

### Canola Market Snapshot

The EU bought 2.1 million tonnes of Canadian canola seed in 2019-20, moving it ahead of Mexico and just behind Japan. Other notables are United Arab Emirates, which increased its purchases to around \$500 million, and Pakistan.

16

### Trade Commissioners provide boots on the ground

Canada's Trade Commissioner Service helps Canadian exporters to find and maintain business relationships, boosting canola trade in Pakistan, China and many other markets.

20

### Making protein a common ingredient

Protein Industries Canada updates on two investments that show a lot of promise for canola.

21

### Canola meal reduces methane output from dairy cows

New studies show canola meal fed to dairy cows can help to reduce their output of methane and nitrous oxide, two greenhouse gases that create a lot of attention for cattle businesses.

22

### Biofuel standard could increase domestic canola demand

It is difficult to project the annual demand for canola as a biofuel feedstock under the new Canadian Clean Fuel Standard, but modelling suggests that CFS could be a significant demand pull for canola oil.

30

### Canada approves cultivation of Nuseed omega-3 canola

This new output trait is set to meet the major global deficit of omega-3 essential fatty acids in human diets and the rapidly growing demand for fish protein.



32

### Cargill uses 4R to show benefits of modern agriculture

Cargill wants to show end users and consumers how modern agriculture can help the planet. One approach is applying the 4R nutrient management program throughout its Canadian grain network.



## DEPARTMENTS

### 26 **Farmer Panel** Who does your marketing?

Canola Digest asked four farmers about the people involved in setting the farm's marketing strategies. Who is the farm's marketing lead? And what, if any, outside expertise do they use?

### 34 **Business management** How to start the succession planning conversation

Through 2020, Elaine Froese has had many young farmers reach out looking for tips to get their parents to talk about the plan to pass along the business. The farm family coach has 14 tips to get the conversation started.

### 28 **Agronomy Insight** Seed traits: What are the standards?

The Canola Council agronomy specialists list the options available for canola seed traits – resistance to diseases, pod shatter and lodging – and describes official standards (if any) for each trait.

### 36 **Canola Eat Well** Farmers rally for restaurants

Farmers use a video called “Field to table, eat well together” to show support for their restaurant partners during COVID-19 shut-downs.

## PROVINCIAL BULLETINS

### 4



Alberta Canola is co-funding a grain drying study, which aims to fill the data gaps related to the efficiency of in-bin supplemental heating systems and heated air dryers. For 2020, the traditional fall run of Powering Your Profits live events is replaced with one online engagement meeting on December 1.

### 6



Given the fundamental importance of healthy soil, SaskCanola is co-funding three research projects designed to improve our understanding of soil health and its attributes impacted by management practices.

### 8



Manitoba Canola Growers continues to sponsor Great Tastes of Manitoba TV show. See the new section of the [canolagrowers.com](http://canolagrowers.com) website for details on how the association advocates for farmers.

## CALENDAR

### CANOLA WEEK, INCLUDING CANOLA DISCOVERY FORUM

December 1-3, 2020  
ONLINE  
[canolacouncil.org](http://canolacouncil.org)

### ALBERTA CANOLA'S GROWER ENGAGEMENT MEETING

December 1, 2020 – 9:30-10:30 a.m.  
ONLINE  
[albertacanola.com](http://albertacanola.com)

### SASKCANOLA'S AGM

January 12, 2021 – 9:30 a.m.  
ONLINE  
[saskcanola.com](http://saskcanola.com)

### ALBERTA CANOLA'S AGM

January 26, 2021 – 9:30 a.m.  
ONLINE  
[albertacanola.com](http://albertacanola.com)

### MANITOBA CANOLA GROWERS' AGM

February 11, 2021 – 10:00 a.m.  
ONLINE  
[canolagrowers.com](http://canolagrowers.com)



THE CANOLA DIGEST IS A  
JOINT PUBLICATION OF:



#### Alberta Canola OFFICE

Ward Toma, Alberta Canola  
Producers Commission  
14560 – 116 Avenue NW  
Edmonton, AB T5M 3E9  
(780) 454-0844 Fax: (780) 451-6933  
Email: [ward@albertacanola.com](mailto:ward@albertacanola.com)



#### SaskCanola OFFICE

Tracy Broughton, SaskCanola  
212 – 111 Research Drive  
Saskatoon, SK S7N 3R2  
(306) 975-0262  
Email: [tbroughton@saskcanola.com](mailto:tbroughton@saskcanola.com)



#### MCGA OFFICE

Delaney Ross Burtneck,  
Manitoba Canola Growers Association  
400 – 167 Lombard Avenue  
Winnipeg, MB R3B 0T6  
(204) 982-2120 Fax: (204) 942-1841  
Email: [delaney@canolagrowers.com](mailto:delaney@canolagrowers.com)



#### Canola Council of Canada (Publisher)

400 – 167 Lombard Avenue  
Winnipeg, MB R3B 0T6  
(204) 982-2100 Fax: (204) 942-1841

#### EDITORIAL OFFICE

Jay Whetter, Editor  
Canola Council of Canada  
400 – 167 Lombard Avenue  
Winnipeg, MB R3B 0T6 | (807) 468-4006  
Email: [whetterj@canolacouncil.org](mailto:whetterj@canolacouncil.org)

**Production:** Suckerpunch Creative  
(204) 452-9446 | Email: [hello@suckerpunch.ca](mailto:hello@suckerpunch.ca)  
[www.suckerpunch.ca](http://www.suckerpunch.ca)

#### ADVERTISING SALES: WTR Media Sales Inc.

1024 – 17 Avenue SE, Calgary, AB T2G 1J8  
Robert Samletzki (403) 296-1346  
Toll free: 1-888-296-1987  
Email: [robert@wtrmedia.com](mailto:robert@wtrmedia.com)  
Linda Samletzki (403) 296-1349  
Toll free: 1-888-296-1987  
Email: [linda@wtrmedia.com](mailto:linda@wtrmedia.com)

#### SUBSCRIPTION INQUIRIES, ADDRESS CHANGES OR CANCELLATIONS

British Columbia . . . . . 250-262-6585  
Alberta . . . . . 780-454-0844  
Saskatchewan . . . . . 877-241-7044  
Manitoba . . . . . 204-982-2122  
Ontario . . . . . 519-986-3519  
All others . . . . . 204-982-2100  
Toll Free . . . . . 866-834-4378

To subscribe, visit [canoladigest.ca/subscribe/](http://canoladigest.ca/subscribe/)

#### CANADIAN POSTMASTER

Send address changes and undeliverable copies (covers only) to:  
400 – 167 Lombard Avenue  
Winnipeg, MB R3B 0T6

#### PRINTED IN CANADA

ISSN 0715-3651  
Postage paid in Winnipeg, MB  
Publication Mail Sales Agreement  
#40027283





# Postmethodically

**W**e must respond posthaste. Must we? The word posthaste, a synonym for urgently, has its origins in communications. It literally means to send a letter quickly. It stems from a time when letters were delivered by foot or horse, and those messages that were truly urgent and required an extra investment in fast runners, and truly urgent messages were labeled “posthaste”. Now all of our posts are haste. Email, Facebook and Twitter messages are instant. This baked-in urgency means the truly important messages are possibly buried and lost. Hasty posts also mean potential costly mistakes in grammar, tone and meaning.

I have read what I think are truly valuable Twitter conversations on agronomy, equipment and marketing. One farmer's question unravels a thread of useful sharing, follow-up questions, respectful challenges and a good collection of ideas and information. Social media can be excellent.

Elan Jury agrees. Jury is a therapist and began her career as a volunteer with the Manitoba Farm and Rural Stress Services. Jury spoke at Manitoba Canola Growers' Learn to Lead event in early 2020 and for her bio, when asked “What is your favourite piece of technology?”, she answered, “Really any form of social media. It's a great way to connect people and to get a message delivered.”

Her answer surprised me because I thought she, as a therapist, might take a dimmer view of social media. It deserved a follow up. Treena Hein interviewed Jury for a Canola Digest article called “Make social media powerful and positive,” which ran in the September 2020 edition. In the article, Jury says social media can help us feel connected and ease our stress. “We humans are wired for connection, and our relationships are an important buffer against stress and anxiety,” she says, but it needs to be used in healthy ways. “It's like our relationship to anything or anyone, there is potential for positive benefits and potential for abuse or addiction, which in turn can impact our relationships with others.”

Hasty posting can also cause unexpected impacts on our markets in an online world where everyone is (or could be) watching.

A year ago, when the African Swine Fever (ASF) in China was at its peak, the Canadian Food Inspection Agency (CFIA) issued a Facebook post saying that Canada

is checking and has not found ASF in pigs in Canada. A small organization amplified the post by sharing it with its followers, adding at the top: “ASF has been found in Canada.” Oops.

It was a simple repost by a relatively small organization, but it generated some unwanted attention. Susan Hilton, a media communications lead at CFIA, says the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) saw the post and started to question whether they should be checking Canadian pork.

CFIA contacted the small organization, noting: “Thank you so much for promoting our content, but Canada doesn't have ASF.” Hilton says the organization staff realized at that point that they had missed a word. What they meant to type was: “ASF has never been found in Canada.”

“They took down the post,” Hilton says, “but by that point market prices had already been affected.”

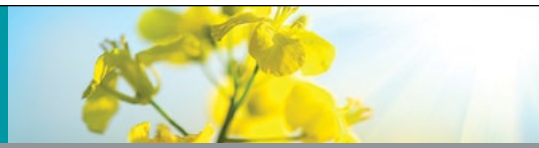
Hilton shares a few tips to prevent your social media posts and tweets from causing unexpected consequences:

- It is super important to re-read your words before posting.
- Understand the potential impact of your social media, not just on you and your career, but also on the industry and Canada brand.
- Stop impulse messaging, especially when it relates in any way to the business. If a post or tweet makes you mad, stop and think of how best to respond.

I'm not a grammar-police kind of person, mostly because I know all those expressions about pots and kettles and glass houses. I've made grammar errors in posts. So this column is a note-to-self that I'm sharing with everyone: social media can be good, but it doesn't have to be instant to be good. In fact, I recommend Hilton's advice to stop impulse messaging. Instead, with every post take a pause to think about grammar, tone and potential consequences for yourself, the community and even the country's market reputation. In these times, when every message is sent “posthaste”, perhaps this calls for a new word: Postmethodically. 🌸

**“Hasty posting can also cause unexpected impacts on our markets in an online world where everyone is (or could be) watching.”**

—Jay Whetter



## Evaluating energy efficiency of on-farm grain conditioning systems

Team Alberta (a working collaboration between Alberta Barley, Alberta Canola, Alberta Pulse Growers and the Alberta Wheat Commission), is working with 3D Energy Limited and the Prairie Agricultural Machinery Institute to assess the energy consumption of grain drying in Alberta, funded in part by the Canadian Agricultural Partnership.

As part of a three-year study, select in-bin supplemental drying systems and heated air-drying systems in Alberta were monitored during the 2019 harvest season to assess the typical energy consumption that farmers experienced. The long-term objective of the study is to fill the data gaps related to the efficiency of in-bin supplemental heating systems and heated air dryers that Alberta farmers use. This information will assist on-farm decision making and guide government programs and policies.

A total of 36 in-bin systems and five continuous grain dryers are being monitored for this study. However, only 32 in-bin systems and three continuous dryers were utilized in 2019. Of the 32 in-bin systems, 22 are direct-fired natural gas systems, seven are indirect-fired diesel or natural gas-fired (four are diesel and three are natural gas), and three are heated using solar air collectors. Energy consumption per tonne of moisture removed (specific energy) was the chosen energy performance metric. This metric allows for an easy comparison between

different types of systems regardless of initial grain moisture, final grain moisture and the volume of grain dried.

### OBSERVATIONS FROM THE 2019 GRAIN CONDITIONING STUDY INCLUDE:

- Variable efficiencies among in-bin supplemental heating systems.
- Indirect-fired in-bin supplemental heating systems had high efficiencies in year one.
- In-bin supplemental heating systems that ran higher supply temperatures than suggested displayed higher efficiencies.
- Some heated air-drying systems had higher efficiencies than specified.

### YEARS TWO AND THREE WILL FOCUS ON INCREASING THE DATA IN ORDER TO BETTER UNDERSTAND THE VARIABLES AND IMPACT ON EFFICIENCIES. NEXT STEPS INCLUDE:

- Additional measurements of in-bin systems to better understand variables impacting efficiencies.
- Testing differences between indirect and direct-fired systems to understand the impact on efficiencies for in-bin supplemental heating systems.

- Understanding the impact on grain quality with higher in-bin supply air temperatures.

### REGARDLESS OF THE TYPE OF IN-BIN SUPPLEMENTAL HEATING EQUIPMENT AND OPERATING METHOD, PRODUCERS SHOULD CONSIDER SOME OF THESE PRACTICES FOR THEIR SETUP:

- **Monitoring:** Understanding the condition of the grain moisture content and temperature will help guide management decisions for fan and heater control strategies.
- **Ventilation:** Ensure adequate headspace ventilation is available to allow the warm, moist air to be escape. A “rule of thumb” for the minimum required area is one square foot of vent space for every 1000 cfm of air flow.
- **Cooling:** Grain should be cooled to less than 15°C after drying for safe long-term storage. Cooling will also remove some moisture, so drying may be complete when moisture is within 0.5 per cent of target.
- **Turning:** Consider turning the bottom grain once the average bin moisture is dry to even out the moisture content in the bin.

For more information on the grain conditioning project or for the full report on the year one results, contact Shannon Sereda at [ssereda@albertawheatbarley.com](mailto:ssereda@albertawheatbarley.com)





# Alberta Canola: connecting with growers online

COVID-19 has created too much uncertainty and restrictions for Alberta Canola to host our traditional fall run of 12 Powering Your Profits in-person events across Alberta this fall.

The FarmTech 2021 Conference has also been cancelled, and that means a change for Alberta Canola's 31st Annual General Meeting in January.

## **GROWER ENGAGEMENT MEETING** **December 1, 2020 | 9:30-10:30am**

Join us online for an update on Alberta Canola's activities, audited financial statements, and budget for the coming year.

This single online event is designed to be an easy way for growers to get the information they need leading up to Alberta Canola's 31st Annual General Meeting.

We have chosen to keep the online event focused on our activities in a concise format. For more details on the Grower Engagement Meeting please visit [albertacanola.com/GEM](https://albertacanola.com/GEM) where you can find links to our annual report video and publication, and to register for the meeting.

## **ALBERTA CANOLA 31<sup>ST</sup>** **ANNUAL GENERAL MEETING** **January 26, 2021 | 9:30-10:30am**

The 2021 Annual General Meeting will be held online. This marks the first time that canola growers in Alberta will be able to participate in, and vote at, the Annual General Meeting without needing to be physically present.

We are grateful to Alberta's Marketing Council that oversees the operations of commissions in Alberta for allowing this online opportunity. Regardless of where you live in Alberta, we are looking forward to bringing the Annual General Meeting to your farm.

### **AGM AGENDA INCLUDES:**

- a review of the activities, audited financial statements, and budget for Alberta Canola
- voting on director elections (if there are vacancies at the time of the AGM) voting on resolutions - Resolutions to be presented at Alberta Canola's AGM must be received no less than 10 business days prior to the AGM (by January 12, 2021) to allow for background to be collected and resolutions to be prepared for presentation at the meeting.

### **REGISTERING TO VOTE ONLINE**

Farmers in Alberta that have sold canola and paid a service charge on canola to Alberta Canola since August 1, 2018 are eligible canola growers and can register to vote.

Eligible canola growers can be individuals or represent a corporation, partnership, or organization.

In order to ensure the integrity of the voting procedure, growers will need to register to vote. This will allow Alberta Canola to verify eligible voters, and therefore enable our third-party voting provider to provide growers with a unique access code to allow them to vote.

