

The FENCE POST

Spring/Summer 2022 Issue No. 4



MANITOBA
CROP
ALLIANCE



The WEED TEAM

*Meet the researchers fighting
the good fight for farmers*

INSIDE:

How to deal with herbicide shortages this season p. 18

Wondering what your ROI is for wheat and barley levy payments? p. 13

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The FENCE POST

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2022-2023 BOARD OF DIRECTORS

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There are so many reasons to be optimistic

Following the Annual General Meeting in February, the 2022 Manitoba Crop Alliance (MCA) board of directors was introduced and MCA's 2022 strategic plan was presented. The new strategic plan revolves around a central goal of maximizing farmer levy dollars by investing in meaningful, independent research, valuable knowledge and targeted advocacy. As always, the board of directors, crop committee delegates and our MCA staff have been working hard to ensure members' levy dollars are strategically invested.

MCA has been at the table with the Canadian Roundtable for Sustainable Crops (CRSC) during the consultations on the draft Code of Practice. In the last few months, there has been quite a bit of information put out about this Code of Practice and the CRSC has come a long way answering the questions and concerns from farmers regarding why it is necessary. We hope to see a formal proposal for how this might look in practice, but we are optimistic we can move forward with a clear vision.

I am looking forward to serving our farmer members as chair in 2022. I have always enjoyed being involved with commodity organizations because they do valuable work and give farmers an opportunity to direct research and support market development. We get to connect with a lot of other organizations in the value chain and within the grain industry, something I think gives us a different perspective and a more rounded opinion on some of the key issues that impact our farms.

There is a value in that and it is good to give back to the agriculture industry.

The next nomination and election period for delegates of the four MCA crop committees – wheat & barley, corn, sunflower and flax farmer members – will start this September. I hope members are interested in running for a position on one of the crop committees. If your interests are in any one of the four crop committees, it is a good experience and gives you the ability to have some input into where market development and research are headed. Read the article on page five for more information about joining our crop committees, and keep an eye on our website and social media in the coming months for more details on the upcoming nomination and election period.

I hope you enjoy reading this edition of the Fence Post. It does a great job showing some of the projects we are currently working on and the direction things are moving. Although we are facing challenges like the increased cost of fertilizer and fuel, as well as some supply issues, there is still a lot of optimism going into the growing season for a better crop than what we had last year.

I wish you all a safe and prosperous 2022 growing season.

A handwritten signature in black ink, appearing to read 'R. Misko', written over a white background.

Robert Misko
Chair
Manitoba Crop Alliance



Meet our new staff!

Earlier this year, Manitoba Crop Alliance (MCA) welcomed three new staff members to our team. We are thrilled to have Katherine, Ashley and Cole join us as we strive to continuously improve the competitiveness and profitability of spring wheat, winter wheat, barley, corn, sunflower and flax in Manitoba. Please join us in welcoming them to the MCA team!

Katherine Stanley

Katherine Stanley joined MCA in January in a new role as research program manager – special crops. Katherine has been busy executing our corn, flax and sunflower research programs, and providing support to the Whole Farm Research program. She is looking forward to collaborating with farmer members, industry and researchers to continue advancing the industry. Katherine earned her B.Sc. in agroecology from the University of Manitoba, her M.Sc. in agronomy and weed ecology from the University of Saskatchewan and prior to joining MCA she managed a field research program focused on cropping systems at the University of Manitoba.



Ashley Ammeter

In early February, MCA welcomed Ashley Ammeter to the team as agronomy extension specialist – cereal crops to cover for Mallorie Lewarne while she is on leave. Ashley is responsible for the development, co-ordination and extension of wheat (spring and winter) and barley agronomic information and research results to our farmer members. She is excited about the opportunity to collaborate with Manitoba farmers and communicate agronomic information based on the latest MCA-supported research. Ashley just completed her M.Sc. in plant science from the University of Manitoba, where her research was focused on plant breeding approaches to the improvement of canola meal protein quality.



Cole Christensen

Cole Christensen joined MCA in mid-February as our new communications manager. Cole is the president of Cole's Ag Communications and will manage our communication and extension activities. He is excited to support the MCA team and help deliver a communications program that puts our farmer members first. His favourite thing about the agriculture industry is the spirit of innovation and the sense of community. Don't hold it against him, but he is a Stampeder fan. . . .



WE NEED YOU!

Consider becoming a delegate with Manitoba Crop Alliance!

Manitoba Crop Alliance will be seeking farmer members to stand for election as delegates to our four crop committees – corn, wheat and barley, flax and sunflower.

The nomination period will open Sept. 1, 2022, with elections to take place starting in mid-November.

To learn more about the role of delegates and the nomination and election process, contact us by email at hello@mbcropalliance.ca or by phone at **204-745-6661**.

Further information will be posted to MCA's website at mbcropalliance.ca/about/governance in the coming months.



Ever considered becoming a crop committee delegate?

By Alison Inglis

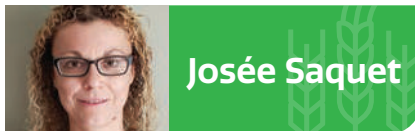
Public Relations Specialist, freelance

Have you considered becoming a delegate on one of Manitoba Crop Alliance's (MCA) crop committees or a member of the board of directors, but don't know much about these roles or where the process begins?

Crop committee delegates are essential to how MCA operates. There are four crop committees — corn, wheat and barley, flax, and sunflower — which work to support the research, agronomy, market development and access, and

communication and advocacy initiatives of the organization. A key responsibility of the crop committees is to elect delegates from the respective committees to sit on the board of directors.

Delegates are nominated and elected every two years. This fall, MCA will open up nominations and begin the process of electing eligible members to serve as delegates on the four crop committees. Of course, serving for any organization requires a time commitment, but there are also numerous benefits producers will take away from their time serving on a crop committee or the board of directors.



Josée Saquet

Josée joined the wheat and barley committee in January 2021 and this is her first time in this type of role. She wanted to be active in the agriculture industry and gain a better understanding of how check-off dollars are put to work.

Why did you want to be nominated for a delegate position on the wheat and barley committee?

As a grower, I think it is important to understand and see how our check-off dollars are spent. It's important to know what projects are being funded, who the funding partners of MCA are and how they interact together. This helps us see how these will affect growers down the line. Joining MCA is also a way for me to represent growers in having a voice within the industry.

MCA crop committee delegates focus on crop-specific issues, including research, agronomy, communication initiatives, and market access and development. They are responsible for developing research recommendations for board approval, as well as reviewing crop-specific projects and monitoring research results. They also gather grassroots feedback about member needs and provide it to the board.



Korey Peters

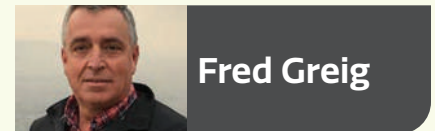
Korey has been on the sunflower committee since January 2021 and this is his first board position in the agriculture world. Korey joined MCA to get more involved in the industry, learn more about policy decisions and grow his ag network.

How would you explain the role of an MCA crop committee delegate?

It's an opportunity to have a say in what your check-off dollars do when it comes to research on a certain crop in Manitoba — designed specifically for farms in Manitoba and our field conditions and climate.

In addition to focusing on research, delegates also have the opportunity to represent MCA on external organizations and their working committees, such as:

- Cereals Canada
- Grain Growers of Canada
- Keystone Agricultural Producers (KAP)
- Manitoba Corn Committee
- Prairie Grain Development Committee — various Recommending Committees



Fred Greig

Fred was a director with the Manitoba Wheat and Barley Growers Association, and has been a director with MCA since the amalgamation in 2020. Fred has also had the privilege of serving on the boards of the Manitoba Pulse and Soybean Growers, Western Grains Research Foundation (WGRF), Sunrise Credit Union and Canterra Seeds.

How would you explain the role of a director?

MCA has an excellent structure set up that allows directors and delegates to do as much as they feel comfortable doing. Training and education opportunities are available to enable greater responsibilities. Research is our major focus, so your input into all things research will be required. You will also be kept abreast of the latest developments in ag policy and be asked for feedback.

MCA directors are appointed by MCA's crop committees and are accountable to all farmer members. Directors are responsible for the management and supervision of the activities and affairs of MCA, including board governance, strategic planning and long-term goals, financial and risk oversight, stakeholder relationships, research and market development oversight, policy and advocacy oversight, as well as quality and operational performance measurement.



Sally Parsonage

Sally has been a delegate on the sunflower committee since January 2021 and is a member of the Whole Farm Research committee. This is her first time serving on a commodity group committee. She grows several of the crops represented by MCA and wanted to be more immersed in the sunflower sector. She had been looking for a way to contribute to the agriculture industry in Manitoba when the sunflower committee was suggested to her.

What have you learned so far?