### **VOTER REGISTRATION CLOSES** **January 12, 2021**

For more details and to register, please visit [albertacanola.com/vote](https://albertacanola.com/vote)





## Further Understanding of Soil Health Through Research

Healthy soil is the foundation for profitable and sustainable agricultural production. The numerous benefits healthy soil provides includes enhanced fertility, increased productivity, adaptability, resiliency, and profitability. Soil processes that support plant growth and regulate environmental quality are affected by management practices. It is possible to design a crop and soil management system that improves and maintains soil health over time.

Given the fundamental importance of healthy soil, SaskCanola is co-funding three research projects designed to improve our understanding of soil health and its attributes impacted by management practices. These projects demonstrate that modern farming practices are annually enhancing the carbon sink capacity of Prairie soils while increasing crop yields on a per acre basis.

1. Developing a Soil Health Assessment Protocol for Saskatchewan Producers led by Dr. Kate Congreves at the University of Saskatchewan

Maintaining and building soil health is an essential component of long-term sustainable agriculture. A healthy soil will produce higher crop yields under favourable weather conditions and have a strong capacity to withstand extreme weather events and reduce nutrient losses. Research must focus on methods of maintaining or improving soil health and providing appropriate protocols or tools from which soil health status can be interpreted. Even though soil health attributes have been identified, and various soil health testing protocols

have been developed elsewhere, there is no standardized science-based soil health test available to producers in Saskatchewan and the Prairie provinces. This research is designed to develop a soil health testing protocol tailored to Saskatchewan's semi-arid climate and major soil zones.

2. Monitoring Soil Organic Carbon on Commercial Direct-Seeded Fields Across Saskatchewan led by Dr. Jeff Schoenau at the University of Saskatchewan

Soil organic carbon (SOC) is strongly related to many aspects of soil quality including nutrient cycling, soil structure, air and water movement, and microbial quantity and diversity. It can also be used as a measure of removal of the greenhouse gas, carbon dioxide, from the atmosphere. Since the late 1800s, the conversion of native prairies to cultivated cropland has led to considerable SOC losses. However, with the introduction of conservation agriculture management practices (CAMP), such as reduced fallow, minimal disturbance, direct seeding, and diversified rotations in the western Prairies over the past 20 years, the SOC levels in once conventionally tilled degraded agricultural soils is increasing. The adoption of direct seeding practice is shown as an effective way to improve SOC in semi-arid regions by reducing soil erosion, conserving soil water, and improving nutrient cycling resulting in higher soil productivity and improved crop yields. Although past research has provided valuable information regarding the short-term efficacy of CAMP to increase SOC levels, until this project, limited in-depth work has been done to examine the long-term effects of CAMP on the stability of

sequestered SOC in Prairie soils. This project is part of the Prairie Soil Carbon Balance project initiated by the Saskatchewan Soil Conservation Association.

3. Soil Health and Nutrient Uptake Among Diverse Canola Lines – Added Value to Crop Phenotyping led by Dr. Melissa Arcand at the University of Saskatchewan

Different canola genotypes interact differently with soil health factors such as dissolved organic carbon, soil microbiome diversity and soil pH. However, the interaction between crop genotype and soil properties that affect crop nutrient uptake and productivity is not well known. The collaborative effort between this project and other current canola phenotyping projects will allow researchers to determine how different soil microbes under different soil health conditions can improve crop nutrient uptake efficiencies and yield.

## Virtual Canola Week

This year the Canola Discovery Forum (CDF) and Canola Industry Meeting will join up for Canola Week – held virtually on December 1-3, 2020.

This series of virtual sessions will focus on updating all links in the canola value chain on the state of the industry, trade, end-use products and markets, research and innovation, cutting edge technologies, as well as agronomic issues and the 2020 crop. Canola fertility is the focus for the CDF sessions this year. It will also recognize Keith Downey's legacy, as this year will be the milestone 50th anniversary of the Canola Industry Meeting.

Visit [saskcanola.com](https://saskcanola.com) to register and view agenda.





## Cast Your Vote Now for SaskCanola's Board Election



Eight nominations were received to fill four director positions at the Commission's board table.

### THE CANDIDATES ARE:

- David Altrogge - St. Benedict, SK
- Greg Brkich - Bladworth, SK
- Jonathan Fehr - Herschel, SK
- Keith Fournier - Maidstone, SK
- Evan Michel - St. Gregor, SK
- Codie Nagy - Ogema, SK
- Luke Perkins - Star City, SK
- Dean Roberts - Coleville, SK

Biographies for each candidate are available at [saskcanola.com](https://saskcanola.com)

All registered producers of Saskatchewan-grown canola are eligible to vote in SaskCanola's board election and should have received a letter in early November that included a unique voter number. Visit [canolavote.com](https://canolavote.com) to cast your vote before November 30, 2020. Alternatively, registered producers can still vote by paper ballot upon request.

The results of the election will be announced in December.



**SaskCanola** is governed by farmers so make sure your voice is heard and vote!

## Grains Act & Grain Commission

The Canadian Grain Commission (CGC) operates under the mandate created by the Grain Act. The last time there were any significant changes to the Grain Act was in the 1970s, a time when there was a fully operational Canadian Wheat Board. Clearly, a lot has changed since then, and pressure has been mounting for an overhaul of the Grains Act and an update of the CGC.

In 2018-19 Agriculture and Agri-Food Canada initiated a review of the Canada Grain Act (CGA). The budget of 2019 confirmed the federal government's desire to review the CGA, but the review was put on hold with the onset of COVID-19. The accumulated surplus is not a part of this review.

There is though, still a need for reform. SaskCanola works with other organizations, including the Canadian Canola Growers Association and the Canada Grains Council, to promote meaningful change. There are three main points of

focus for SaskCanola when it comes to the Canadian Grain Commission.

1. For CGC's governance to be more responsive to Canadian farmers who are the most affected by CGC actions.
2. For CGC's producer security pillar to be robust and responsive to farmers' needs. A farmer needs to be assured that when he delivers grain, he will be compensated for it.
3. To ensure the CGC's programs and services reflect modern times. For example, outward inspection needs to be done in the most cost-efficient and effective manner possible. As countries look for ways to get the quality they want, at the lowest price, it is critical that Canada's reputation as a dependable source of grain meets the expressed demands of buyers worldwide.

Saskatchewan farmers continue to do their part to feed the world. SaskCanola continues to work on their behalf to guarantee that the food produced by those farmers efficiently makes its way to people who need it the most.

## Virtual Annual General Meeting



Join SaskCanola for their virtual Annual General Meeting on **Tuesday, January 12, 2021 at 9:30am.**

The AGM agenda will include a review of SaskCanola's investment priorities, audited financial statements, and budget.

Visit [saskcanola.com](https://saskcanola.com) for details on how to register, vote, and submit resolutions.



## Advocating for Farmers

Agriculture doesn't stop, even for a global pandemic. And neither do the Manitoba Canola Growers in supporting farmers with industry issues. How to run a farm business through COVID-19 was among many issues MCGA has been active on this year, and we are excited to share a new page on the [canolagrowers.com](https://canolagrowers.com) site that will share more with you about what we do behind the scenes to support our members.

This year alone, MCGA has:

- Participated in multiple consultations and lobbying campaigns with the Manitoba government and other groups on business risk management (BRM) programming, water regulations, Manitoba's Climate and Green Plan, and other general policy consultations;
- Continued to work with Canola Council of Canada (CCC) and Canadian Canola Growers Association (CCGA) regarding trade with China. The situation has improved, with more than two million tonnes exported in 2019-20, but there is still work to be done;
- Pushed forward on biofuels, seeking follow through on Manitoba government's commitment to increase the biodiesel mandate to five per cent, and joining partners in addressing more recent concerns with the proposed federal Clean Fuels Standard document.

Visit [canolagrowers.com](https://canolagrowers.com) to find more details on how MCGA continues to represent your farm voice on key issues.



## Virtual Annual General Meeting

SAVE THE DATE

FEBRUARY 11, 2021 | 10:00 AM

*More details to come*



## STAY CONNECTED.

Sign up for our Canola Crush Newsletter today! Visit [www.CanolaGrowers.com](http://www.CanolaGrowers.com)



# Great Tastes of Manitoba Celebrates 31<sup>st</sup> Season



This year Manitoba's favourite cooking series – Great Tastes of Manitoba (GTOM) – is celebrating its 31st anniversary season. Thanks to the support of their sponsors, the show proudly returned to CTV on Saturday evenings at 6:30 starting in September.

GTOM is Manitoba's longest running, locally produced television series that showcases nutritious, affordable, delicious foods grown by Manitoba's farmers. For each episode a local expert joins host Dez Daniels in the kitchen to cook and share stories about how food is produced in Manitoba and tips for choosing locally grown ingredients.

Through Canola Eat Well, Manitoba Canola Growers Association (MCGA) proudly supports the GTOM production. "The value to MCGA is the collaboration between the provincial commodity groups to reach a consumer audience," says Ellen Pruden, Canola Eat Well Director. "It's important to grow and maintain public trust and showcase locally grown ingredients like canola oil and the farmers who produce it."

This style of programming, which reaches more Manitobans each week than any program on the Food Network channel, is a valuable investment because each commodity organization involved collectively supports the whole show. In season 29 the show reached an average of 27,800 viewers and its most watched episode reached 32,900 Manitobans (in fall 2018).

GTOM is the only collaboration of its kind in Canada. In celebration of the show's 31st season, they have produced a series of on-farm videos that will be included in each episode. These mini-documentaries feature Manitoba farm families and share their stories with a consumer audience. GTOM will also be available on Amazon Prime this season.

You can find full episodes and bonus content on the GTOM website at [greattastesmb.ca](http://greattastesmb.ca). You can also find @GreatTastesMB on all the top social media channels: Facebook, Twitter, Instagram, YouTube and Pinterest.

GTOM is Manitoba's most watched food series proudly representing #MBFarms and #MBFoods since 1991.

## Dinners Made Delicious

Air dates: September 26, 2020 & March 6, 2021



**ROASTED TOMATO BISQUE WITH GRILLED CHEESE SKEWERS**



**GREEK POTATOES WITH LEMON YOGURT SAUCE**



**GINGER SHRIMP WITH GAI LAN**



**FARM TO FOOD VIDEO WITH FARMER BROOKS WHITE**

## Canola: Cakes & Cookies

Air dates: November 28, 2020 & March 27, 2021



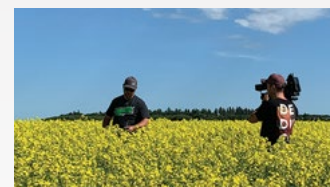
**JUDY'S CHOCOLATE CHIP COOKIES**



**CINNAMON SWIRL ROLLS**



**RHUBARB RIBBON COFFEE CAKE**



**FARM TO FOOD VIDEO WITH FARMER LANDON FRIESEN**

PRESENTED BY:







The Port of Vancouver is the major gateway for canola exports to Asia. For three major grain terminals on Vancouver Harbour's north shore, including the brand new one from G3, all of their grain passes over the single-track Second Narrows Bridge. That bridge is a symbol for a complicated rail infrastructure pinch point and the master plan to fix it.

# STORY ABOUT A BRIDGE

BY JAY WHETTER

One single-track lift bridge, hoisted any time a sailboat pleasure-craft comes along, is all that connects the Cargill, Richardson and brand new G3 grain terminals on the north shore of Vancouver Harbour to all the oilseeds, cereals and pulses grown in Western Canada.

This bridge, the rather nondescript Second Narrows Bridge, almost hidden under the shadow of Highway No. 1's massive and majestically-named Iron Workers Memorial Bridge, is an infamous touchstone for any discussion of Canadian rail infrastructure shortcomings. A bottleneck among bottlenecks.

Of course trade still gets done, and lots of it. Canola stakeholders, including the author of this article, got to see the action first hand in March. As an add-on to the Canadian Crops Convention in Vancouver, the Port of Vancouver provided conference attendees with a boat tour of the harbour. The tour included a spin beyond the Lions Gate Bridge, the iconic suspension bridge officially known as First Narrows Bridge, to see all the freighters parked and waiting in their assigned mooring spots. Gregory Sekulic, Canola Council

of Canada agronomy specialist, was on the tour and says the flotilla reminded him of the Battle of Jutland.

Between the two Narrows Bridges are north and south shores chock-a-block with ship loading and unloading facilities for pretty much everything you can imagine. On the north shore, the focus of this article, are the three major grain terminals mentioned in paragraph one as well as Neptune Bulk Terminals for coal and potash, Fibreco for wood products and many others. These many millions of tonnes of bulk commodities ready for export on the north shore come in by rail over the Second Narrows Bridge. That is why the one-track lift bridge gets so much attention.

But this is where the story gets tricky. The story about a bridge is about so much more than just a bridge. The green-painted 1960s era Second Narrows Bridge is just one piece of an ambitious infrastructure project to expand rail capacity and turnaround time for the busy (and getting busier) sprawling Port of Vancouver complex.

Doug Mills, senior account representative with the Port of Vancouver, says expanding the bridge's capacity won't help much unless a bunch of other things are

*The overhead view shows two bridges in the bottom left, the Second Narrows Bridge on the right and the taller and larger Iron Workers Memorial Bridge on the left.*

**"If we give you the best bridge in the world, it won't solve the problem."**

—Doug Mills

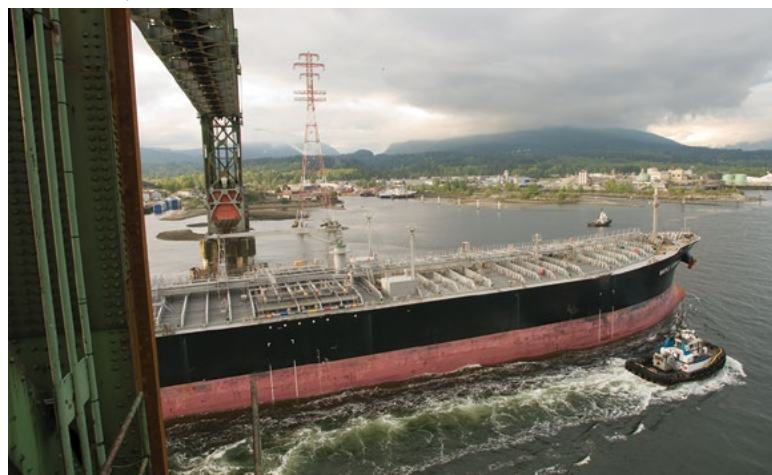




Photo: Doug Mills



Photos: CN Railway



*A CN train crosses the Second Narrows Bridge in the top photo. In the bottom photo, the bridge is lifted to let a ship pass.*

expanded at the same time. “If we give you the best bridge in the world, it won’t solve the problem,” he says.

It makes one think of Justus von Liebig’s Law of the Minimum, which refers to crops but fits here, too: growth is dictated by availability of the most limiting resource. It doesn’t make any sense to apply more nitrogen if what the crop really needs is water or heat or sulphur or whatever. The way Mills describes the situation, the Second Narrows Bridge is just one stave in a barrel of bottlenecks. Fixing the bridge without addressing the other limiting resources is like putting a four-lane bridge on a gravel country road.

That is why the Vancouver Fraser Port Authority, which is the organization responsible for maintaining the Port of Vancouver on behalf of the federal government, has a \$17 billion master plan called Gateway 2030 that includes, as just one of many components, the Burnaby Rail Corridor Improvements Project to address these bottlenecks. This five-kilometre corridor has three major pinch points – a level crossing at Douglas Road, the Thornton Tunnel and Second Narrows Bridge.

Burlington Northern owns the section of track at Douglas Road and CN owns the tunnel and the bridge. CP has access to the north shore terminals through Canadian Transportation Agency inter-switching.

(There’s a lot of sharing of track in B.C.’s lower mainland, a rail network that services seven railways: CN, CP, Burlington Northern, a short-rail called Southern Railway of B.C. and passenger trains Via, Amtrak and Rocky Mountaineer.) Fixing the corridor is further complicated by the challenging landscape, including water, hills and a big, busy metropolitan area, and various governments often pressured by their electorate to put local concerns ahead of national interests.

“Vancouver is not a simple terminal,” says Mark Hemmes, president of Quorum Corporation, the government-appointed monitor of Western Canada’s grain handling system.

### THREE PARTS OF THE BURNABY RAIL CORRIDOR IMPROVEMENTS PROJECT

**Part 1. Douglas Road level crossing.** This is where the north shore corridor bottleneck begins. Trains meet a level crossing at Douglas Road in Burnaby, about five km from the Second Narrows Bridge. Because trains are too long to fit between Douglas Road and the opening of the Thornton Tunnel, the trains have to wait behind the level crossing. Then, once the tunnel is accessible, these 120-car filled loaded trains start from a standing stop and crawl through the tunnel to the bridge, blocking Douglas Road traffic for many minutes



at a time and multiple times a day. Joint funding for a \$145 million overpass was announced in January 2020, but the project won't have a green light until the City of Burnaby completes an environmental assessment. The timeline to complete the overpass is 2024.

Meanwhile, CN also has plans to add a third length of track in this Douglas Road area to hold another train leading into the tunnel and bridge so, when access is available, trains can move to the north shore as quickly as possible.

"If CN can stage trains right up close to the bridge instead of staging them much further back, CN can move them over to the north shore that much more quickly when the bridge is available for transit," says David Przednowek, CN's director of sales and marketing.

**Part 2. Thornton Tunnel.** This 3.2-km single-track tunnel takes trains under most of Burnaby. It was constructed in the 1960s when the Port of Vancouver was rather sleepy compared to today, yet the single track is not the biggest issue with the tunnel. Ventilation is. After one train fills the tunnel with exhaust, the current ventilation system requires 20 minutes to clear the air for the next crew coming through.

Przednowek says ventilation improvements are planned. "These include the addition of several jet fans within the tunnel along with a control system to manage airflow," he says. The goal is get to the tunnel cleared in five minutes.

As part of its \$170 million contribution to Vancouver-area infrastructure, CN will contribute \$75 million to these Burnaby corridor projects.

**Part 3. Second Narrows Bridge.** As with the tunnel, the single track is not the big issue. Once the Douglas Road level crossing and the Thornton Tunnel ventilation issues are resolved, the bridge bottleneck can be brought in line rather simply, by comparison, with a local modification to the laws of the sea.

"International law says that if a bridge crosses navigable water, marine traffic has the right of way," Hemmes says. This includes the tankers that pick up bulk canola oil from Pacific Coast Terminals and other liquid facilities at Port Moody, and it includes personal sailboats. "The bridge takes 20 to 25 minutes to lift, let the boat pass, and then lower," Hemmes says.

Mills says the corridor plan includes a request to change these protocols. "Does it still make sense that marine traffic automatically has priority access? It may not be practical any more," he says. "We'd like to see the Marine Act changed to rationalize that approach."

The bridge is open and unavailable to train traffic for over six hours per day, Przednowek says, "and as vessel traffic increases over time, so too will the period of time that the bridge is not available to move rail traffic over."

While CN does receive an advanced vessel line-up each day, with two-hour advance notice of lift request, a set



*Above: The new G3 grain terminal on the north shore of Vancouver Harbour will increase grain traffic demand for the Second Narrows Bridge and the Burnaby Rail Corridor.*

lift schedule for all traffic, including personal water craft, would mean trains can enter the tunnel knowing that they'll be able to cross the bridge without delay.

"We are actively engaged in discussions with Transport Canada around what potential amendments to the Marine Act would look like," Mills says.

## WHERE WE ARE NOW?

The Port of Vancouver has already made a lot of progress to improve rail access to north and south shore terminals around Vancouver Harbour. Mills started in the marine industry 30 years ago. "At that time, the port was seen as an unlimited resource, but then we came into a wave of off-shore trading, particularly with Asia, and it came as a splash of cold water for everybody," he says. "We really weren't ready."

Issues with the port became painfully obvious around 20 years ago when big winds in Vancouver and snow on the rail lines brought freight movement to a halt. "Ramifications were felt across the country. We couldn't get goods to our customers," Mills says. "Containers were sitting on the dock for four months."

"It was a real black eye for the port," he says. "We couldn't allow that to happen again."

So they brought together industry stakeholders, railway experts and academics to map the network, model the bottlenecks and draw up a plan to provide "supply-chain fluidity," Mills says. These meetings birthed the Asia-Pacific Gateway Corridor Initiative that outlined essential investments – which is the predecessor to the Gateway 2030 plan – with a timeline and sequence for getting them done. For its part, the federal government's National Trade Corridors Fund has announced a \$2 billion contribution.

**"As vessel traffic increases over time, so too will the period of time that the bridge is not available to move rail traffic over."**

–David Przednowek

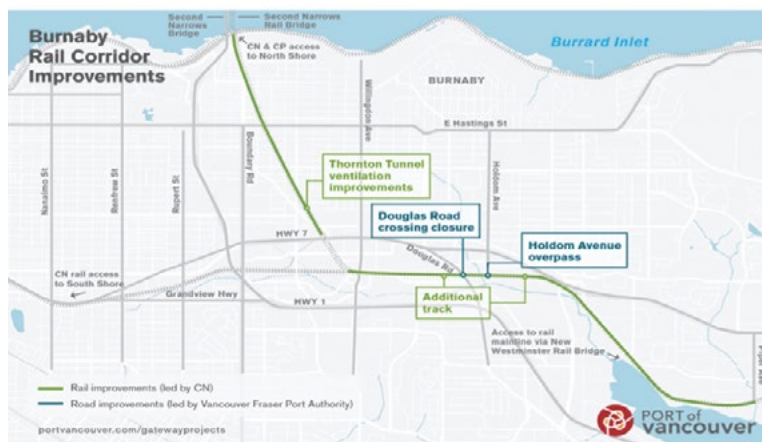




Photo: GregorySekulic



Photo: GregorySekulic



*Ships at mooring sites just past the Lions Gate Bridge are waiting to move into the Port of Vancouver. Improved efficiency at the Port could reduce waiting times for these ships. Gregory Sekulic, who took the photo, says this scene reminded him of the Battle of Jutland.*

Photo: Port of Vancouver

As part of the Gateway 2030 plan, the port has already achieved a much-needed separation of street traffic and rail traffic along north and south shores of Vancouver Harbour. These last-mile improvements have made it a lot easier to unload trains and decrease turn-around time right at the terminals, but bulk commodity exporters on the north shore are depending on the improvements outlined in this article.

“Companies spent one billion dollars on north shore exporting capacity and these companies expect that these rail limitations will be fixed,” Hemmes says.

When asked what the Port of Vancouver needs from its stakeholders – like the Canola Council of Canada and Canadian Canola Growers Association – to help move the Gateway projects along, Mills says, “We need them to let their federal representatives know these projects are important to ensure access to critical foreign markets through this gateway.”

Steve Pratte, policy development manager and transportation specialist with the Canadian Canola Growers Association, says, “We bring it up when and where possible with the railways, in front of government and in formal submissions. The crop logistics working group has and is looking at supply chain resiliency and this is a major component of it.”

This story about a bridge demonstrates the importance of infrastructure investment to Canada’s trade, especially of grain to Asia, and how one seemingly minor bridge can mean so much to Canada’s farm economy.

“The point I’d like to make to farmers,” says Doug Mills, “is that we’re on it.” 🌻

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

*Above: This map from the Port of Vancouver shows locations for all parts of the Burnaby Rail Corridor Improvements Project.*

“The crop logistics working group has and is looking at supply chain resiliency and this is a major component of it.”

—Steve Pratte

## Port of Vancouver – notable statistics

The Port of Vancouver is Canada’s largest port by a wide margin. Based on tonnage handled, it is the size of Canada’s next five ports combined. Bulk commodities account for about 70 per cent of the tonnage. The rest comes and goes in containers, “break bulk” (stuff that doesn’t flow – like logs and lumber) and automobiles.

Top five bulk commodities handled through the whole port (not just the north shore) in 2019: Coal, 36.9 million tonnes; Grain, 23.5 million tonnes; Chemicals, base metals and minerals, 13.8 million tonnes, Fertilizers, 11.8 million tonnes; Forest products, 5.9 million tonnes.

The new 180,000-tonne G3 grain terminal on the north shore can receive up to three 150-car trains on its loop track. With the loop track, trains quickly unload while in motion and exit without detaching from their locomotives. Its three large ship loaders move grain on board at up to 6,500 tonnes per hour, setting a new industry standard.

# CANOLA MARKET **SNAPSHOT**

**T**he European Union entered a new status level for Canadian canola purchases in 2019-20, and it means we can start talking about the “Big 5” instead of the “Big 4”. The EU bought 2.1 million tonnes of Canadian canola seed in 2019-20 worth over \$1 billion, moving it ahead of Mexico and just behind Japan. (See Figure 1.) Growth in Canadian canola seed sales to Europe is driven by

special export programs that certify Canadian canola growers as meeting EU standards for biofuels feedstock.

The U.S. remains the top market for Canadian canola products, especially oil and meal. Though the value of sales to China dropped to \$2.4 billion in 2019-20, driven down by continued suspension of seed export licenses for Viterro and Richardson, China remains a very important customer.

All yield for 2019-20, according to Statistics Canada, was 41.1 bu./ac. – which is on par with the five-year average. (See Figure 3.) A big question for Canada’s canola industry is why average yields have been basically flat for five years. A Canola Council of Canada grower survey this winter, the first comprehensive survey of canola production practices since 2011-12, should help answer this question.

Figure 1: Export value of canola (all products) by country

CROP YEAR (AUGUST TO JULY)					
COUNTRY	2019-20	2018-19	2017-18	2016-17	2015-16
(MILLIONS OF CANADIAN DOLLARS)					
UNITED STATES	\$3,614	\$3,442	\$3,645	\$3,772	\$3,408
CHINA	\$2,444	\$3,218	\$3,790	\$3,369	\$2,746
JAPAN	\$1,195	\$1,181	\$1,480	\$1,234	\$1,213
EUROPEAN UNION	\$1,079	\$319	\$205	\$446	\$281
MEXICO	\$730	\$774	\$888	\$928	\$803
OTHER	\$1,506	\$1,129	\$1,112	\$1,307	\$1,338
TOTAL	\$10,568	\$10,063	\$11,120	\$11,056	\$9,789

Figure 2: Total export value of Canadian canola seed, oil and meal

CROP YEAR (AUGUST TO JULY)					
	2019-20	2018-19	2017-18	2016-17	2015-16
PRODUCT	(MILLIONS OF CANADIAN DOLLARS)				
SEED	\$5,192.6	\$5,001.3	\$6,079.7	\$6,060.6	\$5,516.2
OIL	\$3,621.7	\$3,395.6	\$3,416.6	\$3,422.7	\$2,855.4
MEAL	\$1,754.1	\$1,665.9	\$1,623.5	\$1,573.2	\$1,417.5
TOTAL	\$10,568.4	\$10,062.8	\$11,119.8	\$11,056.5	\$9,789.1

## GLOBAL VEGETABLE OIL PRODUCTION KEEPS RISING

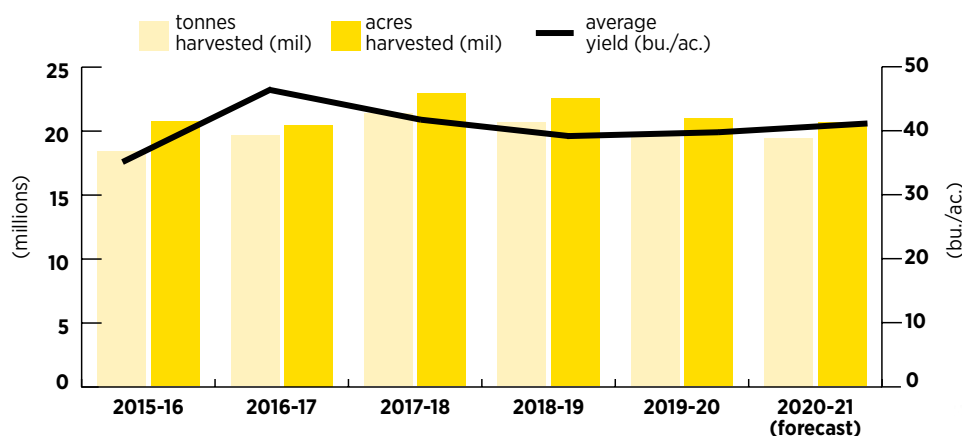
The USDA, in its September 2020 “Oilseeds: World Market and Trade” report, projects global oilseed production for 2020-21 at 609 million tonnes. This marks a return to the usual growth trend after a blip last year where global production was only 577 million tonnes, down from 601 the year before. Soybeans are by far the biggest oilseed crop, accounting for 370 million of the 609 million. Canola/rapeseed is second at 68 million, but that is the lowest global canola/rapeseed output over the past five years. Palm oil, not included in the oilseed numbers, is still the biggest volume vegetable oil in the world – and its annual production keeps increasing. The September USDA forecast for 2020-21 is 75 million tonnes of palm oil compared to 60 million of soybean oil and 27 million of canola/rapeseed oil. Over the past five years, canola/rapeseed oil production is basically flat while soybean and palm

oil production are rising. Soybean and canola meal production follow the same trend lines.

## NOTABLE SECOND WAVE MARKETS

The value of sales to markets outside of the Big 4 crossed the \$1 billion mark in 2015-16 and blew past the \$2 billion mark in 2019-20, reaching \$2.6 billion. The EU accounted for a large percentage of this, with over a billion dollars in Canadian canola seed purchases. Other notable seed markets are United Arab Emirates, which increased its purchases to around \$500 million, Pakistan, which has become a reliable market for \$400 to \$500 million each year, and Bangladesh at \$160 million. For bulk shipments of Canadian canola oil, South Korea has become a reliable market for over \$100 million each year and Chile is steadily rising. Chile was actually our third biggest market for canola oil in 2019-20, buying \$141 million worth. While Chile is still well behind the U.S. and China, sales to Chile symbolize good growth in second wave markets all around the world. 🌻

Figure 3. Graphic representation of 5-year production, acres and yield.



Citation: Statistics Canada. Table 32-10-0359-01 Estimated areas, yield, production, average farm price and total farm value of principal field crops, in metric and imperial units DOI: <https://doi.org/10.25318/3210035901-eng>





# 30 ACRES AN HOUR<sup>\*</sup>

## 20% LESS FUEL IN WHEAT<sup>\*\*</sup>

Introducing the **X Series Combines**. These new combines deliver more harvesting capacity, with no sacrifice in grain quality — all while using 20% less fuel. The X9 1100 can harvest up to 320 acres a day in wheat\*. And to match the increased crop harvesting capacity of these new combines, we also redesigned our headers.

To learn more about whether an X9 combine is the right one for you, contact your local dealer or visit [JohnDeere.com/X9Combine](http://JohnDeere.com/X9Combine).

**That's Harvesting to the Power of X.**



**JOHN DEERE**

[JohnDeere.com](http://JohnDeere.com)

\* Internal testing of X9 1100 Combine. \*\* Internal comparison between X9 1100 and S790 Combines, based on field conditions, per unit harvested. Pre-production model shown. Specifications and design subject to change.

Canada's Trade Commissioner Service helps Canadian exporters to find and maintain business relationships, boosting canola trade in Pakistan, China and many other markets.