I've enjoyed learning about the research side from the funder's perspective; seeing what projects researchers are contemplating, and discussing with other farmers what would be the most useful/interesting use of the funds we all contribute. It's been rewarding to connect with more experienced sunflower growers from across the province, to learn about their practices and struggles, and learn more about what's coming for this commodity.



Hubert Preun

Since January 2021, Hubert has been a delegate on the corn committee. He has been involved with KAP for 15 years, and before that was involved with the Manitoba Pork Council. He has enjoyed learning a lot about the research side of things and all that goes into being a delegate.

What is one takeaway you've learned that you didn't realize before becoming a corn committee delegate?

Being part of MCA is a big responsibility because we are dealing with a lot of money that needs to be dealt with properly. I think it is our duty as farmers to be involved in organizations like this to make a difference in our industry. We as farmers must be involved to help push agriculture in the right direction.



Jonothan Hodson

Jonothan has been a director at MCA since its inception on Aug. 1, 2020. He has served on local boards, as well as the Manitoba Angus Association. Prior to the amalgamation, Jonothan was a director with the Manitoba Corn Growers Association and was a supporter of putting more crops under one organizational umbrella.

What have you enjoyed the most about being a director?

Without a doubt it's the people I've met and the ideas and thoughts they bring to the table, whether that's a fellow director or a staff member.

Becoming a director will provide personal growth opportunities, including networking with fellow farmers, researchers, and industry stakeholders and leaders, as well as gaining in-depth understanding of the crop industries MCA represents. Directors also have the opportunity to represent MCA to external partner organizations such as:

- Cereals Canada
- Barley Council of Canada
- Flax Council of Canada
- Grain Growers of Canada
- KAP Advisory Council
- WGRF
- Canadian Wheat Research Coalition
- Canadian Barley Research Coalition



Sheila Elder

Sheila joined the wheat and barley committee a little over a year ago, having no previous experience in a similar role. After completing two levels of agronomy through distance learning with Olds College, Sheila and her husband saw this as a great learning opportunity for her as she becomes more involved with their farm.

What have you enjoyed the most about being on the wheat and barley committee?

Two things: 1) The sense of feeling welcome and included, and 2) The learning. I love to learn and the group is so willing to answer questions and find resources if I ask. They seem to understand (at least I hope they do!) that I am genuinely interested in learning.




Dean Buchanan

Dean was elected to the flax committee last year and has served on other boards over the years. Dean has enjoyed finding out about the different research projects MCA undertakes and funds, and meeting the other members.

Would you encourage other farmer members to get involved and consider becoming a delegate on a crop committee?

I would recommend anyone who has an interest in all crops or a certain crop should get involved and consider becoming a delegate, it's been a good experience so far. You get to meet a number of new and diverse people and you can help focus the way the different crops that MCA represents are researched and promoted.

Becoming a delegate with MCA will provide personal growth opportunities, such as networking with fellow farmers, researchers, and industry stakeholders and leaders, the chance to gain an in-depth understanding of the crop industries MCA represents, and the ability to attend educational and leadership-building workshops



SR&ED Credit 2020-2021
(August 1, 2020 to July 31, 2021)

33.44%

and seminars. Participation on the crop committees will also provide development opportunities for a potential future role on the board of directors.



Fred Greig

Would you encourage others to get involved and consider becoming a director?

I can't say enough good things about my time as a director and delegate with MCA. I would absolutely encourage anyone to become a director. It is an excellent opportunity to expand your skillset and knowledge while giving back to this amazing industry and farmers.

For more information on the roles and responsibilities of MCA crop committee delegates and the board of directors, please visit mbcropalliance.ca/about/board-and-crop-committees

MCA will share information on the upcoming nomination and election period in the coming months, so stay tuned!

MCA offers interest-free/low-interest cash advances for farmers

Manitoba Crop Alliance (MCA) is now issuing cash advances for the 2022 crop year through the Advance Payments Program (APP).

The APP is a federal loan program administered by MCA on behalf of Agriculture and Agri-Food Canada (AAFC). It offers Canadian farmers marketing flexibility through interest-free and low-interest cash advances, allowing them to sell their agricultural products based on market conditions rather than the need for cash flow.

"The APP is a valuable resource for farmers across Manitoba," says Pam de Rocquigny, CEO of MCA. "We are proud to provide personalized, friendly, small-town service to all our APP clients to make their experience with the program as smooth as possible."

MCA provides cash advances on over 35 different crop kinds, including cereals, grain corn, oilseed crops, pulses, specialty crops, hay and grasses, and honey. Farmers can access up to \$1 million per program year in advances based on the value of their agricultural product.

AAFC pays the interest on the first \$100,000 advanced to a producer. For interest-bearing cash advances, MCA's interest rate is competitive with major banks and credit unions.

For the 2022 Spring Cash Advance program, AAFC has temporarily waived the requirement for production advances to be issued in two installments, 60 per cent upfront and 40 per cent after seeding is confirmed. For this program year, producers can receive 100 per cent of their 2022 advance immediately when they apply.

"As an APP administrator for more than 40 years, MCA is committed to offering the exceptional level of service our clients have come to expect," says de Rocquigny. "This commitment is fully defined in our APP Service Standards, which are available on our website."

MCA's staff will continue to work closely with partners at AAFC to deliver the APP and provide administrative options to serve Manitoba farmers. For more information about the APP – including 2022 application forms, rates and fees, and important dates and deadlines – visit mbcropalliance.ca.

ADVANCE PAYMENTS PROGRAM

SERVICE YOU DESERVE!
The Advance Payments Program is a federal program, administered by the Manitoba Crop Alliance. Now issuing advances for the 2022 program year.
204-745-6661

MANITOBA CROP ALLIANCE

Advance Payments PROGRAM

Agriculture and Agri-Food Canada
Agriculture et Agri-alimentaire Canada
Programme de paiements anticipés

2022 program expands to include more crop types

By Daryl Rex

Research Trial Specialist, MCA

Have you ever considered trying out a new practice or product on your own farm, with your own equipment? Would you like to learn more about doing your own research? Are you a member of the Manitoba Crop Alliance (MCA)? Consider participating in an MCA trial. We are expanding our Research on the Farm program, with projects on wheat, barley, corn, flax and sunflowers available for farmers to participate in for 2022.

A) Use of a seed treatment on wheat or barley

Objective: To quantify the impact of the use of a seed treatment on crop establishment and yield in wheat or barley.

Benefits to Manitoba farmers: Does it make sense to use a seed treatment on your wheat or barley crop in Manitoba? How can farmers ensure a successful start with a good crop establishment of their wheat or barley field in uncertain field conditions? A use of a seed treatment may prove beneficial in ensuring a good start for a promising crop.

B) Seeding rates in wheat, barley, flax, corn and sunflowers

Objective: To quantify the impact of plant stand on the agronomic and economical implications in each crop type.

Benefits to Manitoba farmers: How will



a low or high plant stand affect the health of your crop? Will it affect the yield and, ultimately, the returns to your farming operation?

C) Enhanced efficiency fertilizer usage in spring wheat

Objective: To quantify the agronomic impact of enhanced efficiency fertilizer (EEF) usage in spring wheat on yield and protein.

Benefits to Manitoba farmers: How will EEFs respond under dry/wet conditions? Is there a blend that shows promise with your farming operation? Does the use of an EEF add to your wheat crop's yield or seed protein levels?

D) Management of lodging with the use of a plant growth regulator on spring wheat or barley

Objective: To quantify the agronomic impact of the use of a plant growth regulator (PGR) on plant height, lodging and yield in spring wheat or barley.

Benefits to Manitoba farmers: When does it make sense to use a PGR for your cereal crop in Manitoba? This is a

question many farmers ask as they see a good growing season developing. An application of a PGR may be a useful tool in a high-input situation where the crop has high yield potential but is at risk of lodging.

E) Fungicide timing for management of Fusarium head blight on spring wheat

Objective: To provide insight on the impact of fungicide application and timing on Fusarium head blight (FHB) disease levels, in-season and in harvested grain, for spring wheat.

Benefits to Manitoba farmers: Being aware of potential risk of FHB infection through the use of decision tools such as Manitoba Agriculture's FHB risk maps, combined with proper timing of a fungicide application, are key factors in helping Manitoba wheat growers reduce the risk of yield and quality loss due to FHB.

Interested in participating?

If you are interested in participating in any of these trials, please contact:

Daryl Rex, Research Trial Specialist,
Manitoba Crop Alliance
204.745.6661 | daryl@mbcropalliance.ca

Jordan Karpinchick, Trial Coordinator,
Tone Ag Consulting
204.433.7189 | jordankarpinchick@toneag.com

For more information on MCA's Research on the Farm trial program, including results from previous years and current Research on the Farm projects, visit mbcropalliance.ca/research/on-farm-research

Whole Farm Research Program

New research set to begin this year

Manitoba Crop Alliance (MCA) recently announced a call for letters of intent (LOI) for the second round of funding in

the Whole Farm Research program. Developed in 2021, the Whole Farm Research program allows for a whole-farm, cross-commodity approach to research. Priorities of the Whole Farm Research program include crop rotation innovation, soil health, cover crop and intercropping, pest management, and water management.