# Trade Commissioners provide boots on the ground

**C**anada's canola industry makes good use of Canada's Trade Commissioner Service (TSC). The TCS has over 1,000 lower case trade commissioners in 160 locations worldwide, and they do a lot of the groundwork required to make new connections and maintain existing business relationships.

TCS has helped to make Pakistan a reliable market for Canadian canola seed. Processors in Pakistan have bought 700,000 to one million tonnes per year over the past five years and, as senior trade commissioner Margaux McDonald describes in the sidebar, this market has a lot of growth potential.

"Trade commissioners in Pakistan know the people who influence market access rules and have long-standing local networks in the oilseed processing community," says Brian Innes, vice president of public affairs for the Canola Council of Canada (CCC). "When we aren't there, trade commissioners and embassy staff are our boots on the ground to help maintain stable access and strong relations with processors purchasing our canola."

Innes and the CCC visited Pakistan for the first time in many years in late 2019. He presented at the Pakistan Oilseeds Summit. He also visited key stakeholders in government and academia who influence regulations affecting market access – such as those related to biotechnology approvals and import requirements around plant disease. Innes also had the chance to visit and meet with several purchasers of Canadian canola. Trade commissioners stationed at the embassy in Islamabad help to set up the itinerary.

By visiting Pakistan's importers, Innes got to connect with their realities and talk about what they need to consistently get the most value from Canadian canola. "They like our canola and are an important customer," he says. "Seeing them in person gave us a much better understanding of what we can do to support our crop."

When the CCC isn't present, which is most of the time, the TCS continues these conversations that are essential to trade relationships.

This TCS presence is important in all major canola markets, including China. Brittany Dyck, senior manager of canola utilization for the CCC, leans on the TCS office in China, especially as she and canola exporters are working



Exporters who want to make their own connections with the TCS can reach out to Canadian offices in Vancouver, Calgary, Saskatoon, Winnipeg, Toronto, Montreal and Halifax.

Find contact information at **trade commissioner.gc.ca**.

**"When we aren't there, trade commissioners and embassy staff are our boots on the ground to help maintain stable access and strong relations with processors purchasing our canola."**

—Brian Innes



*Brian Innes, vice president of public affairs at the CCC (left), walks with Tariq Ullah Sufi (centre), chief executive of Hamza Foods, a group of companies involved in oilseed processing, oil refining, food processing, fast food restaurants and related businesses. This was taken at the Sufi Group of Companies processing plant and refinery near Lahore, Pakistan.*

to develop a meal market among China's dairy sector and maintain canola meal as a key ingredient in China's aquaculture industry.

"The most recent example," Dyck says, "occurred in early September when the trade commissioner set up and participated in a virtual meeting with aquaculture feed giant, Tongwei, which is one of Canada's most valued and long time customers of canola meal." 🌻



Margaux McDonald, Canada's senior trade commissioner in Pakistan, answers a few questions about canola market expansion in Pakistan.

## Q&A WITH MARGAUX MCDONALD

### **What should the canola industry know about the demand opportunity for canola in Pakistan based on your experience there?**

**MCDONALD:** Pakistan is one of Canada's top six exports markets for canola – and the good news is that it is likely to grow even more! Canola seed in Pakistan is prized for its high oil content, with recent campaigns, led by the Government of Pakistan, supporting canola oil use across its 200 million population in a push for consumers to switch to healthier edible oils. Moreover, we believe there is real opportunity for demand growth of canola seed in Pakistan – particularly for animal feed, including poultry and dairy. We suspect that the full benefits of canola meal on animal growth and productivity is not yet fully known across the industry in Pakistan, so we have our work cut out for us to expand the thinking about canola and to grow the market here for the benefit of both Canada and Pakistan.

### **What is unique about the Pakistan business community that is important for canola sales?**

**MCDONALD:** Pakistani canola seed importers prioritize long-term, trustworthy relationships. Business partners become like family and often share in meals, exchange gifts and commit to doing business over the long-haul. Fortunately, the small community of oilseed importers in Pakistan love Canada – which makes sense – after all, their livelihood depends on our product! Visits to Pakistan, like the one CCC's, Brian Innes took in December 2019 to meet with partners and build stronger bonds, go a long way in fortifying the commitment of a buyer to one particular product from one particular country. That's also where Canada's High Commission in Pakistan and our TCS team can play an important role. For example, Ali Khan, our canola expert, has been a Canadian trade commissioner in Pakistan for over 25 years. Every day he works to strengthen Canada's network of Pakistani oilseed importers, helping to grow market share for Canadian canola seed. Also, our high commissioner, H.E. Wendy Gilmour,

has taken a particular interest in promoting canola and regularly meets with influential members of the business community in Pakistan, highlighting the virtues of this valuable Canadian commodity. It's true that Pakistan is a price-sensitive market, but it's also a relationship-based market, and I encourage canola seed exporters to work with the CCC and with our TCS team in Pakistan to help strengthen canola's favourability in this growing market.

benefits of Canadian canola. During the facility tour, Brian and I found ourselves actually holding Canadian canola seed as it was being prepared for crushing. It was surreal to imagine the journey that this seed had taken – from Canadian farms, across the ocean on a cargo ship, to the Port of Karachi, and then eventually to the Punjab province of Pakistan where we were standing. It was an incredibly gratifying moment to realize that



### **What was the most memorable interaction you had while working on canola in the lead-up to the Pakistan Oilseeds Summit?**

**MCDONALD:** Hailing from Western Canada, I have strong memories of visiting farming relatives in the canola belt of Saskatchewan every summer. So it was all the more memorable when, in December 2019, I visited a canola seed crushing facility outside of Lahore, Pakistan with CCC's Brian Innes, en route to the Pakistan Oilseeds Summit. CCC's visit to Pakistan was a perfect reason to tour the facility, meet some of the leading importers of Canadian canola, and speak to them more about the value and

*Margaux McDonald, Canada's senior trade commissioner in Pakistan, poses with a can of Sufi brand canola oil.*

my TCS team and I play a role in that journey, as we work hard to ensure secure and reliable market access, and search for opportunities to grow the canola seed market in Pakistan. Moreover, as I toured the crushing facility, I had a tangible glimpse at the jobs that Canadian canola seed create all the way across the world in Pakistan – not to mention the other benefits that canola oil consumption brings to the people of Pakistan in terms of health benefits. I'm proud to be a part of canola's success story – in Canada and on the other side of the globe in Pakistan and beyond. 🌻



# “CS2300

*puts up amazing yields.  
It's a strong plant with an  
even stand and as a customer  
and agronomist I couldn't  
be happier!”*

HOLLY DICK | NOKOMIS, SASKATCHEWAN

- ✓ A Yield Powerhouse
- ✓ Excellent Standability
- ✓ Roundup Ready® Canola Hybrid



Seed the Difference.™

\*Instantly qualify for an early Germinating Success™ rewards payment when you order your CANTERRA SEEDS canola from your preferred retailer at [canterra.agro.club](http://canterra.agro.club) by Dec. 15, 2020. Early rewards payment will equal 50% of total rewards earned on qualifying orders placed through [canterra.agro.club](http://canterra.agro.club) by Dec. 15, 2020. If early rewards payment is greater than total rewards earned on your qualifying purchases by final program deadline (July 31, 2021), you will be required to return the difference. Visit [CANTERRA.com](http://CANTERRA.com) for full details. | \*\*Registration Pending.



# Agronomics and Performance Tried and Trusted by Farmers

Order by December 15, 2020  
and put **50%** of your  
rewards in your wallet before  
the seed hits the soil.\*

**CS2700 CL\*\***



**NEW**

- ✓ Clubroot Resistance
- ✓ Multigenic Blackleg Resistance
- ✓ Contract Premiums



**CS2200 CL**



- ✓ Multigenic Blackleg Resistance
- ✓ Value Priced
- ✓ Contract Premiums



**CS2600 CR-T**

**TruFlex**  
CANOLA

**NEW**

- ✓ Enhanced Clubroot Resistance
- ✓ Swath, Delay Swath or Straight Cut
- ✓ Early Maturity

**CS2100**



- ✓ Swath, Delay Swath or Straight Cut
- ✓ Multigenic Blackleg Resistance
- ✓ Excellent Yield

**CS2500 CL**



- ✓ High Yielding, Broad Adaptability
- ✓ Great Standability
- ✓ Contract Premiums



**CS2000**



- ✓ Enhanced Clubroot Resistance
- ✓ Multigenic Blackleg Resistance
- ✓ Broad Adaptability



**CS2400**



- ✓ Early Maturity
- ✓ Swath, Delay Swath or Straight Cut
- ✓ Value Priced



REWARDS PROGRAM

Your Germinating Success™ Rewards:



**CANOLA**

**\$15/Bag** (16-31 Bags)

**\$30/Bag** (32-63 Bags)

**\$40/Bag** (64+ Bags)

**Plus:**

Order from Agro.Club  
Canada by Dec. 15  
and watch your  
rewards grow by  
**\$10/Bag** (16+ Bags)

## IT'S AS EASY AS 1-2-3

**1**

### GO ONLINE

Choose CANTERRA SEEDS  
canola at:  
**[canterra.agro.club](http://canterra.agro.club)**



**2**

### ORDER

Place your order with the  
seed retail of your choice.



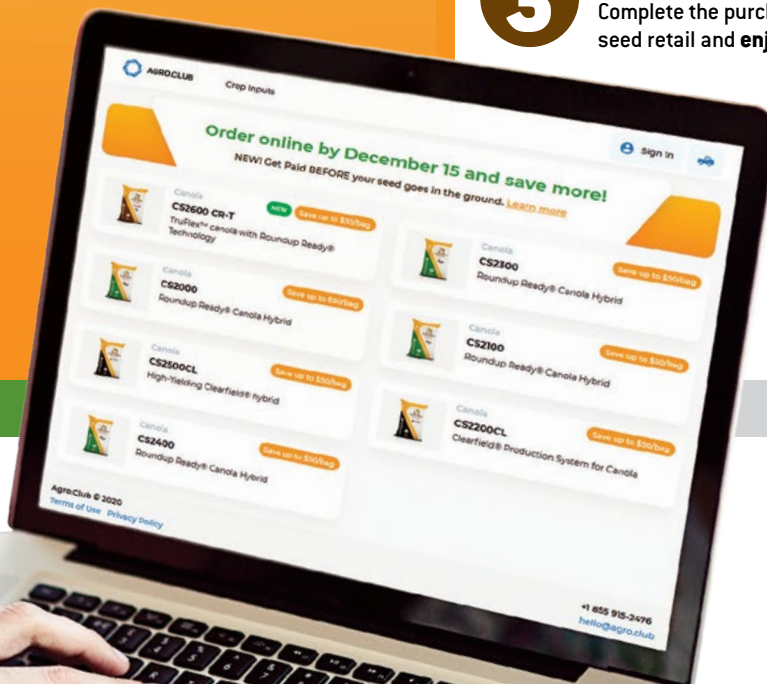
**3**

### PICK UP

Complete the purchase at your  
seed retail and **enjoy your rewards!**



**CANTERRA.COM | 866-744-4321**



Clearfield and the unique Clearfield symbol are registered trademarks of  
BASF Agrochemical Products B.V.; used with permission by BASF Canada Inc.

Always follow grain marketing and all other stewardship practices and pesticide  
label directions. Details of these requirements can be found in the Trait  
Stewardship Responsibilities Notice to Farmers printed in this publication.

Protein Industries Canada provides updates on two investments that show a lot of promise for canola. The Merit plant in Winnipeg will make food products that use canola proteins, and Botaneco has a new processing method that makes canola protein a better option for aquaculture.

# MAKING CANOLA PROTEIN **A COMMON INGREDIENT**

BY MIRANDA BURSKI

**C**anola has the potential to be a leading source of plant protein in the Canadian food and feed industries – as long as the infrastructure and processing capabilities are in place to support its transition into new products. Protein Industries Canada's members, along with other members of the canola sector, are working together daily to make that happen.

"It's been incredible to be a part of the canola protein work our members have been accomplishing," says Protein Industries Canada CEO Bill Greuel. "Not only are they and their partners finding innovative uses for a truly Canadian plant protein, but they're also finding new, sometimes international, partners with which to market them. These are exactly the sort of collaborative success stories we hope to see our members achieve."

Thanks to this work, new canola-protein products are making their way toward commercialization in both the food and feed markets.

## MERIT TO DIVERSIFY THE CANOLA CONSUMER MARKET

While canola meal has traditionally only been used in livestock feed, food processors throughout the country are finding innovative ways to get this high-protein commodity onto the tables of consumers around the world.

It's not hard to see why. The vegan and flexitarian markets are expanding, which drives a demand for new plant-based protein products. Why, then, shouldn't the canola sector attempt to take advantage of some of this opportunity?

Merit Functional Foods is doing particularly good work in this area. Together with Pitura Seeds and Winning Combination, and with a co-investment from Protein Industries Canada, Merit is using Burcon's patented technology to create new food and

beverages that feature canola protein.

As part of this co-investment project, Merit is constructing the first commercial facility in the world capable of producing food-grade canola proteins. The Winnipeg facility is expected to be complete in late 2020. Partnering Burcon's technology with the new facility, Merit will process canola protein to use it in a novel pea-canola blend that looks and tastes great, and exceeds industry standards for purity, solubility and taste. With a protein content of more than 90 per cent, Merit's canola protein extract has a nutritional value that meets or exceeds dairy or beef. The blend will then be processed into a variety of ingredients, which can be included in such items as beverages, yogurts, and meat and cheese substitutes.

The early development of these new ingredients is already leading to some exciting opportunities. In a joint agreement with Nestle, Burcon and Merit will be tailoring and producing their canola protein ingredients for use in a range of meat and dairy alternative products. Merit also recently announced a partnership with Bunge Limited, which will help accelerate the construction of Merit's facility and ability to bring their canola protein products to market.

## BOTANECO ESTABLISHING A NEW FEED MARKET

Livestock producers have long been incorporating canola meal into feed, but the aquaculture market presents a new opportunity for processors. And as a growing sector needing an additional 2.7 million tonnes of protein by 2025, it's easy to see why the aquaculture sector is so appealing to companies developing new forms of feed.

Botaneco is one such company, in part because of a project they partnered on with Corteva Agriscience Canada and Rowland Farms. Recently, Botaneco announced

successful trial results of canola protein concentrate as an ingredient in aquaculture feed. Tested in salmon at the Centre for Aquaculture Technologies in Prince Edward Island, the protein showed excellent feed acceptance, growth and weight gain.

The canola-based ingredient has a 75 per cent protein content, higher than many leading protein options currently available for the aquaculture market. Salmon also reacted well to the ingredient, showing full consumption and normal behaviour at all test levels. Despite this, canola hasn't been used in aquaculture feed prior to this point due to current processing methods.

Botaneco is revolutionizing these methods through the creation of their new aqueous-based process, which was developed as part of a project by Botaneco, Corteva Agriscience Canada and Rowland Farms. The project, which received a 50 per cent co-investment from Protein Industries Canada in June 2019, is well on its way to commercialization.

"Successful completion of this growth trial is one of the key validation points we have now achieved, which is in addition to the advantage we have on scale, sustainability and intellectual property. Our proprietary oilseed manufacturing platform represents a generational opportunity to transform the processing of oilseeds, creating access to new world markets," president and CEO of Botaneco James Szarko said in a news release announcing the trial results. "This milestone is a key step in advancing Botaneco toward commercialization."

Clearly, canola protein is only on the brink of its potential. By working together, businesses passionate about canola can not only make this potential a reality, but also help change the way consumers around the world view this versatile crop. 🌻

— Miranda Burski is a marketing and communications consultant with Protein Industries Canada.



New studies show canola meal fed to dairy cows can help to reduce their output of methane and nitrous oxide, two greenhouse gases that create a lot of attention for cattle businesses.

# CANOLA MEAL **REDUCES METHANE** OUTPUT FROM DAIRY COWS

BY BRITTANY DYCK AND ESSI EVANS

**N**ew research by Agriculture and Agri-Food Canada research scientist Chaouki Benchaar shows that canola meal, in addition to supplying escape protein and essential amino acids, can be instrumental in reducing enteric methane and nitrous oxide in dairy cows.

The accumulation of greenhouse gases, primarily carbon dioxide, methane and nitrous oxide, are blamed for causing atmospheric changes, including global warming. The warming potential of methane is approximately 20 times greater than carbon dioxide, and nitrous oxide is about 300 times greater than carbon dioxide. The current convention for measurement is to convert greenhouse gas emissions to a carbon dioxide equivalent. Therefore, the removal of one pound of methane is equal to eliminating 20 pounds of carbon dioxide, and likewise one pound of nitrous oxide is as good as removing 300 pounds of carbon dioxide from the atmosphere.

Exact figures for emission by livestock vary with source. However, values obtained from the Food and Agriculture Organization (FAO) suggest that 14.5 per cent of the greenhouse gases produced by human activity arise from livestock production. Rumen fermentation accounts for about 75 per cent of the livestock total. Thus, reducing greenhouse gas production by dairy and beef cattle can be a practical way of reducing a portion of these emissions, particularly if it can be accomplished at a low cost to dairy and beef producers.

One way of reducing costs to producers is to capture the energy from methane that

would otherwise be lost to the atmosphere and allow that energy to be used by the cow. Some of Benchaar's previous research showed that fat supplementation, particularly fats rich in unsaturated fatty acids, are useful for the reduction of rumen methane. Indeed, the fatty acid profile of canola meal

*Table 1. Replacing soybean meal with canola meal changes intake, milk production and methane output*

CANOLA MEAL (% OF TOTAL DRY MATTER)				
	0	4	8	12
DRY MATTER INTAKE (LB.)	58.7	61.2	61.6	62.9
ENERGY CORRECTED MILK (LB.)	92.6	95.0	95.9	98.6
TOTAL METHANE OUTPUT (G/DAY)	489	475	463	461
METHANE (G) PER POUND OF ENERGY CORRECTED MILK	5.3	5.0	4.8	4.7
ENERGY LOST AS METHANE (% OF TOTAL)	5.65	5.28	5.05	4.90

has been shown to be particularly beneficial to reducing methane output.

Benchaar presented two posters of his most recent research at the virtual American Dairy Science Association annual meeting.

The first presentation "Replacing Soybean Meal with Canola Meal Reduced Enteric Methane Production and Improved Milk production in Dairy Cows" showed that the percentage of the total dietary energy lost as methane was reduced with canola meal, and methane emission per kilogram of energy corrected milk declined as the feeding rate of canola meal was increased.

The diets used in the study provided zero, four, eight and 12 per cent canola meal. The diets contained 52 per cent forage and 48 per cent concentrate, and all diets provided 16 per cent crude protein.

(Results are provided in Table 1.) Dry matter intake and milk yield increased with each incremental increase in canola meal in the diet. Methane production decreased both overall and when expressed per unit of milk. The energy lost as methane was also reduced by the substitution of canola for soybean

meal. This energy then became available for the cows to put to productive purposes.

The second of Benchaar's presentations "Canola Meal in Dairy Diets: Effects on Nitrogen Utilization" shows that canola meal results in less urinary nitrogen output when compared to soybean meal. Urine nitrogen is volatile and is known to contribute to atmospheric ammonia and nitrous oxide.

Many feed additive products are available to help reduce greenhouse gas emissions. This research shows that the inclusion of canola meal in the diet may also be an effective and economical tool for reducing these waste products as well as improving milk production.

This research is part of the Canola AgriScience Cluster, with funding provided through Agriculture and Agri-Food Canada's Canadian Agricultural Partnership, the Canola Council of Canada, Alberta Canola, SaskCanola and the Manitoba Canola Growers. For more information, please visit [CanolAmazing.com](http://CanolAmazing.com). 🌻

— Brittany Dyck is the senior manager of canola utilization for the Canola Council of Canada.

— Essi Evans is president of E+E Technical Advisory Services, which provides technical and managerial support for livestock nutritionists.



It is difficult to project the annual demand for canola as a biofuel feedstock under the new Canadian Clean Fuel Standard, but modelling suggests that CFS could be a significant demand pull for canola oil.

# BIOFUEL STANDARD COULD INCREASE DOMESTIC CANOLA DEMAND

BY STEVE PRATTE

**B**iofuel is an important global market for Canadian canola, using approximately three million tonnes of seed – or about 10 per cent of Canada’s total production – in 2020. In the shadow of the major market disruptions faced in 2019-20, a working group struck by the federal minister of agriculture identified biofuels as the top prospect for near-term domestic market diversification.

With biofuel demand expected to grow in Canada and elsewhere, the Canadian canola industry is working diligently to ensure that canola continues to be a preferred feedstock for this growing demand. A concerted effort is already underway to advocate for a regulatory environment that supports biofuel demand growth while meeting the needs of canola farmers and the broader canola industry.

Demand for canola as a biofuel feedstock could increase significantly with (1) new clean fuel regulations on the horizon and (2) growing North American interest and investment in advanced biofuels processing techniques that make inclusion into the diesel pool more efficient. Let’s dig deeper into what the future holds for canola-based biofuels and canola demand as a feedstock.

## CANADA’S CLEAN FUEL STANDARD

Since fall 2016, the Government of Canada has been developing a Clean Fuel Standard (CFS). This is a complicated regulation, which seeks to lower the average carbon



*\*Carbon Intensity is the quantity of CO<sub>2</sub>e (carbon dioxide equivalents) emissions that are released during the activities conducted over the fuel's life cycle. This includes all the emissions associated with the extraction or the cultivation of feedstock used to produce the fuel, with processing, refining or upgrading that feedstock to produce the fuel, with the transportation or distribution of that feedstock and with combusting the fuel.*



intensity\* of liquid fuels used in Canada. As a policy, it is very different in structure and outcome than the volume-based biofuel mandate which Canada currently employs and, as a result, will impact how biofuels and their feedstocks are consumed in Canada and how much will be utilized.

When the CFS is implemented, the current federal Renewable Fuel Standard (RFS), which mandates a national average blend of two per cent bio-content in diesel, will be repealed. In its place, the primary suppliers – the manufacturers and importers of liquid fuel in Canada – will need to demonstrate that they are placing increasingly “cleaner” fuel into the Canadian marketplace. The fuel must have a lower carbon intensity score than typical Canadian diesel and the stringency increases incrementally over the years. Using biofuels is a primary way for fuel suppliers to comply with this new CFS regulation.

Despite the CFS not including a clear biofuel mandate or demand signal, the CFS could still provide a major domestic opportunity for sustained growth in the use of canola-based biofuels, namely in diesel fuel. If done right, the CFS regulation provides benefits on three fronts, particularly in Canada’s post-pandemic recovery:

1. **Economic growth** through value-added agricultural processing. Investment in clean, low-carbon biofuels will spur investment in canola processing.
2. **Market diversification.** New sustainable demand creation for canola in Canada reduces reliance on unpredictable global markets.
3. **Reduction of greenhouse gas emissions.** Canola-based biofuels have excellent life-cycle carbon intensity characteristics.

Canadian canola has several strategic advantages that make it a high-quality biofuel feedstock of choice, well-positioned for increased use. Canola has readily accessible supply both in quality and quantity. It has excellent low carbon intensity properties (on a lifecycle basis) and technical

*Modelling suggests that the CFS could be a significant demand pull as diesel fuel in Canada could approach eight to nine per cent renewable content by 2030. Increasing renewable content could potentially require an additional one to four million tonnes of canola seed annually.*

specifications to satisfy the regulation. And the existing supply chain and industry already understands, supports and currently manufactures biofuel.

## WHY BIOFUELS MATTERS TO FARMERS?

Historically, 1.5 million tonnes of canola seed has been used annually in the production of biofuels in Canada, the U.S. and the EU. In 2020, increased EU demand elevated total demand to approximately three million tonnes, representing approximately 10 per cent of annual Canadian production. Every year, approximately 500,000 tonnes of canola seed is used in the production of Canadian biodiesel – representing approximately 40 per cent of the total Canadian feedstock requirements.

It is difficult to project the annual demand for canola as a biofuel feedstock under the CFS since there are multiple ways for primary suppliers to achieve



Read more about CCGA's work on the CFS and Land Use Biodiversity criteria, as well as submissions to Environment and Climate Change Canada:  
[ccga.ca/policy/Pages/Biofuels.aspx](https://ccga.ca/policy/Pages/Biofuels.aspx)

## Trait Stewardship Responsibilities Notice to Farmers

**Monsanto Company is a member of Excellence Through Stewardship® (ETS).** Monsanto products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Monsanto's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. Trecepta® RIB Complete® Corn has been approved for import into Australia/New Zealand, Colombia, China, Japan, South Korea, Mexico, Taiwan, United States and all individual biotech traits approved for import into the European Union. Please check [biotraderstatus.com](http://biotraderstatus.com) for trait approvals in other geographies. Any other Monsanto commercial biotech products mentioned here have been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from these products can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for these products. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

**ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS.** Roundup Ready® Technology contains genes that confer tolerance to glyphosate. Roundup Ready® 2 Technology contains genes that confer tolerance to glyphosate. Roundup Ready 2 Xtend® soybeans contains genes that confer tolerance to glyphosate and dicamba. LibertyLink® Technology contains genes that confer tolerance to glufosinate. Glyphosate will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba. Glufosinate will kill crops that are not tolerant to glufosinate. Contact your local crop protection dealer or call the technical support line at 1-888-283-6847 for recommended Roundup Ready® Xtend Crop System weed control programs. Insect control technology provided by Vip3A is utilized under license from Syngenta Crop Protection AG.

**FOR CORN, EACH ACCELERON® SEED APPLIED SOLUTIONS OFFERING** is a combination of separate individually registered products containing the active ingredients: **BASIC** is a combination of fluoxastrobin, prothioconazole and metalaxyl. **STANDARD** is a combination of fluoxastrobin, prothioconazole, metalaxyl and clothianidin. **STANDARD plus DuPont® Lumivia®** is a combination of fluoxastrobin, prothioconazole, metalaxyl and chlorantraniliprole. **COMPLETE plus DuPont® Lumivia®** is a combination of metalaxyl, chlorantraniliprole, and prothioconazole and fluoxastrobin at rates that suppress additional diseases. **BioRise® Corn Offering** is the on-seed application of either BioRise® 360 ST or the separately registered seed applied products Acceleron® B-300 SAT and BioRise® 360 ST. BioRise® Corn Offering is included seamlessly across offerings on all class of 2019, 2020 and 2021 STANDARD, STANDARD plus DuPont® Lumivia®, and COMPLETE plus DuPont® Lumivia® corn hybrids. **FOR SOYBEANS, EACH ACCELERON® SEED APPLIED SOLUTIONS OFFERING** is a combination of registered products containing the active ingredients: **BASIC** is a combination of prothioconazole, penflufen and metalaxyl. **STANDARD** is a combination of prothioconazole, penflufen, metalaxyl and imidacloprid. **STANDARD plus Fortenza®** is a combination of prothioconazole, penflufen, metalaxyl and cyantraniliprole. Optimize® ST inoculant is included seamlessly with both **BASIC** and **STANDARD** offerings.

Acceleron®, Bayer, Bayer Cross, BioRise®, BUTEO®, RIB Complete®, Roundup Ready 2 Technology and Design®, Roundup Ready 2 Xtend®, Roundup Ready 2 Yield®, Roundup Ready®, Roundup Transorb®, Roundup WeatherMAX®, Roundup Xtend®, SmartStax®, Transorb®, Trecepta®, TruFlex®, VaporGrip®, VT Double PRO® and XtendiMax® are trademarks of Bayer Group. Used under license. Lumivia® is a registered trademark of E.I. du Pont de Nemours and Company. JumpStart® and Optimize® are registered trademarks of Novozymes. Used under license. DuPont® and Lumivia® are trademarks of E.I. du Pont de Nemours and Company or its Affiliates and are used under license by Monsanto. LibertyLink® is a registered trademark of BASF. Agrisure Viptera®, Fortenza® and Helix Xtra® are registered trademarks of a Syngenta group company. LibertyLink® and the Water Droplet Design are trademarks of BASF. Used under license. Herculex® is a registered trademark of Dow AgroSciences LLC. Used under license. Respect the Refuge and Design is a registered trademark of the Canadian Seed Trade Association. Used under license. Poncho® and VOTIVO® are registered trademarks of BASF. Used under license. ©2020 Bayer Group. All rights reserved.





regulatory compliance beyond using biofuels. However, modelling suggests that the CFS could be a significant demand pull as diesel fuel in Canada could approach eight to nine per cent renewable content by 2030. Increasing renewable content could potentially require an additional one to four million tonnes of canola seed annually, as the regulation requires continually cleaner fuel to be placed in the Canadian market. Environmentally, canola currently contributes approximately 1.5 million tonnes of greenhouse gas reduction under the current two per cent RFS mandate. It could potentially increase to six million tonnes under a mature CFS.

The CFS is in its final stages of development prior to the draft regulation being published in late 2020. However, there remains much uncertainty about the direct effect of the CFS on canola demand. Currently there is no similar biofuel policy without an accompanying mandate in any other jurisdiction around the world. This makes modelling or predicting the demand implications for biofuels and canola as a feedstock much more difficult.

Canadian Canola Growers Association and the Canola Council of Canada are working to ensure that the final regulation, slated for implementation in 2022, creates a platform for long-term increased use of canola as a biofuel feedstock in Canada. In addition, work continues to ensure that elements, such as the CFS Land Use Biodiversity criteria, recognize the sustainability of today's modern farming practices and maintain the global competitiveness of Canada's canola farmers. ✿

— Steve Pratte is a policy manager with the Canadian Canola Growers Association.



## Biodiesel, Renewable Diesel and Co-Processing

Currently in North America, diesel-based biofuels are typically produced by one of two methods: traditional biodiesel or renewable diesel. The finished biofuels have different carbon intensity profiles as the energy required in both processes differs, as do the by-products. Regardless of manufacturing process used, all finished fuels must adhere to specific quality standards before being placed into the marketplace.

**Biodiesel (FAME)** is typically produced by blending of bio-mass feedstock (e.g. canola, used vegetable oil and fats) into diesel fuel to achieve a desired blend level (e.g. two per cent biodiesel). The fuel will have specific chemical properties, such as cloud point, based on the feedstock.

**Renewable diesel (HDRD)**, often referred to as a drop-in fuel, is produced through a different chemical reaction than biodiesel. The finished biofuel is chemically indistinguishable, regardless of the feedstock used. Compared to biodiesel, it has higher carbon intensity because it requires more energy to produce, but the quality and properties are the same regardless of the feedstock.

Currently, all diesel biofuel production in Canada is biodiesel, while there is significant renewable diesel capacity in the U.S. Both these processes typically occur in stand-alone facilities, often operated by a biodiesel or renewable diesel manufacturer.

**Co-processing** is fundamentally different from both FAME and HDRD in two ways. First, the bio-mass feedstock is introduced at the same time as the crude petroleum product enters the refining process, rather than being blended at the end stage. Second, co-processing is done in a traditional petroleum refinery at large volumes.

As low-carbon fuel regulations mature and intensify in both the U.S. and Canada, conventional petroleum companies are more seriously looking at co-processing in order to meet local and federal regulations, while integrating the manufacturing of renewable fuel products into their core operations. In the last year, several major U.S. companies have made announcements regarding planned investments within their facilities. Testing of co-processing in Canadian refineries has occurred as well. The opportunity for Canadian canola is significant, as it is one of only a handful of feedstocks in North America readily available to provide the large scale, consistent quality required to serve these large refineries.