After a successful inaugural call for Whole Farm Research proposals, three projects have been funded and are set to begin in 2022. The total value of this research, which will be conducted over the next five years (2022-27) is \$1,506,047. MCA's contributions to the projects will total \$476,470.

Following the success of the

first call, MCA is excited to provide continued support to this important multi-disciplinary research. LOIs for the next funding call were accepted until April 13, 2022 for projects set to begin in 2023. To learn more about the Whole Farm Research program, please visit mbcropalliance.ca/projects/whole-farm-research

Congratulations to our 2021/2022 bursary winners!

Our future just keeps getting brighter! In February, Manitoba Crop Alliance (MCA) awarded six students from Manitoba with MCA 2021/22 bursaries valued at \$2,000 each. Congratulations to each of the winners and thank you to everyone who submitted applications. We wish you all the best in continuing your ag education.

MCA 2021/22 bursary winners:

George Meggison Goodlands, MB



George grew up on a grain and Red Angus cattle farm and has been interested in agriculture from a young age. Growing up, he helped feed cows in the winter and maintained equipment and structures around the farm. In high school, he began to operate machinery for spraying, bailing and harvest. George enjoyed working on the farm with cows and crops, so he decided to pursue a diploma in agriculture at the University of Manitoba (UM) to learn more about operating a farm. After graduating from the agriculture diploma program last year, he enrolled in the agribusiness degree program at the UM to gain a stronger understanding of how to manage the business side of the farm. Once he completes his education, George hopes to go back to the farm to work with his dad on implementing more sustainable practices, so they can continue to produce food while doing their part to maintain and improve their land.

Nicole Jonk Bruxelles, MB



Raised on her family's potato and grain farm near Bruxelles, MB, Nicole is a third-year agronomy student at the UM. From a young age, Nicole knew she wanted to pursue a career in crop production. A major focus for her family farm has always been soil and environment conservation. Witnessing the diverse range of crop management practices, growing seasons, soil and crop care for different crop species piqued her interest in agronomy. After she completes her degree, Nicole hopes to work as an agronomist and encourage farmers to incorporate sustainable practices within their farm management plans. She hopes to make an impact not only in crop production practices, but also on the health and sustainability of soil and our environment.

Jada Ricard Baldur, MB



Jada was raised on a dairy and grain farm and joined her local 4-H club when she was eight. She has been involved in agriculture since she was young, but it wasn't until pandemic restrictions forced her to complete her final year of high school from home, where she chose the diploma in agriculture program on a whim, that she knew she wanted to work in agriculture. The decision changed the course of her life. She will graduate with her diploma in agriculture from the UM in October 2022, and hopes to continue her learning in a bachelor of science (agribusiness) program with advanced entry to the UM in Fall 2022. After she completes her education, Jada hopes to return to her family farm with new knowledge of farm business and poultry management to start a new enterprise and investigate starting a layer facility in their old dairy barn.

Joelle Little McConnell, MB



Joelle grew up on her family's grain farm where she earned her allowance cleaning bins and doing chores around the farm. As she got older, she began running equipment and accompanying her mom scouting the fields. This is when she developed her interest in crop development. Joelle is a third-year student at the UM majoring in plant biotechnology. After experiencing the 2021 drought working as a summer student, Joelle saw firsthand how hot, dry summers can be disastrous for crops yields. She hopes to be a part of a solution for this in the future. Once she completes her degree, she plans to pursue a career in crop development research, ideally focusing on genetics-based drought and heat tolerance.

Simon Hodson Lenore, MB



Simon's passion for agriculture began at a young age growing up on his family's cattle and grain farm. He spent his summers working on the farm learning all about cattle and crop production, where calving became one of his favourite seasons. Working with a variety of field crops, including corn, canola, soybean, wheat, barley and rye, made Simon curious about crop production. He is in the second year of his agronomy degree at the UM. His passion for sustainable agriculture is his motivation for researching innovative solutions that benefit the agriculture industry. Upon completing his degree, Simon intends to pursue a career in agronomy and work with farmers to help them achieve high-yielding crops that are quality products year after year.

Taylor Mutch Crystal City, MB



Agriculture has always been a part of Taylor's life. Some of her earliest memories are of riding in the combine with her father or grandparents on her family's grain farm where she was raised. After school and in the summers, she helped her dad on the farm, which is where she learnt her appreciation for the hard work and dedication it takes to be a farmer. Taylor is in her third year at the UM studying agronomy. She was drawn to agronomy because she wanted to study agriculture on a scientific level to better understand how crops grow and how the decisions made by farmers impact the growth of their crops. After graduating, Taylor hopes to take on an agronomic advising role, working in fields assessing crops and advising farmers on the best course of action to get the most out of their land.



Resistance roundtable

Weed management isn't as straightforward as it used to be

By Alison Inglis
*Public Relations Specialist,
freelance*

Farmers have gotten used to a fairly straightforward system of weed management where they spray herbicides, weeds die and they move on. But as resistance continues to become more prevalent, that straightforward system is getting more and more complicated.

The community of weed scientists on the Prairies is small, but mighty. We sat down with four of them to talk about weed ecology, herbicide resistance and the power of collaboration.

Photo courtesy Eric Johnson





Breanne Tidemann is a weed scientist in weed science and field agronomy with Agriculture and Agri-Food Canada (AAFC). Breanne lives in Blackfalds, AB, with her husband and their two little boys. She is an avid reader and enjoys crocheting and playing violin.

[@breannetidemann](#)



Eric Johnson is a research officer in the Agronomic Crop Imaging Lab at the University of Saskatchewan. He lives in Battleford, SK, with his wife Trish, and commutes to Saskatoon for work when required. Johnson enjoys gardening, golfing and curling, and told us he is going to have to develop more hobbies as he is nearing retirement.

[@ericusaskweeds](#)



Shaun Sharpe is a research scientist at the AAFC Saskatoon Research and Development Centre. Sharp and his wife live in Saskatoon with their dog and cat. They enjoy spending free time with their rescue horses, and Sharp is a gamer when he has the time.

[@shaunsharpe9](#)



Charles Geddes is a research scientist in weed ecology and cropping systems with AAFC. Geddes lives in Lethbridge, AB, with his wife Crystal and their two kids, Olivia and Adam. As a family, they enjoy camping in the summer, and Geddes plays the violin and guitar. Ask him about the hop variety experiment going on in his backyard.

[@charlesmgeddes](#)

Charles Geddes's research is focused on the discovery of new herbicide-resistant weed biotypes that exist on the Prairies. They monitor for biotypes to determine the impact of that herbicide resistance, and develop integrated management strategies specifically targeting those biotypes. Collaborating with other weed scientists to test at various locations across Western Canada gives them more control over the accuracy of their treatments and the results.

Eric Johnson adds that "by working together, we can learn how consistent the practices we are evaluating are, and how robust the hypotheses we are testing are to gain an understanding of the variability between environments. It's important to conduct experiments in different locations and environments across the Prairies."

Johnson is also a member of the Resistant Wild Oat Action Committee, a group focused on raising the profile of resistant wild oats and developing farmer-led solutions to manage herbicide-resistant wild oats. The committee is composed of 12 members, including farmers, agronomists, industry, and research and extension people, working together to develop herbicide-resistant wild oat management solutions for farmers.

Collaboration is critical in weed science. "If we were competing for funding or for projects, our work would get spread out, become very localized and would not have the same reach or impact it does when we work together," explains Breanne Tidemann. "We often share each other's results when we are talking with farmers or industry. I very seldom give a presentation that I'm not including data from one of the other weed scientists, and vice versa."

Tidemann's area of focus is integrated weed management strategies and her research is focused around alternative weed management strategies in conventional cropping systems. "We are trying to determine additional management strategies farmers can utilize to help reduce the reliance on herbicides, and manage the selection and evolution of resistant weeds."

Collaborating with farmers is equally as important. "It's very beneficial to be able to go to the farm and work with farmers to learn what issues they are dealing with and where they are severe, and to be able to look at all the factors in the local environment," explains Shaun Sharpe. "Every farm is different. What works in one area may not work in another. Being able to work with farmers and encompass as much diversity as possible is beneficial to our work."

Sharpe emphasized the importance of two-way communication with farmers. "We work for Canadian farmers. Feedback from farmers helps us understand what the major issues are that they are going to face on their farm so we can help. A lot of the time, that communication is either happening through commodity organizations or through agronomy extension and collaboration."

The underlying goal of research is trying to solve issues farmers are dealing with directly. "From our ongoing work, the results we are seeing and the impact that those results are going to have on the farm is going to be a huge return on investment for farmers," says Geddes. "I think continuing with the level of involvement that farmers have had funding research in this area is extremely important, so they can continue to see those benefits."

Herbicide resistance is not going away. "I couldn't tell you which weed scientist said it first, but we are not going to spray our way out of resistance," adds Tidemann. "Monitoring what resistance we've got, where it is and how we deal with it is very important for farmers moving forward."

Visit mbcropalliance.ca for more information on our research program.

Wheat levy delivers

Recent study shows strong returns for western Canadian farmer investments in wheat breeding

By **Delaney Seiferling**

Communications Specialist, *Cole's Ag*

A good return on investment (ROI) is generally considered to be at least seven percent per year.

So, if you had the option to invest in something that provided returns of more than three times that, would you consider that a good deal?

That is the question now posed to western Canadian wheat farmers, who each year invest in the future of their farms by paying check-off fees to their provincial wheat commissions in Saskatchewan, Alberta and Manitoba. Together, those three wheat commissions form the Canadian Wheat Research Coalition (CWRC).

Last year, CWRC (who), the Western Grains Research Foundation (WGRF), and the Saskatchewan Winter Cereals Development Commission began working together on a study to quantify the benefits of wheat breeding investments in Western Canada in the last 27 years.

The study, led by well-known agricultural economics researcher Richard Gray of the University of Saskatchewan, looked at the history of western Canadian investments in varietal research and development to determine the measurable gains from these in relation to farmer and public investments.

The most notable takeaway from the study, says Gray, was conclusive data showing that for every \$1 of farmer investment in wheat breeding in the last 27 years, farmers have received \$32.60 in benefits (even after accounting for the time value of money). These investments may come in the form of provincial levies or funding from WGRF.

This proves just how strong an investment wheat breeding is for farmers, Gray says.

"I would challenge them to find any other investment on their farm as close to that rate of return."

The final study also showed a cost-benefit ratio for the total investment in varietal development (combining producer and taxpayer investment) of 35:1.

Using another method to measure this, the internal rate of return for farmer investments in varietal development is also extremely high relative to most investments at 33.1 percent. To put this in perspective, this is equivalent to having a bank savings account that earns 33.1 percent interest or nearly doubles in value every two years.

Farmer directors from the western Canadian wheat commissions say this report provides valuable insight into their past investments.

"This report highlights the incredible success of Canada's wheat breeding programs over the past few decades," says Jake Leguee, vice-chair of SaskWheat. "This is a tremendous rate of return."

"It's important to revisit the economics of farmer investment in breeding efforts," says Fred Greig, past chair of Manitoba Crop Alliance.

"It's important to revisit the economics of farmer investment in breeding efforts."

—
Fred Greig
past chair of MCA

"Current information will allow CWRC and wheat commissions the ability to affirm our investment strategy and/or adjust it to better utilize farmers' hard-earned dollars. We often quote the multiplication effect from previous studies, but new information will certainly give our farmers more confidence in our investments on their behalf."

This report also provides the western Canadian wheat commissions with guidance for future investment strategies, says Jason Lenz, vice-chair of the Alberta Wheat Commission.

"This study clearly shows that continuing to enhance our wheat breeding capacity and maintaining funding relationships will be key to ensuring the continued success of

farmer investments in varietal development into the future."

About the report

What makes the 32.6:1 rate of return number even more impressive is that it only accounts for gains that come from genetic yield improvements and not improvements in agronomic practices over the same period, Gray says. "This is a conservative estimate."

But if these less tangible benefits were included, he says the estimated rate of return would be even higher.

"Our measure is conservative because we don't include many other potential benefits," he says. "It provides a very defensible estimate because we can measure it accurately."

Measuring for the benefits of yields alone is also an easier sell for farmers, he says.

"Wheat yields are something that everybody sees," says Gray. "They understand that the new varieties are better than the older varieties, yielding better, and yields are not as dependent on environmental conditions."

Another important note regarding the final ROI numbers is that they are based on the returns being cumulative, says Gray.

This means that if wheat yields are going up almost one per cent annually, and producers are paying about 0.5 per cent of the gross revenue, after one year there would be a one per cent increase in yield, but after five years, the increase would be five per cent.

For example, the final report shows that the producer-funded investment costs, at less than 0.5 per cent of gross sales, were dwarfed by the yield benefits, which after a 10-year delay accumulate about one per cent of gross sales per year between 2004 and 2020.

This is also why previous studies had lower rates of return, Gray says.

"They didn't have sufficient time to capture the benefits from the research. If it takes 10 years to get something out of the pipeline, after which you're accumulating gains, you need many years of accumulation to show the size of that stream," he says.

The 10-year lag also means that for the next period of breeding, 2022-29, even if producer funding ended, yields would continue to increase for another decade due to the work that has already been done and the varieties already in the breeding pipeline.

Future funding for

BARLEY BREEDING

A 2021 study quantifies just how much value farmers get from their barley levy investments

Originally published in SaskBarley's The Barley Bin magazine.

By Leeann Minogue
Freelance writer

The future funding of barley breeding programs in Canada has been in the spotlight following the value creation/capture consultations initiated by Agriculture and Agri-Food Canada in 2018-19.

SaskBarley asked agricultural economist Richard Gray to look at Western Canadian farmers' spending in this area. Gray and his co-researchers, Katarzyna Bolek-Callbeck and Jillian Brown, were asked to find out what kind of return farmers get from levy

dollars spent on barley breeding.

This type of research might sound familiar. Richard Gray has spent much of the last decade studying the economics of research. He's developed methods to calculate what share of returns from crop research actually ends up in farmers' hands. Gray uses conservative estimates for his calculations, he says, including "numbers that producers can verify themselves." Gray has done similar work looking at research investments for other crops. However, as barley growers know, barley is a little different, as maltsters and brewers are often slow to adopt new varieties."

What's the return?

To estimate farmers' return on investments in barley breeding, Gray and his co-researchers first calculated how much farmers spent on breeding research from 1995 to 2020, through levies paid on barley sales. A levy of \$1.06/tonne on Saskatchewan barley doesn't seem like enough to make a difference, but when levies across the prairies are totalled over 25 years, the

investment reaches \$51.5 million (in 2019 dollars).

Next, they calculated what farmers got back. Farmers' returns from breeding research come mainly from higher yields. Because it takes 10 years to get a new variety from the lab to the field, Gray and his coresearchers looked at varieties released from 2005 to 2019. Then, they forecast these increases out another 10 years, to consider a 25-year period. Based on estimated adoption rates for new varieties, they used these yield increases to calculate the total increase in production. With average and forecast prices, they put a dollar value to these gains. When they multiplied increased production by prices, farmers' gains came in at \$1.360 billion over the 25-year period (again, in 2019 dollars).

With a \$1.360 billion revenue increase from an investment of \$51.5 million, the ratio of farmers' benefits to costs is 26. That is, for every \$1 invested, \$26 is returned to farmers through increased barley yields.

Continued on next page

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Why don't we double down?

With an investment paying out returns like this, the question that comes to mind is "why aren't we investing more?" "There are benefits to doing a lot more than we're doing now," Gray says. "It's a little frustrating." Western Canadian farmers currently spend about one-sixth of one per cent of gross barley revenue in research and breeding. "Farmers could benefit a great deal from investing more," Gray says, "yet here we sit."

For a mental picture, Gray suggests imagining getting every barley producer in Western Canada together. "You'd have to go to an arena," he says.

Then, in the front, imagine every Western Canadian barley breeder. There are five. That's right, five researchers do all of the barley breeding for all of Western Canada. There are three in Lacombe, Alberta, at the Field Crop Development Centre, one in Saskatoon at the Crop Development Centre (who also works on oats), and one at the Agriculture and Agri-Food Canada (AAFC) facility in Brandon, Manitoba.

Are we competitive?

The study commissioned by SaskBarley, titled "Barley Breeding in Canada – A Path Forward," also compared Canadian investments in barley breeding with competitors' breeding investments. Australia, they found, spends almost 10 times more than Canada, with funding coming from Australian barley growers. Australian yields are lower than yields in Western Canada, but they are increasing steadily. Over the past 40 years Australia has moved from publicly funded research to research funded primarily by farmer royalties.

In France and Germany, barley breeding funding comes mainly from private companies and so is difficult to assess. Based on the number of breeders in Germany, the authors concluded that Germany spends more than Canada, and Germany has seen some yield

increases in recent years. Production in France has remained relatively constant.

Going back to the visual image of Western Canada's five barley breeders, Jason Skotheim, Saskatchewan farmer and outgoing Director of SaskBarley points out that these five scientists are "really hitting above their weight." Under their watch, Western Canadian barley yields continue to increase – and maintain a global reputation as a premium product – while the agronomics of barley keep improving, keeping barley relevant in Saskatchewan crop rotations.

"The value proposition that research presents to producers is significant"

—
Jason Skotheim

Outgoing Director of SaskBarley

How do we sell new varieties?