## IT'S IN THE BAG.

Strong yields, direct harvest, and Clubroot protection...  
you can't lose with 6090 RR canola from BrettYoung.

[brettyoung.ca/6090](http://brettyoung.ca/6090)



BrettYoung™ is a trademark of Brett-Young Seeds Limited. DefendR® is a registered trademark of Brett-Young Seeds Limited. ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready® Technology contains genes that confer tolerance to glyphosate. Glyphosate will kill crops that are not tolerant to glyphosate. Roundup Ready® is a registered trademark of Bayer Group, Monsanto Canada ULC licensee. All other trademarks are property of their respective companies. 11.20 5456



**BrettYoung™**  
DISTINCT BY DESIGN

# Who does your marketing?

Canola Digest asked four farmers about the people involved in setting the farm's marketing strategies. Who is the farm's marketing lead? And what, if any, outside expertise do they use?

BY JAY WHETTER



**CHUCK FOSSAY**  
STARBUCK, MANITOBA



Chuck Fossay says a farmer can be a good producer, a good manager or a good marketer. "Rarely do you

find someone who is good at all three,"

Fossay says. "So, as farmers, we have to find what we can do really well and get advisers to help with the other jobs."

Fossay farms with his three brothers. They share equipment and some storage, and work together to seed and harvest their crops, but they have their own land and, for the most part, do their own grain marketing.

"We see each other every day through the busy season and a few times a week through the winter, and we share offers received from elevators, any transactions we've done and marketing tips we've heard," Fossay says. But then each brother makes his own final decisions.

Although Fossay has taken a lot of marketing programs over the years, he subscribes to AgChieve's marketing newsletter to get some of that valuable outside expertise. "David Drozd is basically a neighbour and I've known him for 35 or 40 years," he says.

With the programs and outside advice, Fossay takes a rather streamlined approach to marketing: Watch the charts. Look for a good price. Lock in a bit when charts and outside advice suggest it. "I don't go in for a lot of fancy marketing," he says, "but I will watch futures charts fairly closely so I'm not caught by surprise."

One thing David Drozd taught him is that the market knows all the reports about trade issues, weather events and harvest productivity and has built these observations into the price, probably before anyone else has heard about them – "even with social media." So futures market prices are a good indicator of what's happening in the world.

Having a trusted adviser also takes some of the emotion out of his marketing decisions, Fossay says. "When you get an arm's length recommendation to pre-sell 20 per cent at a decent price, then I try to take that advice. That way I have my fall cash flow needs covered without forcing a harvest sale at what is often the lowest prices for the year."

However, by watching charts instead of sticking to usual trends, Fossay observed in late August 2020 that the typical harvest drop off wasn't happening. "Here we are with markets trending up," he says. "With an upward trend, I usually wait until the charts start to go sideways, then I make a move."



**KATELYN DUNCAN**  
REGINA, SASKATCHEWAN



Katelyn Duncan farms with her sister, Mary Jane, and her father. They subscribe to a few marketing

newsletters, including those from

John DePutter, Larry Weber and Keith Ferley, for updates on futures trends and global production, but the farm's chief marketer is Mary Jane.

"She is much more interested in marketing, in general, so she took over the marketing role from dad," Katelyn says. "We want to be comfortable in our roles, be energized and enjoy the work. If we're doing tasks we want to be doing, it is better in the long run for everybody."

The farm's executive team, comprised of the three Duncan family shareholders, sets the marketing strategy. This includes growing some specialty canola to offset a little bit of the market risk. They follow the market advisers when it comes to suggestions on what percentage of the crop should be sold by a certain time, for example. They also have quick "farm executive chats" to consider new quotes from grain buyers. Otherwise Mary Jane is in charge of day to day marketing of the farm's production.

This division of labour suits their geographies. Mary Jane lives two hours away, at Coronach, SK. While she spends seeding and harvesting seasons on the farm, she can complete marketing transactions by computer and phone any time of year from her home.

Katelyn notes that if they didn't have a keen and competent marketer on the executive team, they would pay a broker or a grain marketing firm to do the job. For example, they used to hire outside agronomy services, now Katelyn is the farm agronomy lead. When it comes to machinery maintenance, they have a full-time employee who specializes in small repairs and detailed combine inspections, but big jobs go to the dealerships.

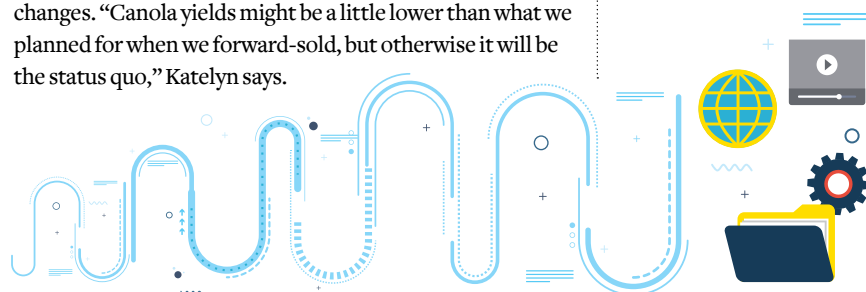
The marketing plan for 2020 won't have any major changes. "Canola yields might be a little lower than what we planned for when we forward-sold, but otherwise it will be the status quo," Katelyn says.

"When you get an arm's length recommendation to pre-sell 20 per cent at a decent price, then I try to take that advice."

—Chuck Fossay

"We want to be comfortable in our roles, be energized and enjoy the work. If we're doing tasks we want to be doing, it is better in the long run for everybody."

—Katelyn Duncan







**CHRISTI FRIESEN**  
BROWVALE, ALBERTA



Christi Friesen and her husband Kelly use Cargill's MarketSense as their main marketing resource. It

provides daily market updates from

Cargill's lead analysts, and two local advisers help with marketing plans and actions for the farm. One local advisor visits the farm for regular consultations (now done through an online meeting platform like Microsoft Teams) and the other puts the marketing orders into action.

As part of the regular consultations, the local MarketSense adviser looks at every aspect of the business, including machinery costs, power bills and all other inputs, to come with a precise farm-specific cost per acre for each crop.

"As young farmers starting out on our own, this program has been amazing," Friesen says.

The marketing recommendations are based on the farm's business plan, which includes debt servicing and cash flow needs unique to their operation. The program combines business plan objectives with market outlooks from the lead analysts and local pricing opportunities uncovered by the local advisors to come up with recommendations on when to sell and how much. "Our advisor will make specific recommendations, like you should be 50 per cent sold for new crop based on this trend and this trend and this trend," she says. "We always use forward contracts for the sense of security."

The local Cargill elevators get most of their deliveries, but Friesen says they're not required to sell everything through Cargill.

Although Friesen says her husband Kelly is the marketing lead for the farm, she takes part in all the consultation meetings and knows the plan. She recently took part in a women-only marketing course called Market Gals, offered through MarketSense. "It was a pilot program. There were only three of us and the instructor was a woman," she says. Among other things, it taught her how to read charts (she uses [barcharts.com](http://barcharts.com)), layer data and use this information to identify good opportunities to make a sale.

These fundamentals help take some of the emotion out of marketing, she says. "If you're passionate about the farm, you put your emotions into everything – but you can't market your livelihood based on emotion," she says. "You have to market based on facts."

"Our advisor will make specific recommendations, like you should be 50 per cent sold for new crop based on this trend and this trend and this trend."

—Christi Friesen



**DEAN ROBERTS**  
COLEVILLE, SASKATCHEWAN



Dean Roberts has what he calls an "opportunistic" approach to marketing. Roberts farms with his

father, uncle and cousin, and while

they're all involved in making the final marketing decisions, he is the farm's marketing lead. Farm logistics and readiness are a big part of their marketing action plan.

"Our yard has good gravel and we keep it cleared. As long as the municipal roads are passable, trucks can get in and out of our yard," Roberts says. "So if an elevator makes a good offer for a quick delivery of 20,000 bushels, they can come and get it as soon as they need it."

For marketing help, Roberts subscribes to newsletters from Grain Shark and FarmLink Marketing Solutions. The two sources are a little different, he says. "Grain Shark tends to rely more on technical signals while FarmLink seems to rely more on supply and demand fundamentals."

"If they both say to sell, then we'll probably sell," he says. "Or if my gut says sell and one of the newsletters says sell, that's good enough for me."

To manage cash flow, the Roberts farm will set up monthly instalments on financing so they never need a big influx of cash to cover an annual or semi-annual payment. As a result, they can be a little more patient. They don't strive to be a percentage sold by a certain date, they don't have a strategy to sell a little bit at a time throughout the year, and they rarely forward-sell. "We feel that forward-selling can actually elevate our risk, especially with regard to canola yields in our area," he says.

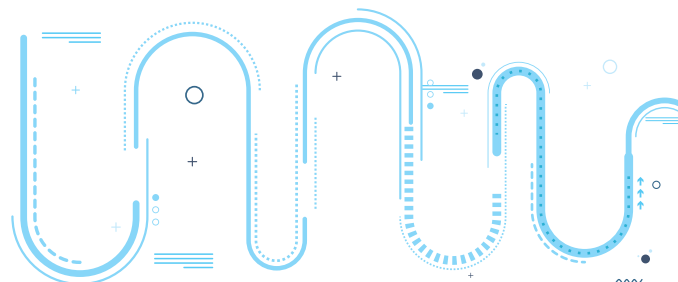
Instead, they have more of a quick-strike approach. "When we recognize a good price opportunity, we sell hard into it."

A big part of their opportunistic strategy relies on their local FarmLink representative. "At times we can have a 10 to 15 per cent price spread between locations within our area," Roberts says, and having a local rep following all the grain elevators and processors in the area helps to discover those sell opportunities.

She also represents quite a few farm clients in the area, which Roberts thinks can provide extra leverage in price negotiations. "I believe we get better results when we have our marketing rep with us," he says. 🌻

"I believe we get better results when we have our marketing rep with us."

—Dean Roberts





## SEED TRAITS: WHAT ARE THE STANDARDS?

**T**his list covers the options available for canola seed traits and describes official standards (if any) for each trait.

Western Canada Rapeseed and Canola Recommending Committee (WCC/RRC) is the industry body that recommends to the CFIA which canola cultivars get registered. The CFIA collects a lot of information from the WCC/RRC as well as company trial data to approve cultivars for registration, but ultimately the recommendation for registration is based on quality traits for oil (including erucic acid and saturated fats), protein and glucosinolate levels to ensure it meets the canola quality definition.

Raymond Gadoua, the WCC/RRC coordinator, says that while WCC/RRC does track yield, lodging, disease resistance and more, there is no registration standard for these traits. Gadoua does keep unpublished short descriptions for each cultivar that goes through the WCC/RRC, but he says post-registration information from company trials and third-party comparisons, like the Canola Performance Trials at [canolaperformancetrials.ca](http://canolaperformancetrials.ca), are probably more relevant to the grower.

### HERBICIDE RESISTANCE

- Liberty Link – BASF.  
Resistant to group-10 glufosinate
- Roundup Ready – Bayer.  
Resistant to group-9 glyphosate
- Clearfield – Corteva.  
Resistant to group-2 IMI products, including Ares
- Truflex – Bayer.  
Resistant to group-9 glyphosate
- Falco – Cibus.  
Resistant to group-2 sulfonyl-urea

These traits and their labeling are maintained by the gene-developer. Stacked traits are now available, specifically for Truflex and Liberty Link.

**Standards:** The WCC/RRC no longer requires any data to support herbicide tolerance claims, but herbicide tolerant candidates require disclosure regarding their herbicide tolerant nature.

### BLACKLEG RESISTANCE

- Major gene resistance – industry developed labels using molecular tests
- Quantitative resistance – no standardized testing for claims on this resistance

**Standards:** WCC/RRC trials determine the overall level of blackleg resistance, with ratings based on a comparison to blackleg levels in the highly-susceptible Westar cultivar, which is grown as a blackleg check at blackleg trial nursery. Cultivars with a severity index less than 30 per cent of



*These tiny canola seeds can pack a punch, with a collection of traits well suited to Western Canadian growing conditions. Growers have a lot of traits to choose from and can benefit from picking the best mix of traits for each field.*

Westar are considered resistant “R”, but WCC/RRC does not have a minimum standard for blackleg. Susceptible cultivars can be approved for registration, but this is rare. These trials do not determine which resistance genes are in a cultivar or how much quantitative resistance is present; they only average field performance at these locations. Canola growers will often discover that cultivars with an R rating can show fairly high levels of blackleg when grown in a situation where resistance is overcome by the particular blackleg races prevalent in a field. As a result of this, an R-gene labeling model as designated by Canola Council’s Blackleg Steering Group

is included in the WCC/RRC procedures for use on a voluntary basis by canola variety developers. Research is underway to develop a standard evaluation for adult plant or quantitative resistance.

### CLUBROOT RESISTANCE

Commercial canola cultivars often make specific claims for clubroot resistance.

**Standards:** WCC/RRC has protocols for greenhouse or field testing to determine a level of resistance, but these are not published and there is no WCC/RRC standard to determine the level of clubroot resistance and the genetic source of resistance.

### SCLEROTINIA STEM ROT RESISTANCE

Sclerotinia resistance labels are used, often based on company interpretations of WCC/RRC approved protocols for field testing.

**Standards:** WCC/RRC has a protocol for evaluating sclerotinia stem rot resistance in the field, but companies can use their own methodology. There is no industry standard to compare the levels of sclerotinia resistance. Gadoua says standards have been proposed over the years, but there has been no agreement.

### VERTICILLIUM STRIPE

**Standards:** Currently there is no disease rating scale or screening process to determine cultivar susceptibility to this pathogen. Protocols will be presented at the WCC/RRC pathology sub-committee meeting this winter to help develop an industry standard.

### POD-SHATTER TRAIT

Seed companies promote cultivars as having a pod-shatter trait or a heightened level of pod integrity. This is used to promote them as suitable for straight combining or late swathing.

**Standards:** There is no industry standard for the level of pod shatter tolerance. Gadoua says a sub-committee is looking into it, but WCC/RRC doesn’t have a protocol yet.



## END-USE TRAITS

- Nexera – Corteva. High oleic low linolenic fatty acid oils
- Victory and Invigor Health – Cargill. High oleic low linolenic fatty acid oils
- High Erucic Acid Rapeseed (HEAR)

**Standards:** For these specialty crops grown under identity-preserved (IP) programs, companies are responsible to maintain the quality standards they require from their end users. However, cultivars with a high oleic and/or low linolenic acid profile still have to meet the same WCC/RRC standards for erucic acid and glucosinolates. HEAR is an exception. It goes through the specialty subcommittee for unusual oils that don't meet the canola definition. These must follow strict IP to keep them out of the canola market channels.

## OTHER TRAITS

- Yield is measured against WCC/RRC checks in inspected small-plot trials. Once commercial, these can be compared to any product in any trial type (no standards).
- Lodging resistance is tested for, and candidate cultivars often come with lodging scores, but not always. The standard protocol is a rating scale from 1 (standing straight) to 5 (flat). Gadoua notes that a variety that consistently lodges likely won't come to market.
- Maturity is no longer a WCC/RRC requirement, and there is no standard to determine short-, medium- or long-season cultivars. It often comes down to company promotions based on their own data. Gadoua notes that maturity tends to be getting later since the season is getting a little longer.
- Height is tracked by the WCC/RRC, but there is no standard labelling. Companies may provide their own data, particularly if the height is notable (short size with high yield, for example).
- Swathability/harvestability has no WCC/RRC standard, so a company that claims "good harvestability" for a cultivar may be basing it on their own internal trials.
- Oil and protein content is tracked by the WCC/RRC (as percentages and compared to check cultivars), with minimum standards for oil content. Protein content below industry standards can eliminate a cultivar from commercialization, Gadoua notes. Oil and protein content is important for buyers and end-users of canola, but these are not factors in a grower's seed decision with no monetary implications at the farm-level.