As barley growers know, once malt buyers find a variety they like, they're reluctant to try something new, even when new varieties offer farmers higher yields and better agronomic traits. This complicates investments in barley breeding. Some high-quality varieties are passed over by maltsters and never catch on. Gray considered this problem as part of the research study. He found that if farmers could always grow the top-yielding varieties, the benefit/cost ratio of breeding research could reach as high as 50, approximately doubling current returns on breeding investments.

In this situation, there is a potential danger to releasing too many new

varieties. "We don't want a lot of 'me too's,'" says Jason Skotheim, "where a variety is one or two percent better in a single category. We'd rather have fewer varieties, because then it sends a clear signal to the supply chain." SaskBarley is working in this area, Skotheim says. "We've been doing a lot of market development work to try to get our market to understand that we need higher levels of churn in the varieties we grow."

The rise of craft microbreweries and the "buy local" movement present opportunity in this area. Local buyers for niche markets could provide a market for new, high-yielding varieties that are not accepted by large-scale maltsters.

What's in the future?

Future public funding for barley breeding research is uncertain. AAFC has sent signals that investment in variety development will be pulled back, and COVID-19 may further impact future government spending. In the fall of 2018, AAFC held a series of public consultations on new "value creation" models, or new ways to fund breeding research. These consultations included barley alongside other cereals, without special consideration for the effects of malt selection. There were no clear results from these consultations.

In this environment, Gray's study concludes that farmers should be confident that their levy payments have resulted in higher profits, and should dedicate more check-off funding to barley breeding programs. Gray says, "The biggest question is, 'Why not do more?'"

SaskBarley recognizes those returns and allocates over 70% of its annual budget to research with a significant portion of those dollars in variety development, with an aim to continue developing exciting and high-yielding barley varieties, Skotheim says.

"The value proposition that research presents to producers is significant," says Skotheim.

"Every farmer should be leaving their check-offs with the crop commissions."

How effective are PGRs?

We conducted research to determine how they affect spring wheat quality and FHB resistance

By Ashley Ammeter

Agronomy Extension Specialist – Cereal Crops, MCA

In Manitoba cereal crops, lodging can be a major production challenge, especially in high-yielding environments. Plant growth regulators (PGRs) are products that can modify plant growth and development. By altering hormonal activity within the plant, PGRs can help prevent lodging by producing shorter, thicker stems. While the performance of PGRs and the most effective circumstances in which to use them has been studied, the effects of PGRs are complex, so an understanding of potential secondary effects is important.

In the 2022 season of our Research on the Farm program, Manitoba Crop

Alliance (MCA) will continue to study the agronomic impact of PGRs in both wheat and barley, on the real, working farms of farmer members.

In addition to on-farm research quantifying the agronomic and economic impacts of PGR use, MCA has supported two research studies that explore the potential impact of PGR use on spring wheat end-use quality and susceptibility to Fusarium head blight (FHB).

Evaluation of the role of PGRs on FHB infection

Research completed by Anita Brûlé-Babel and Young Lee at the University of Manitoba has explored

the impact of PGRs on FHB infection in spring wheat.

The presence of a semi-dwarfing gene within a variety reduces plant height, but can also result in an increase in the frequency of anther retention in the spike. Trapped anthers act as an ideal environment for FHB infection. As a result, many semi-dwarf wheat varieties grown on the Canadian Prairies may have an increased susceptibility to FHB infection. Since PGRs can affect similar hormonal pathways as semi-dwarfing genes, there is a risk that PGRs can also increase FHB infection.

"High moisture conditions that are conducive to FHB infection are often conditions that can lead to lodging" says Brûlé-Babel.

"PGRs have become one of the tools for managing lodging risk of high-yield wheat varieties under intensive management. We wanted to find out whether applying PGRs to reduce lodging risk would increase risk of FHB."

To determine the effect of PGRs on FHB infection, field experiments were conducted in Winnipeg and Carman in 2019 and 2020. Five spring wheat varieties that varied in plant height, semi-dwarfing gene, FHB resistance and end-use class were used (*Table 1*) along with two PGRs (Manipulator™ - AI: chlormequat chloride, and Ethrel™ - AI: ethephon). To ensure adequate presence of FHB, plots were sprayed with *Fusarium graminearum* inoculum.

Continued on next page

Table 1: Five spring wheat varieties used in field experiments conducted in Winnipeg and Carman, MB, in 2019 and 2020, with wheat end-use class, height, FHB resistance level, and the presence of semi-dwarfing alleles.

Cultivar	End-Use Class ^a	Height (cm) ^b	FHB Resistance ^c	Semi-Dwarfing Allele (Rht-B1 or Rht-D1) ^d
AAC Tenacious	CPSR	Tall (101)	R	None
AAC Penhold	CPSR	Short (71)	MR	Rht-D1b
AAC Brandon	CWRS	Intermediate (81)	MR	Rht-B1b
AAC Cameron	CWRS	Tall (94)	I	None
Prosper	CNHR	Intermediate (84)	I	Rht-B1b

^a CPSR = Canada Prairie Spring Red, CWRS = Canada Western Red Spring, CNHR = Canada Northern Hard Red

^b Plant Height, from Seed Manitoba 2018

^c FHB Resistance Level where R = Resistant, MR = Moderately Resistant, I = Intermediate

^d Information sourced from Dr. Santosh Kumar – Agriculture and Agri-Food Canada

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Based on these experiments, Ethrel™ was shown to reduce plant height by an average of 5 cm, while Manipulator™ reduced plant height only slightly (Figure 1). Due to drought conditions during these field experiments, plants were shorter than normal.

Several traits were measured to determine the extent of FHB infection, including levels of the mycotoxin deoxynivalenol (DON). No difference was observed in DON content between plots that were not treated with PGRs and those that were treated with either Manipulator™ or Ethrel™ (Figure 2). Similar trends were observed for other FHB-related traits. Use of PGRs was found to not significantly affect yield (Figure 3).

In terms of what this means for farmers, Brûlé-Babel advises "our research has shown that the two PGRs tested did not significantly affect FHB in the field. Therefore, farmers could select varieties with the best FHB resistance with less emphasis on plant height, and use PGRs to control lodging risk under high-moisture conditions."

Quality analysis of spring wheat treated with a PGR

Management decisions made throughout the growing season can have a major impact on the quality of wheat produced on Manitoba farms. MCA collaborated with Cereals Canada on a two-year study to evaluate the quality of wheat, flour and end-products of spring wheat varieties treated with a PGR.

"Customers look for key quality attributes in the production of various end-products including bread, baked goods, pasta and noodles" says Elaine Sopiwnyk, vice president technical services with Cereals Canada. "Research like this PGR project is critical to ensuring the needs of customers are met."

As part of MCA's Research on the Farm program, seven spring wheat varieties were grown at 21 on-farm locations across Manitoba during 2019 (AAC Brandon, AAC Cameron VB, AC Cardale, SY Rowyn, Faller) and 2020 (AAC Brandon, AAC Redberry, AAC Starbuck VB, Faller). At each location, the chosen variety was grown under two treatments: a single application of Manipulator™ or an untreated check.

Wheat samples were graded, with most samples graded as either No.1 or No. 2 CWRs

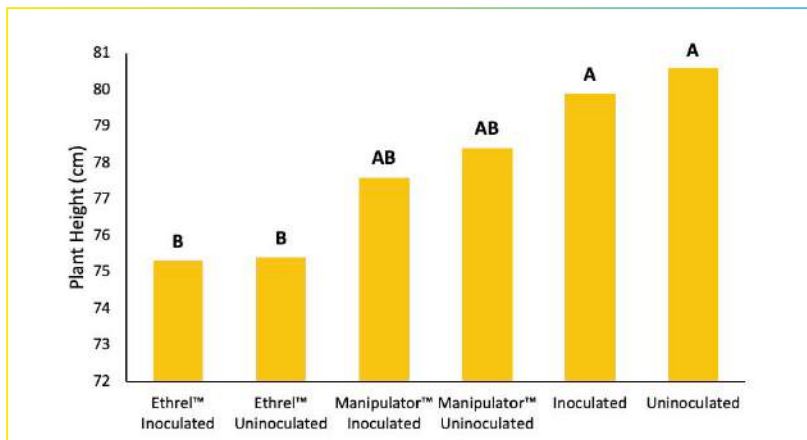


Figure 1: Mean plant height across five varieties and four growing environments. Similar letters indicate there is no significant difference between treatments (at p=0.05 based on the Tukey means comparison test).

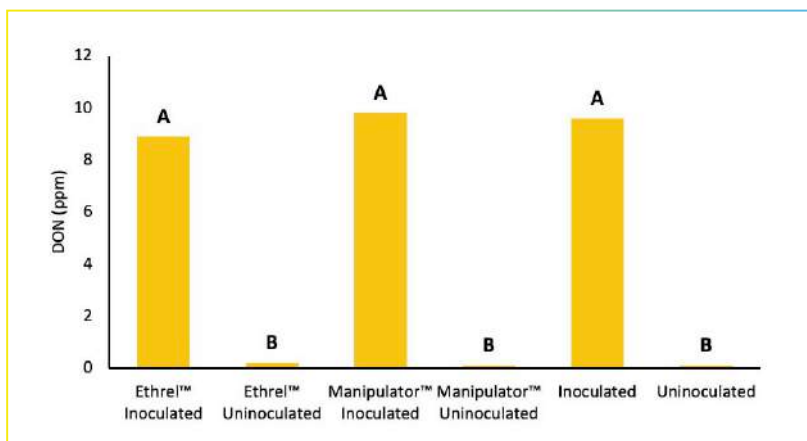


Figure 2: Mean deoxynivalenol (DON) content across five varieties and four growing environments. Similar letters indicate there is no significant difference between treatments (at p=0.05 based on the Tukey means comparison test).

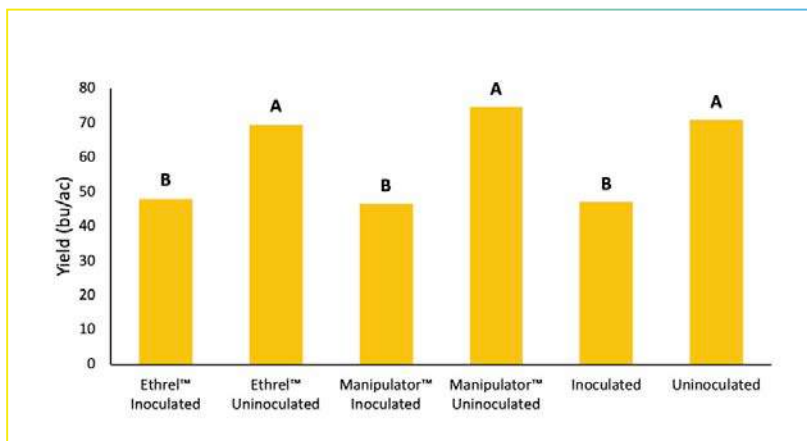


Figure 3: Mean yield across five varieties and four growing environments. Similar letters indicate there is no significant difference between treatments (at p=0.05 based on the Tukey means comparison test).

or No. 1 CNHR. The main factors contributing to downgrading were the presence of hard vitreous kernels (HVK) or fusarium damage.

To assess wheat quality, tests including an analysis of wheat protein content were carried out. This study found that protein content of wheat samples treated with Manipulator™ was similar to that of the untreated samples (Figure 4).

Flour quality was also considered. No significant difference in flour yield was found between treated and untreated samples (Figure 5). In addition, PGR treatment had a minimal effect on gluten strength, a characteristic upon which variety had a larger impact.

Importantly, end-product testing also revealed that the use of PGRs had minimal effects on flour baking performance and bread quality. Using the no time dough (NTD) baking procedure, researchers were able to assess features such as bread quality, crumb structure and loaf volume (Figure 6).

Overall, this study shows that wheat, flour and end-product quality are not affected when wheat is treated with PGRs. "Having the knowledge that crop protection products do not compromise the high quality of wheat that Canada is known for can give farmers peace of mind when making decisions regarding what crop protection products to use on their farms," says Sopiwnyk.

Note: Moddus™ (AI: Trinexapac-ethyl) is another PGR that is available for use in spring wheat. It was not tested in these trials, so it is unknown how it may impact FHB infection or wheat quality.

Resources

Factsheets on this research are available on our website:

https://mbcropalliance.ca/assets/uploads/images/MCA_factsheet_PGR_quality_FINAL.pdf

https://mbcropalliance.ca/assets/uploads/images/MCA_factsheet_FHB_PGR-1_FINAL.pdf

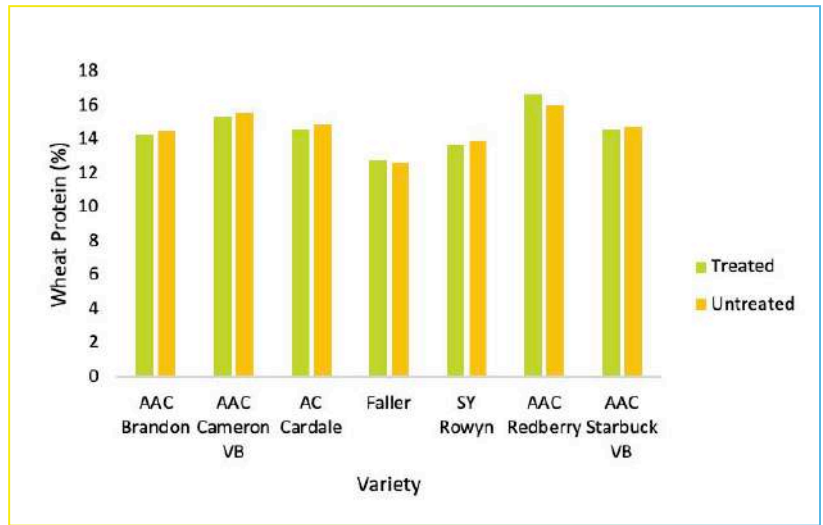


Figure 4: Mean protein content of Manipulator™-treated and untreated varieties. Results for AAC Brandon and Faller are a two-year average.

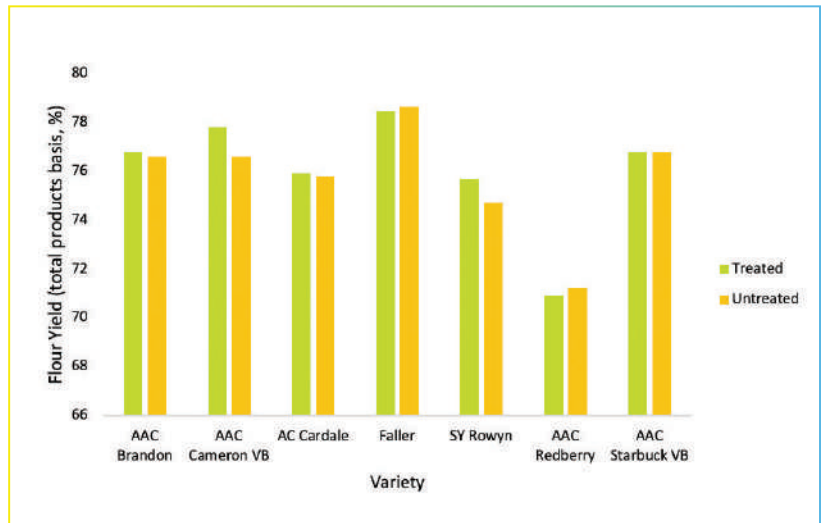


Figure 5: Mean flour yield (total products) of Manipulator™-treated and untreated varieties. Results for AAC Brandon and Faller are a two-year average.



Figure 6: Bread baked using the no time dough baking procedure. Left: Internal crumb structure of AAC Brandon, treated with Manipulator™. Middle: Internal crumb structure of AAC Brandon, untreated. Right: untreated (left) vs. treated (right) loaf comparison of AAC Brandon.



Don't get caught **SHORT**

How to deal with the threat of herbicide shortages this season

By Ashley Ammeter

*Agronomy Extension Specialist
— Cereal Crops, MCA*

Rising herbicide costs and supply chain issues may create challenges around herbicide applications this season. Herbicide prices have risen significantly in the past year and recent announcements indicate there may be shortages in the spring. These shortages may require careful consideration of the management practices that will be most effective on your farm.

Integrated pest management (IPM)

Field history and scouting are important when making pre-burn decisions. Scout fields for weeds and consider field history to determine weed pressure. Fields that are known to have higher weed pressure may need to take priority if herbicides are limited.

In addition to scouting, multiple strategies can be used to improve the crop's ability to compete with weeds. All crops have a "critical weed-free period," the window during which crops are most susceptible to weed competition for resources. For spring cereals, the critical weed-free period is the 1-3 leaf stage.

Flax does not have a defined critical weed-free period, but due to its non-competitive nature, best practice is to keep the crop weed free until canopy closure. Sunflowers close canopy quickly for a row crop, so the typical critical weed free period is about four weeks from emergence until row closure. Corn is similar in timing, depending on the environment. It is good practice to consider emergence until V6 (six leaf collars) the critical weed-free period in corn. In all crops, it is important to keep weed pressure low until this period has passed. Weed emergence after this period has a reduced impact on yield, as the crop will have the competitive advantage. Spraying early has an added advantage: generally, the weeds are smaller, so lower herbicide rates can control weeds.

Increased seeding rates can also be used to improve crop competitiveness with weeds. For cereals, a target of 250-400 seeds/m² is adequate to provide weed competition. In flax, increasing seeding rates from 400 to 800 seeds/m² can reduce weed biomass production by half. This is not an effective option for weed control in row crops like corn and sunflowers.

Row spacing is another tactic that can be considered to improve crop competitiveness and provide an advantage

against weeds. Reducing row spacing speeds up canopy closure, which will reduce the ability of weeds to compete for resources. In a noncompetitive crop like flax, narrow row spacing can increase crop biomass production and yield.