Canola Performance Trial data, available at [canolaperformancetrials.ca](http://canolaperformancetrials.ca), provide third party comparisons for yield, lodging, height and days to maturity. These rates are based on protocols agreed to by the CPT committee, which includes growers and industry representatives.

## NEW SEED TREATMENTS FOR 2021

**Canola growers looking for a new source of flea beetle control or a seed treatment for blackleg have a couple of new options for 2021.**

**Saltro.** This new fungicide seed treatment from Syngenta protects canola from airborne blackleg infection at the cotyledon stage. The active ingredient, adepidyn, is a new Group-7 fungicide. Blackleg that starts early on cotyledons tends to cause the highest levels of stem damage and yield loss later in the season. In high risk situations – fields with a history of high levels of blackleg – this seed treatment protection provides an option to foliar in-crop sprays that some growers use for early protection.

**Buteo Start.** Bayer will offer "Buteo start" as an insecticide seed treatment option on Dekalb canola hybrids for 2021. Other seed brands will also offer Buteo seed treatment, so farmers can ask their seed representatives if that's an option for them. Buteo start has a new active ingredient, flupyradifurone, for improved protection from striped and crucifer flea beetles. The company says that rapid uptake and systemic translocation from cotyledon to leaf margins allow for a strong plant right off the start, even in dry conditions. Buteo start will be used in combination with other seed treatments that provide the fungicide and base insecticide active ingredients. For more flea beetle seed treatment options, go to [canolaencyclopedia.ca](http://canolaencyclopedia.ca) and see the flea beetles chapter.

## REGISTER FOR CANOLA WEEK: DECEMBER 1-3, 2020

This year, Canola Week joins together the Canola Industry Meeting, Canola Discovery Forum (CDF), and Canola Innovation Day and will be held online. This series of virtual sessions will focus on updating all players in the canola industry on the state of the industry, trade, end-use products & markets, research and innovation, cutting edge technologies, as well as agronomic issues and the 2020 crop. The focus for the CDF sessions is canola fertility. Since 2020 marks the 50th anniversary of the Canola Industry Meeting, we'll also be recognizing Keith Downey's legacy at this milestone event.

*More information on the agenda and registration is coming soon.*

## WELCOME NATE ORT



Nate Ort from Carman, MB joins the Canola Council of Canada agronomy team. Nate has a diploma from the University of Manitoba School of Agriculture (class of 2013), a bachelors of science in agriculture (agronomy) from the U of M (class of 2017) and is just finishing up a masters degree in plant science, focusing on soybean phenology and physiology. Nate loves working with farmers and researchers. "I think it's important to bridge the gap between the two," he says. "Farmers have questions and ideas, and researchers tackle these ideas.

Then we at the CCC relay the information and findings back to farmers. That's what I am most excited for. Taking good, strong scientific data and bringing it to the farm and seeing if it can work for them."

# CANADA APPROVES CULTIVATION OF NUSEED OMEGA-3 CANOLA

BY DONNA FLEURY

**N**useed has the first land-based source of the essential long-chain omega-3 to be commercialized. This new output trait is set to meet the major global deficit of omega-3 essential fatty acids in human diets and the rapidly growing demand for fish protein. A conservative estimate indicates the world needs about twice as much omega-3 fatty acids as can be supplied by the oceans.

"We started developing our unique Value Beyond Yield "output" plant trait approach for novel oils and proteins about 10 years ago," says Brent Zacharias, group executive for Nuseed. "We saw output trait seed technology as a key to unlock new agriculture opportunities, which really started the research into omega-3s."

"This new technology unlocks brand new opportunities and whole new markets for agriculture that we don't yet serve, and created a whole different perspective of how we can build value chains in an organization to help facilitate that," he says.

Omega-3 fatty acids are important for human health, but humans are unable to make these critical nutrients themselves. The long-chain polyunsaturated fatty acids docosahexaenoic acid (DHA) and eicosapentaenoic acid

(EPA) are essential nutrients found in fish and other marine life. DHA and EPA omega-3s are critical for brain, eye and heart health, inflammation management, and development in children. Fish also require DHA and EPA for optimum growth and health, but can't make these fatty acids themselves. They accumulate omega-3s from eating other fish. Historically, DHA and EPA have been sourced from ocean-caught fish, however, the ocean cannot provide enough of these nutrients to sustainably supply the rapidly growing aquaculture industry. Crops such as flax and conventional canola only produce shorter-chain omega-3s, such as alpha-linolenic acid (ALA). As a result, the aquaculture industry needs alternative sources of omega-3 nutrients.

"DHA is a complex, longer chain fatty acid, making it technically very difficult to produce," says Zacharias. In 2010, Nuseed formed a research collaboration with CSIRO and the Australian Grains Research and Development Corporation (GRDC), with a goal of being able to produce DHA.

"Recognizing the need to at least double the supply of omega-3 to meet global aquaculture and human market demand, we will need roughly four million acres of our omega-3 canola, which is a significant opportunity for

*Above:  
Aquaterra feed  
ingredient trials  
in collaboration  
with salmon  
aquaculture  
farms in Chile.*

*Right: Plant to  
plant technology  
creates  
the first world  
supply of land-  
based long  
chain omega-3s.*

Photos: Nuseed



industry,” Zacharias says. “One of the great advantages of utilizing canola as a platform is we absolutely have the scalability to supply that type of a program from our global canola growing regions.”

Nuseed’s omega-3 program included selected genes, previously identified and collected by CSIRO and GRDC through years of marine and grain research, to create the world’s first supply of land-based long chain omega-3s. Researchers were able to stack selected genes from these microalgae together with top yielding elite canola genetics to really accomplish the unique and reliable pathway to a whole new fatty acid within canola. In July 2020, Nuseed received Canadian food and feed approvals for their omega-3 proprietary DHA refined canola oil, which has been deemed to be safe for human consumption, and DHA canola crude oil and meal as safe for aquaculture and livestock feed.

“Both the aquaculture and human food markets, including dietary supplements, pharmaceuticals and food fortification, have distinct needs and we are building a very close association and investing in those markets in a very collaborative way,” says Benita Boettner, Nuseed global general manager for omega-3. “The product we are ultimately selling is the oil directly to local markets in Canada and global export markets. About two-thirds of the market volume will go to aquaculture and one-third to the high value human markets.”

Boettner says Canada is the third largest global producer of farmed salmon, and adds that both human and aquaculture markets are poised for significant growth.

“We are utilizing a closed loop system, which means a close partnership with growers and shared success,” Boettner says. “There is also a nice parallel sustainability story where canola production and end use markets complement each other on sustainability goals. The canola industry already has an advanced stewardship strategy, and combined with the improved sustainability metrics of the aquaculture industry, are positive for the entire value chain.”

Nuseed recently completed commercial scale trials with their Aquaterra feed ingredient in collaboration with aquaculture farms in Chile. The results were very positive, with Aquaterra delivering additional benefits of improved health and survivability of the fish. “This study demonstrates Aquaterra is a highly effective, sustainable complement to fish oil for the aquaculture industry,” says Boettner. “The market is not only excited about the performance and health benefits of Aquaterra, but also about the improved



**“We are exceptionally pleased to see the recent regulatory approvals in Canada, but need to carefully manage the approval process in other countries as well. Once we get further in regulatory approvals and consult with Canadian canola grower groups and industry, we can jointly decide the sequence and timing to enter the Canadian market.”**

—Brent Zacharias

sustainability metrics of being able to grow the aquaculture industry with a renewable and scalable source of omega-3 nutrients, while reducing pressure and over-fishing of ocean resources. We have also just concluded human nutrition clinical trials in Canada, the first pilot to test the benefits of the omega-3 oil (marketed as Nutriterra) for human consumption.”

Nuseed has a significant market share of the Australian canola genetics industry and have spent the last six years building on their elite genetics platform and selecting hybrids for the needs of Canadian growers. “With our genetics and genetic parents, we have been able to develop very competitive hybrids with competitive yields and maturity, as well as good weed control options and disease resistance,” says Roger Rotariu, Nuseed North American marketing lead. “In 2020 we launched a TruFlex product into the commodity canola space as our first launch in Canada. We are also

working on multigenic clubroot resistance hybrids, but one of the most exciting things goes back to our Australian heritage and exceptional blackleg resistance performance. The intent of the portfolio is to offer core products that have a range of maturities and yield opportunities, as well as different disease packages suited for different areas across the canola growing region in Canada. The introduction of selected omega-3 canola hybrids to Canada will follow.”

“We know Canada is the world’s largest, most sophisticated highest yielding canola growing region and a critical partner of the future of our omega-3 canola,” adds Zacharias. “We are exceptionally pleased to see the recent regulatory approvals in Canada, but need to carefully manage the approval process in other countries as well. Currently we have a very contained supply chain base out of some key geographies in the U.S. Once we get further in regulatory approvals and consult with Canadian canola grower groups and industry, we can jointly decide the sequence and timing to enter the Canadian market. This is an exciting time and things are moving very quickly toward huge opportunities. It is an opportunity for the whole industry to get behind a different mindset of more end to end value creation with output trait technology. We truly believe in a partnership approach for creating value and sharing value, which is something we think is needed in our industry to create whole new opportunities.” 🌻

— Donna Fleury, P.Ag., is an agricultural freelance writer from Millarville, Alta.

Cargill wants to show its end users and consumers how modern agriculture can help the planet. One approach is applying the 4R Nutrient Management program throughout its Canadian grain network.

# Cargill uses 4R to show benefits of modern agriculture

BY JAY WHETTER

**C**argill provides food ingredients to processors and end-users all around the world, and these processors and end-users want to share the story about how their ingredients are grown. Consumers are demanding it, they say, which puts the onus on Cargill to work back through its supply chain to write a good story.

Cargill has a goal to reduce greenhouse gas emissions produced throughout its extended supply chain by 30 per cent per tonne of product by 2030. Nutrient use efficiency is a big part of the plan.

“As a global food company, Cargill is trying to reduce carbon at every step of the food chain,” says Simon North, Cargill agronomy technology lead for Western Canada. “Fertilizer is one of the bigger sources of emissions, so one way we will achieve that goal is by partnering with farmers worldwide on projects to improve soil health, increase soil carbon storage and reduce greenhouse gas emissions.”

For crops produced in Western Canada, Cargill wants to be able to measure the reduction in carbon and greenhouse gases.

North sits on the Fertilizer Canada nutrients committee which helped to develop the 4R program that promotes the four ‘Rights’: Right Source at the Right Rate, Right Time, Right Place. He says practices that make the biggest measurable differences are direct seeding and zero till, which maintain the carbon in the soil, and placement of fertilizer in the ground, which reduces losses to the environment and puts it where it’s needed. Advanced practices include split applications that can align more with the “right time”, variable rate applications that improve the “right rate”, and “right products” like nitrogen stabilizers.

North says most farmers in Western Canada already follow many of the basic 4R practices. Having their acres counted under 4R Nutrient Stewardship means they’re recognized for this, and Cargill can use this program participation to improve the brand and value of Canadian grain.

To have their acres counted, farmers have to an

approved fertilizer plan by an agronomist with a 4R designation from Fertilizer Canada. North says Cargill has 4R-designated agronomists at 90 per cent of their locations across the Prairies, and it will be at 100 per cent soon.

Agronomists going for their 4R designation need to have their CCA or P.Ag. for base knowledge. Then they take a course through Fertilizer Canada and sign an “attestation” form.

Meanwhile, Cargill is running a pilot program to measure how 4R practices will reduce the greenhouse gases per tonne of grain. “Cargill has already shown a 700-tonne reduction in greenhouse gas output with just a small number of farmers in the pilot program,” North says. “This is the equivalent of taking 150 cars off the road.”

He emphasizes that the goal is not to reduce productivity. “We need to grow the food, so the point is not to cut yields,” he says. The goal is improve profits and reduce carbon output per tonne of crop produced.

Farmers in the program achieve more efficient use of their input dollars. And Cargill can share these measured improvements with its customers. “We can use this to sell modern agriculture to consumers,” North says. “As agriculture in general comes under more scrutiny, this is a win for everyone. That is why individual farmers are starting to do it without being told to do it.”

Cargill isn’t the only company that is active on 4R and as Canola Digest continues with this series, it will feature other companies and other farmers. Farmers looking for Western Canadian agri-retailers with designated agronomists can go to [fertilizercanada.ca](http://fertilizercanada.ca). Check “What’s in it 4R me?” under the Nutrient Stewardship tab.

“We recognize that no single company or sector can solve all of our environmental challenges alone,” North says. “We all have a role to play. Agriculture is how we can make a more meaningful impact, together. That’s why Cargill is committed to partnering with farmers, customers, nonprofits and academic institutions to catalyze and advance innovation in this space.” 🌻

“We can use this to sell modern agriculture to consumers. As agriculture in general comes under more scrutiny, this is a win for everyone. That is why individual farmers are starting to do it without being told to do it.”

—Simon North



For more information, see the Fertilizer Canada resources at [fertilizercanada.ca/nutrient-stewardship/4r-designation](http://fertilizercanada.ca/nutrient-stewardship/4r-designation) or talk to a CCC agronomy specialist.





## HOW TO GET YOUR 4R ACRES COUNTED

**What is 4R?** 4R Nutrient Stewardship is a Fertilizer Canada framework encouraging growers to use the four 'Rights': Right Source @ the Right Rate, Right Time, Right Place. The goal of the 4R Designation program is to help crop producers minimize environmental concerns related to agriculture while maximizing economic benefits. The principle is simple, provide the right source of nutrients at the rate, time and place that will minimize the losses of nutrients and maximize the crops access to the nutrients.

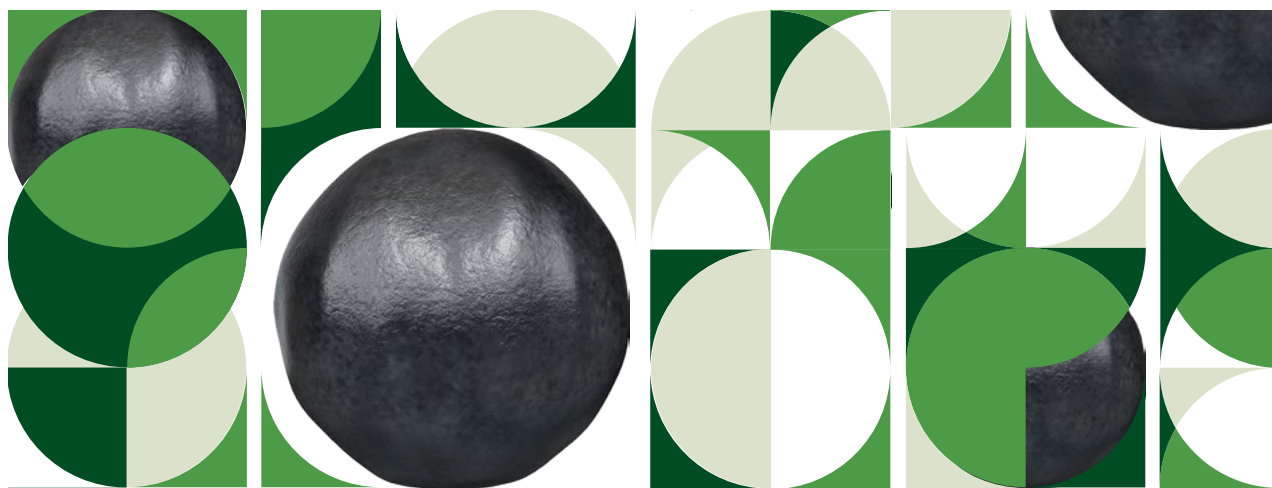
**Why does it matter?** Canada's canola industry sees a lot of potential for 4R Nutrient Stewardship for land enhancements, profitability improvements and proactively showing our customers and their governments how we're taking sustainability seriously. As a result, Canada's canola industry has a goal to utilize 4R Nutrient Stewardship practices on 90 per cent of canola acres by 2025.