Herbicide alternatives and tank mixes

Farmers may need to prioritize some fields for pre-burn spray applications. Fields with higher weed pressure may require higher rates of glyphosate, or the inclusion of a tank mix partner. The addition of a tank mix partner can be useful for improved weed control, managing herbicide resistance and reducing the rate of glyphosate needed.

Always consult the product label for recommended herbicide rates, as it is not advisable to reduce product rate below these guidelines. This could lead to reduced efficacy and increase the risk of polygenic herbicide resistance. Lower rates of glyphosate may require application adjustments, such as lower water volumes and the addition of a non-ionic surfactant, which can increase the ability of glyphosate to penetrate the plant cuticle. If glyphosate is used with a tank mix partner, higher water volumes may need to be maintained.

It is also valuable to contact your retailer and confirm the status of any pre-order herbicides. If certain herbicide active ingredients are not available, growers should consider alternative plans. In these considerations, crop tolerance, weed spectrum and re-cropping restrictions should be factored in. If there are limited glyphosate supplies, growers will need to re-balance their herbicide program and decide if glyphosate should be reserved for Round-Up Ready crop acres or if it is needed for pre-burn applications. These decisions will be field specific, based on the weed spectrum, resistance management and re-cropping restrictions. The Manitoba Guide to Crop Protection contains herbicide selection charts to help growers consider herbicide options for different weed spectrums in various crop types.

Tillage

Tillage can be used to control weeds prior to seeding, however it is important to recognize that moisture will be limiting for many areas in Manitoba this spring. Any soil disturbance can

increase moisture loss and erosion. Additionally, tillage can increase weed seed germination, therefore multiple passes may need to be utilized. The first tillage pass will stimulate weed growth by aerating and warming the soil, the second pass can be used to control weed growth.

Spraying technologies

Increasing spray efficacy is an important consideration. Poor spray water quality can impact herbicide efficacy, and testing water can be an important factor in ensuring good herbicide performance. Spraying speed can also impact herbicide efficacy. In general, slower travel speeds result in more consistent spray deposition and better weed control.

Another consideration to ensure maximum efficacy of pre-burn herbicides is droplet size: finer sprays should be used for tank mixes that contain contact herbicides (group 1, 6, 10, 14, 15, 22, 27) and herbicides that target grassy weeds⁴.

Managing herbicide shortages can be a complex problem. The choice of what

strategy will be most effective must be made on a farm-by-farm, or even a field-by-field, basis. Integrated pest management, alternative products, tank mixes, tillage and maximizing spray efficacy are all approaches that can be taken into consideration. For more information, visit mbcropalliance.ca or see the additional resources below.

Additional resources:

Full article is online at https://mbcropalliance.ca/assets/uploads/images/Strategies-for-Managing-Herbicide-Shortages_FINAL.pdf

Manitoba Guide to Crop Protection

<https://www.gov.mb.ca/agriculture/crops/guides-and-publications/pubs/guide-crop-protection-2021.pdf>

Spray Water Quality

<https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/agribusiness-farmers-and-ranchers/crops-and-irrigation/weeds/water-quality-and-herbicides>

Dealing with Pesticide Shortages in 2022, Sprayers101

<https://sprayers101.com/dealing-with-pesticide-shortages-in-2022/>

Farming without Glyphosate?

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7020467/>

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Grain Marketing Insights

Wheat market experiences extreme volatility



An update on global production and exports

By Leftfield Commodity Research

Russia's invasion of Ukraine has triggered a month of intensely volatile price activity. The moves in futures markets have been the most extreme, but cash values have moved higher as well, both on the Prairies and globally. Russia and Ukraine together represent approximately 30 per cent of world wheat exports, and there is now a great deal of uncertainty on how shipments will be disrupted going forward. This will be particularly felt in fall when the bulk of exports normally move from the region.

Any loss of wheat exports from Black Sea countries compounds risks in other key growing regions. China reported that its winter wheat crop could be the "worst in history," while U.S. winter wheat ratings are poor in several key states. Dry conditions through a good portion of Western Canada going into spring should also be watched closely. While timely rain could improve things, a tight global balance sheet leaves little room for any yield hiccups.

New crop prices for wheat have increased faster than for most other cereals, which may buy in a few last-minute Prairie acres. Even so, spring wheat area may only be up 2 per cent in 2022, as competition for acres is fierce. Yields may also struggle to get fully back to normal after the severe drought in 2021. Total Canadian non-durum wheat production (Table 1) could approach 25 million tonnes this coming season, a sizable rebound, but still below that of other recent years.

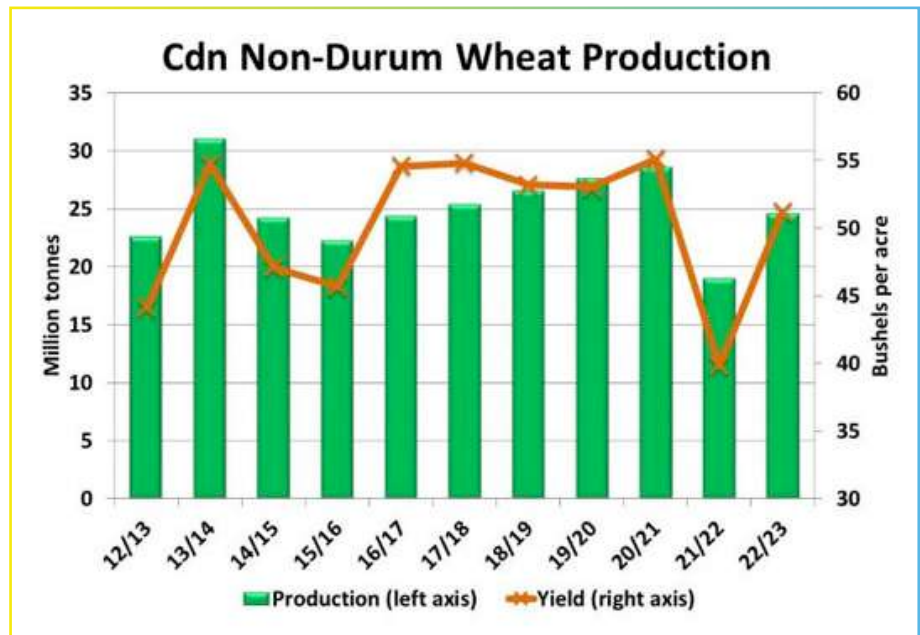


Table 1

Barley getting another boost

Just when the Canadian barley market was starting to calm down, the turmoil in Ukraine gave it another jolt. Record imports of U.S. corn have been able to backfill low feed supplies in Western Canada and maltsters seem to have finally found enough barley to tide them over till 2022/23. Bids for both feed and malt barley turned sideways to lower.

Both Ukraine and Russia are major exporters of barley and that interruption in the trade gave global prices a boost. Countries looking to import barley suddenly had fewer options, with the biggest price reaction occurring in Europe. Old-crop bids in Western Canada only saw a small response, partly because there's not much barley left to buy.

The more noticeable response in Canada was for new-crop bids, with both

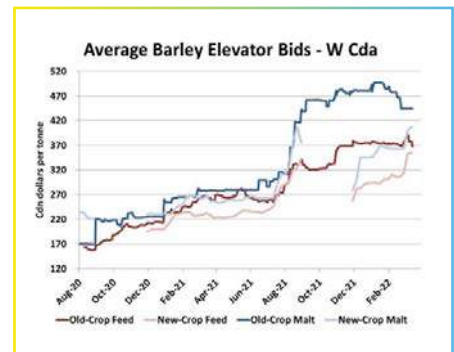


Table 2

feed and malt moving strongly higher. Overseas buyers, mainly in China, have become more concerned about barley supplies from the 2022 crop, especially in Ukraine. As a result, they've started shopping for more barley from other sources, including Canada.

However, this increase in new-crop barley bids (Table 2) may have come too late to stir up much interest in planting barley. A number of sources

are indicating Canadian barley acres will decline in 2022, due to strong prospects for other crops and some disappointment with barley's performance in the 2021 drought. If that's the case, tight supplies will be a feature again in 2022/23.

Corn prices rally ahead of 2022 production year

As with other cereals, corn prices have also strengthened due to the war, as Ukraine is one of four major global exporters. There is a great deal of uncertainty over what Ukraine's production might look like this year, given planting should be starting, and what that means for shipments going forward. This places even more attention on the U.S. balance sheet, both in terms of potentially higher exports overseas in the coming months and the need for good growing conditions this year.

U.S. exports to Canada have skyrocketed this season (Table 3) in response to the extreme tightness in the Prairie feed grain complex. Total commitments have already exceeded 3.5 million tonnes, which is roughly four or five times what would normally be purchased in the average year. However, fresh sales have slowed significantly, reflecting feeders having covered a good portion of their needs, as well as logistical constraints on moving greater volumes.