**How to get your 4R Acres counted?** To become a part of the 4R program, farmers have to work with a 4R designated agronomist. The agronomist helps the farmer construct a specific 4R nutrient management plan to help ensure your acres can be considered 4R. Once farmers have taken the steps required to complete a 4R Plan,

the 4R designated agronomist compile all 4R acres, on a crop and location basis, and submits these acres to Fertilizer Canada. Fertilizer Canada never sees individual plans developed as that stays between the agronomist and their farmer customer – all Fertilizer Canada sees is a total number of crops by location and crop. (A farmer cannot get a designation on their own.) There will be increasing demand for 4R designated agronomists to meet industry goals, and provide this service for their customers. Ask your local retailer about the designation program today.

**What's in it for the farmer?** Two things. First, fertilizer is the biggest expense in canola production. Through the use of 4R Nutrient Stewardship, farmers can ensure they use fertilizer efficiently and get more return from the investment. Second, end users and regulators are paying more attention to crop production practices such as how fertilizer is utilized, especially escapes to the atmosphere and runoff into waterways. Losses to the environment are monitored and could lead to regulations. 4R Designation demonstrates that farmers have the same cares and concerns as other members of society.

For more information, see the Fertilizer Canada resources at [fertilizercanada.ca/nutrient-stewardship/4r-designation](http://fertilizercanada.ca/nutrient-stewardship/4r-designation) or talk to a CCC agronomy specialist.



## THE BEAUTY OF PROVEN RESULTS

We think of seed design as both a science and an art. Proven® Seed offers a full range of leading-edge LibertyLink®, TruFlex™ Roundup Ready and Clearfield canola hybrids that are all designed for disease management, high yields and consistent performance. No matter what you're looking for, there's a Proven Seed canola hybrid for your farm. **Only available at Nutrien Ag Solutions™ retail. Visit [ProvenSeed.ca/canola](http://ProvenSeed.ca/canola) to learn more.**



**Nutrien**  
Ag Solutions™

**Proven**  
SEED

Always follow grain marketing and all other stewardship practices and pesticide label directions. Details of these requirements can be found in the Trait Stewardship Responsibilities Notice to Farmers printed in this publication. BASF, Liberty, LibertyLink and the Water Droplet Design are registered trademarks of BASF. Proven® Seed is a registered trademark of Nutrien Ag Solutions (Canada) Inc. Nutrien Ag Solutions™ and Design is a trademark of Nutrien Ag Solutions, Inc. 09/20-72516-2



Photo credit: Anna Workman

# How to Start the Succession Planning Conversation

What does the future hold for your farm? Through 2020, I have had many young farmers reach out looking for tips to get their parents to talk about the plan to pass along the business. Farm family coach Elaine Froese has 14 tips to get the conversation started.

BY ELAINE FROESE

**F**arm families are stuck when it comes to getting folks to the kitchen table to talk about timelines for transition of labour, management and ownership of the farm. Over the past six months of the Great Pause, I have had many young farmers reach out to me looking for tips to get their parents to talk about what the future holds for generation one and generation two.

Procrastination and conflict avoidance are often the root of the issue for farm families being stuck. Here are my tips to get the conversation started.

**1 ACT.** Decide that you are no longer avoiding the tough conversations. Are you willing to be the driver to call the family together to meet? The first step is to decide that you will no longer accept silence from your parents or siblings. Listen to Dr. Henry Cloud's audio book on Boundaries, and his book Necessary Endings. Both are powerful motivators.

**2 THINK.** Talk to yourself first about what you really want. Then check out the same issues with your spouse. If parents are not in agreement as to what they each want for future roles on the farm, then you will have to work hard to negotiate a more workable vision for generation one. Be clear about your intent. Understand why this is so important for you to get talking and discovering your future now. Complete this sentence for yourself: "My intention is...."

**3 ASK MORE POWERFUL QUESTIONS** to kick-start the conversation. Ask your parents, "Do you remember what it felt like when you first owned land?" Then add something like, "I am curious if we could sit down and explore ideas on how I can get some equity before April 2021 on this farm. I want to be more than an employee." Dates are targets to aim for. Certainty of agreements and timelines is what you really want.



---

*Elaine Froese has coached many farm families on the “undiscussabull” challenges, including income, housing and fairness to non-farm heirs, as they relate to succession planning.*

---

- 4 DOCUMENT.** COVID-19 has been a reality check for the farmer who said, “Elaine if I get sick and die, the farm will be in chaos.” Get a will, an enduring power of attorney, and guardians for your children. Make sure your executor is fully informed. As you go through the succession planning journey, you will change the estate plan (your will), but get a will now! Lawyers can work with you virtually, and witnesses can sign digitally.
- 5 BE CURIOUS.** Stop telling yourself that is “disrespectful to your parents” or that it is greedy to ask for what you need for your young family. Come from a position of “I am curious Dad, how do you want your role to change on this farm as you age? I am seeking a way to build my own equity. What are you needing?”
- 6 FACE FEARS.** Address the bull in the middle of the room, what I call the “undiscussabull”. Parents are afraid of failure, loss of wealth, conflict with the non-farm heirs, and loss of identity or purpose as they age. Love does not read minds, so ask gently and graciously “What is hard for you to talk about? I am here to listen and understand.” Watch “Finding Fairness in Farm Transition” on my Youtube channel as a great discussion starter. Download the “Key Challenges” part of the Farm Family Toolkit at [elainefroese.com](http://elainefroese.com).
- 7 COLLECT DATA.** Know what you need for family living, and where your income streams are coming from. Have financial transparency between the generations. Share the amount of debt you are willing to service or transfer to the next generation. Do understand how much debt you are willing to sleep with, and what you are willing to buy out. Some assets will be gifted, but young farmers need to be clear about how much debt they can service. Have your accountant, lender or farm business adviser confirm the viability of the operation, knowing cash flow, and the number of families the farm can support.
- 8 PREPARE YOUR IDEAL BUSINESS PLAN FOR THE FARM.** What is your vision? On our farm, generation one wants to slow down but still be active in the decision making process, and generation two wants to build more efficient systems.
- 9 EXPLORE “WHAT IF?”** What if we block time once a month for two hours to talk about our succession journey? Stress the importance and benefits to all generations. David Kohl’s research showed that farms with regular meetings were 21 per cent more profitable.
- 10 MEET.** If the thought of meeting scares you, then hire a third party facilitator to prepare each person for the meeting. In 2020, these meetings are done on Zoom. Advisers have seen many creative solutions, and they can keep the conversation safe and respectful.
- 11 BUY A FLIPCHART, AND FIND A STUFFIE TOY.** You need a visual spot to land ideas and process thoughts. The toy is your talking stick for folks to speak at the meeting without interruption. Record notes and action steps on the flipchart, and use smart phones to capture the pages when the meeting ends. Simple? Yes. Life-changing? Yes!
- 12 EXPLORE RESIDENCE OPTIONS.** Housing is a big source of conflict. Promises are made to switch houses, then things change or a sibling comes to live close to generation one. Be really clear that you understand the timelines and expectations for the residence needs of all generations. If mom wants to move and dad wants to stay put things will be stuck for a long time.
- 13 COPY SUCCESS.** Conflict resolution is a business risk management strategy. Share the stories of good transitions. Know that you are not alone in your current struggle, and that the hard work is worth the reward of a workable succession plan to create certainty for everyone’s future.
- 14 BUILD YOUR BINDER.** Or use Google documents to organize the many plans you need to talk about: lifestyle income, legal, accounting, meeting action plans, business plans, coaching communication, estate, loans, etc. I have created a “Life” binder with passwords info, and Maggie Van Camp’s “Because I love you” list. The binder is a great place to jot down your dreams, thoughts and frustrations as you create solutions for the life you’ve always wanted on your farm. Email me at [elaine@elainefroese.com](mailto:elaine@elainefroese.com) for binder tabs, and the “Because I love you” list.

In conclusion, three big questions in farm succession are about income streams, housing and fairness to non-farm heirs. Getting insight on those questions will keep your succession planning going. Remember, it is a journey. I am here to help. Talking is the work. ✨

— Elaine Froese is a farm family coach and farmer from Boissevain, Manitoba. She is a CSP and part of Canadian Association of Farm Advisors and [AgVisorPro.com](http://AgVisorPro.com).

# Farmers rally for restaurants

Farmers use video called “Field to table, eat well together” to show support for their restaurant partners during COVID-19 shut-downs.

BY LIBBY ROACH

**T**here is a special connection that happens around the dinner table. Breaking bread with loved ones and the ritual of sharing a meal are intrinsic to the foundation of family. Food is not just calories, it's the shared experience of eating together. And while eating together is happening more often for many families, it is happening less in restaurants.

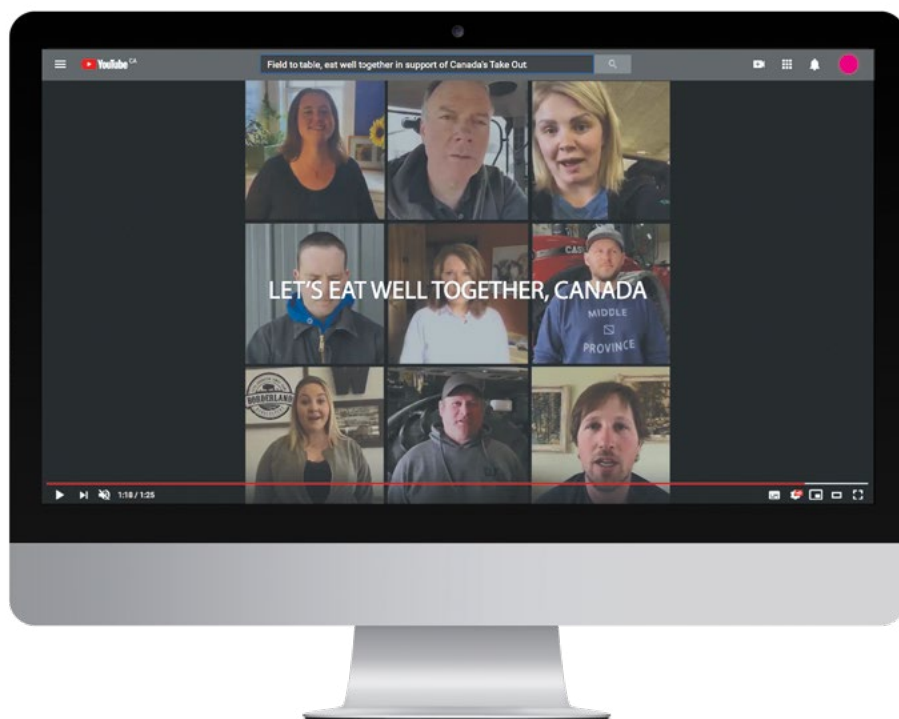
COVID-19 has hit the restaurant industry hard. Some restauranteurs were forced to close immediately, while others managed to pivot, emerging seemingly overnight as a gourmet grocery store, meal delivery kit service, bodega or soup kitchen. This past spring, canola farmers came together to showcase support to those restauranteurs who count on canola oil in their fryers, sauté pans and squeeze bottles.

This was spearheaded by Canola Eat Well. “It was a way to show support to chefs, restaurant owners and the industry in their market distribution,” says Ellen Pruden, director of Canola Eat Well. Market disruption is something that farmers know all too well from imposed limitations in exports. They are deep in the trenches with their chef compatriots and restauranteurs who rely on canola oil as their primary go-to cooking oil in the kitchen.

“Canadians cannot eat enough of what we grow to get us out of world market disruptions. And we can't possibly order enough takeout to solve all the problems, but we can certainly show our support to one another,” says Jeannette Andraszewski, a canola farmer from Two Hills, Alberta.

This message is on full display in the Canola Eat Well video titled “Field to Table, Eat Well Together”.

“Nineteen farmers from across Canada video-recorded themselves in their kitchen, on a tractor or in the barn to share a message of hope to their fellow Canadians,” Pruden



says. “The video has been wildly successful with over one million views via social media.”

Many industry partners echoed their support by re-sharing the video. It is being shared throughout the restaurant industry, reaching a primarily urban audience who are hearing loud and clear the message of support from farmers. It has been heart-warming to read all of the thank you comments on social media from urbanites back to the farming community.

To watch the video, go to [youtube.com/canolaeatwell](https://youtube.com/canolaeatwell) and look for “Field to table, eat well together in support of Canada's Take Out”. Feel free to share the video through your social media platforms, and tag @CanolaEatWell on Facebook and Twitter or canolaeatwell on Instagram.

The Canola Eat Well joint effort is part of the provincial canola organizations' mandates to actively facilitate market development initiatives in Canada. Across the Prairies,

market development programming is about maintenance and awareness while a targeted market development program in Ontario is about increasing awareness and demand among consumers in that growth market. 🌻

— Libby Roach is a food editor at [auburnlane.com](https://auburnlane.com) and photographer based out of Toronto, ON. Her creative passion lies in weaving stories into photographs and creating images that are engaging. Libby attended Canola Harvest Camp in 2018 and you will want to follow her on the Instagram @cookiespi.



Find the video on youtube  
[youtube.com/user/CanolaOilGrowers](https://youtube.com/user/CanolaOilGrowers)



Interest-bearing portion now at prime less 0.75%

# YOU HAVE ENOUGH ON YOUR MIND.

Put it at ease with an Advance  
Payments Program cash advance.

Get the farm cash flow you **need** and the  
control you **want** to sell at the best time  
and the best price.

Our experienced team makes it easy to apply.  
Call 1-866-745-2256 or visit [ccga.ca/cash](http://ccga.ca/cash)

**50+**  
Commodities

**\$100K**  
Interest-free

**\$1M**  
Maximum



Agriculture and  
Agri-Food Canada

**Advance Payments  
Program**

Agriculture et  
Agroalimentaire Canada

**Programme de  
paiements anticipés**

SAFETY  
TRADE  
MARKETS  
QUALITY  
TRANSPORTATION  
LABOUR  
CASH FLOW  
WEATHER





## AFTER THREE SEASONS, CHOOSE A SEED WITH AS MUCH POTENTIAL AS YOU.

**DEKALB® TRUFLEX™ CANOLA WITH ROUNDUP READY® TECHNOLOGY GIVES YOU THE SPRAYING FLEXIBILITY YOU WANT WITH THE WEED CONTROL YOU NEED.**

**You might get about 40 chances to achieve your best yield yet from the seed you choose. That's why you need a canola with proven spray flexibility and next-level weed control. You need the proven performance of DEKALB canola. Developed with superior genetics to deliver yield and stand up against disease pressure, DEKALB canola is the choice you can depend on year after year to deliver an easier, faster and smoother harvest.**

### THE SEED FOR EVERY SEASON



[DEKALB.ca](http://DEKALB.ca) | 1 888-283-6847 | [@DEKALB\\_Canada](https://twitter.com/DEKALB_Canada) | [@Bayer4CropsCA](https://twitter.com/Bayer4CropsCA) | [#AskBayerCrop](https://twitter.com/AskBayerCrop)

**Bayer is a member of Excellence Through Stewardship® (ETS).** Bayer products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Bayer's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. These products have been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from these products can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for these products. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

**ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS.** Roundup Ready® Technology contains genes that confer tolerance to glyphosate. Glyphosate will kill crops that are not tolerant to glyphosate. Bayer, Bayer Cross, DEKALB and Design®, DEKALB®, Roundup Ready® and TruFlex™ are trademarks of Bayer Group. Bayer CropScience Inc. is a member of CropLife Canada. ©2020 Bayer Group. All rights reserved.