Canadian corn acres are likely to be relatively flat in 2022 at around 3.5 million, as they tend to fluctuate very little from one year to the next. While a better Prairie harvest overall should prevent the kind of severe feed-grain shortage seen this season, supplies are likely to remain on the tighter side, which in turn should support local bids and keep U.S. imports above what was typically seen prior to 2021/22. However, global and U.S. markets will still be the most important drivers for corn values overall.

Flax trade flows shift

The shortage of flax supplies in North America caused prices here to spike higher this winter, nearly tripling the

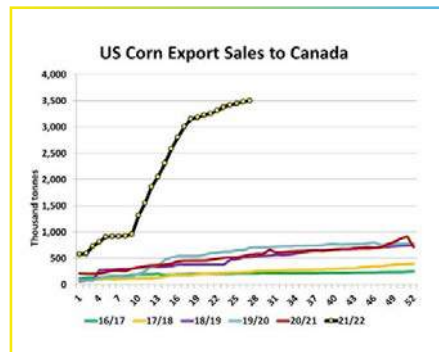


Table 3

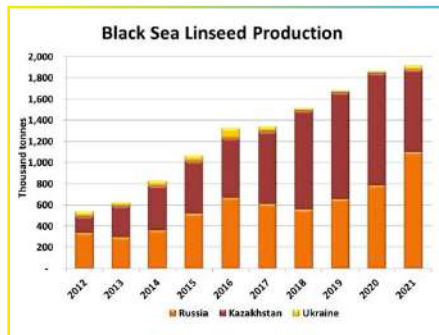


Table 4

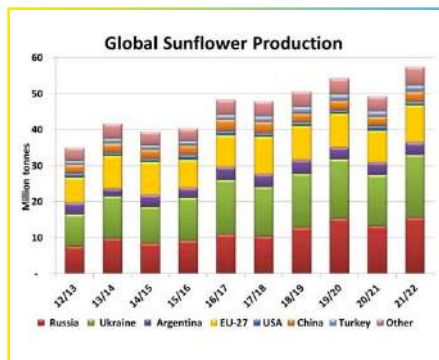


Table 5

previous record. That also shut off most Canadian flax exports to typical destinations in Europe and China so far in 2021/22.

More recently, Canadian prices have turned lower, but the Black Sea conflict is now shaking up the market again. Russian flax exports have been disrupted, especially to Europe, while Ukraine is only a minor exporter. For European flax users that had adjusted to the small Canadian crop, concerns about supplies have once again come to the forefront. Canadian bids have seen a small rebound in response.

If the conflict continues (we hope it

doesn't), the more important outcome would show up in the 2022/23 marketing year (Table 4). Russian flax planting won't likely be affected, but trade with Europe could be disrupted, meaning Canadian exporters would benefit from the return of that market.

With minimal old-crop carryover and uncertainty in other exporting countries, the 2022 crop outlook here is more critical than ever. There's a good chance \$25 new-crop bids will convince farmers to add more acres in Canada and the U.S., but flax is competing against other good-looking alternatives, so the response could be modest. Of course, there's also the unknown of this year's yield.

Sunflower markets face uncertainty

The Russian invasion of Ukraine caused sunflower and vegetable oil prices to jump, but the main impact will depend on the length of the conflict. The biggest concern is how the fighting could delay or discourage planting of spring crops. Ukraine is the world's largest producer of sunflowers, with 30 per cent of the global crop, and Russia is frequently in second place. If the fighting continues through the planting season, global sunflower production would drop sharply.

Normally, North American sunflower markets are somewhat insulated from the global supply situation, but the scale of potential losses in the Black Sea region would likely spill over into North America (Table 5). Bids for both oil and black birdseed sunflowers were already starting to move higher before the conflict, but the latest boost in both old-crop and new-crop sunflower bids can be attributed to this turmoil.

Farmer interest in planting sunflowers was already strong prior to these developments. This latest price move could push 2022 seeded area even higher in Canada and the U.S. Whether that acreage response will ultimately weigh on prices would depend on the strength of the global market.

What About Wheat?

New initiative aims to champion the crop to Canadian consumers

By Alison Inglis

Public Relations Specialist, freelance

Launched in February, What About Wheat, a new initiative aimed at health professionals and consumers, provides up-to-date, science-based wheat nutrition information and showcases Canadian wheat as part of a healthy diet. It tells Canada's wheat story from seed to product, including practices used by Canadian farmers to produce a nutritious and versatile crop while protecting the environment, in an easy-to-follow format.

Addressing Canadians' concerns around healthy grains has been a discussion at both the Manitoba Crop Alliance (MCA) and Cereals Canada board tables for some time. "Farmers want to make sure our customers understand we produce safe and healthy products that we eat and feed our families. We rely on the land and we believe in what we do," says Robert Misko, MCA chair and Cereals Canada treasurer. "Getting involved with What About Wheat? was important for MCA, as it presented another vehicle to address some of the common concerns and misconceptions around wheat nutri-

tion and production, and get as many science-based facts out there."

What About Wheat? is brought to you by the Canadian Wheat Nutrition Initiative (CWNI), composed of MCA, Cereals Canada, Alberta Wheat Commission, Saskatchewan Wheat Development Commission, Grain Farmers of Ontario and Canadian National Millers Association, with support from Synthesis Agri-Food Network. Qualified researchers and registered dietitians make up the Science Advisory Council, which provides unbiased, accurate and timely insights on wheat nutrition research, all in one location: whataboutwheat.ca.

Benchmarking surveys polled dietitians on what information they were missing and what problems they needed solving. They responded that Canadians have concerns around fibre and gut health. Survey results made it clear that the wheat story, from production and milling to final product and nutritional in-

formation, needed to be told in Canada.

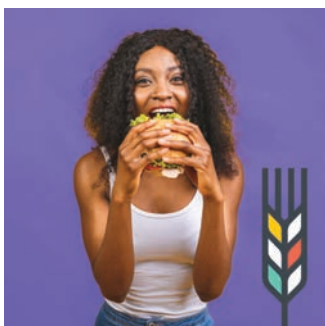
Earlier this year, the What About Wheat? website and social media channels were launched.

"People who visit the website will get a chance to learn what makes Canadian wheat special and why it is sought after around the world for its protein, quality and versatility," says Elaine Sopiwnyk, Cereals Canada vice-president of technical services and member of the CWNI working group. She points to how it is grown and milled as what sets it apart.

"Wheat and flour in Canada are produced by a team of experts — from research scientists and farmers to grain handlers and millers — who follow stringent protocols that ensure food quality and safety."

WhatAboutWheat.ca houses wheat nutrition information, research findings and resources, and will be continuously updated. Nutrition fact sheets and dietitian-focused webinars are among some of the resources in development during 2022.

Follow What About Wheat? on Twitter, Instagram and Facebook, and learn more at whataboutwheat.ca.





We are strengthening our communications program

I am always thrilled to see our Fence Post issues come together, but this one in particular. It's the first one designed by our new communications manager, Cole Christensen, and his team at Cole's Ag Communications. I am excited by the redesign and hope it provides our readers with an engaging format for valuable, timely and relevant information for your farm operations.

Bringing Cole and his team on board has also helped us to work towards a strategic communications plan for the 2022-23 fiscal year. Communicating with farmer members and other MCA stakeholders is a critical component of our work we need to continue to build on. We want to create and implement a strong communications program to achieve our vision, mission and objectives as stated in our recently released strategic plan (mbcropalliance.ca/about/strategic-plan).

As part of MCA's communications plan, we want to recognize the importance of our farmer members' levy dollars. We understand how critical it is to communicate the value of those levy dollars back to you, our farmer members. The objective of our member value campaign will be to communicate the qualitative and quantitative (when available) return on investment for Manitoba farmer members on their levy investments on an ongoing basis, through all of our regular media platforms. Stay tuned for more details on this communication effort.

Research and production programming continues to build momentum. The first dollars committed through our Whole Farm Research program were an-

nounced, funding three research projects beginning in 2022. The total value of this research, which will be conducted over the next five years (2022-27), is \$1,506,047. MCA's contributions to the projects will total \$476,470 over that five-year period. MCA launched the second intake round where we accepted letters of intent (LOIs) in April 2022 for Whole Farm Research projects to begin in 2023.

Our Research on the Farm program is growing, with 13 projects in the following crop types: spring wheat, barley, corn, sunflowers and, for the first time in 2022, flax. There are trial projects for seeding rate and plant populations, evaluating plant growth regulators, fungicide timing, enhanced efficiency fertilizer in wheat, and malt barley variety evaluations. Conducting on-farm research benefits farmer members by demonstrating how products or practices behave on their own farm, on their own land and with their own equipment. By involving farmers in the scientific method, results and conclusions can be drawn from a wider range of environments. Farmer members can sign up for the 2022 season at mbcropalliance.ca/projects/2022-on-farm-research-program.

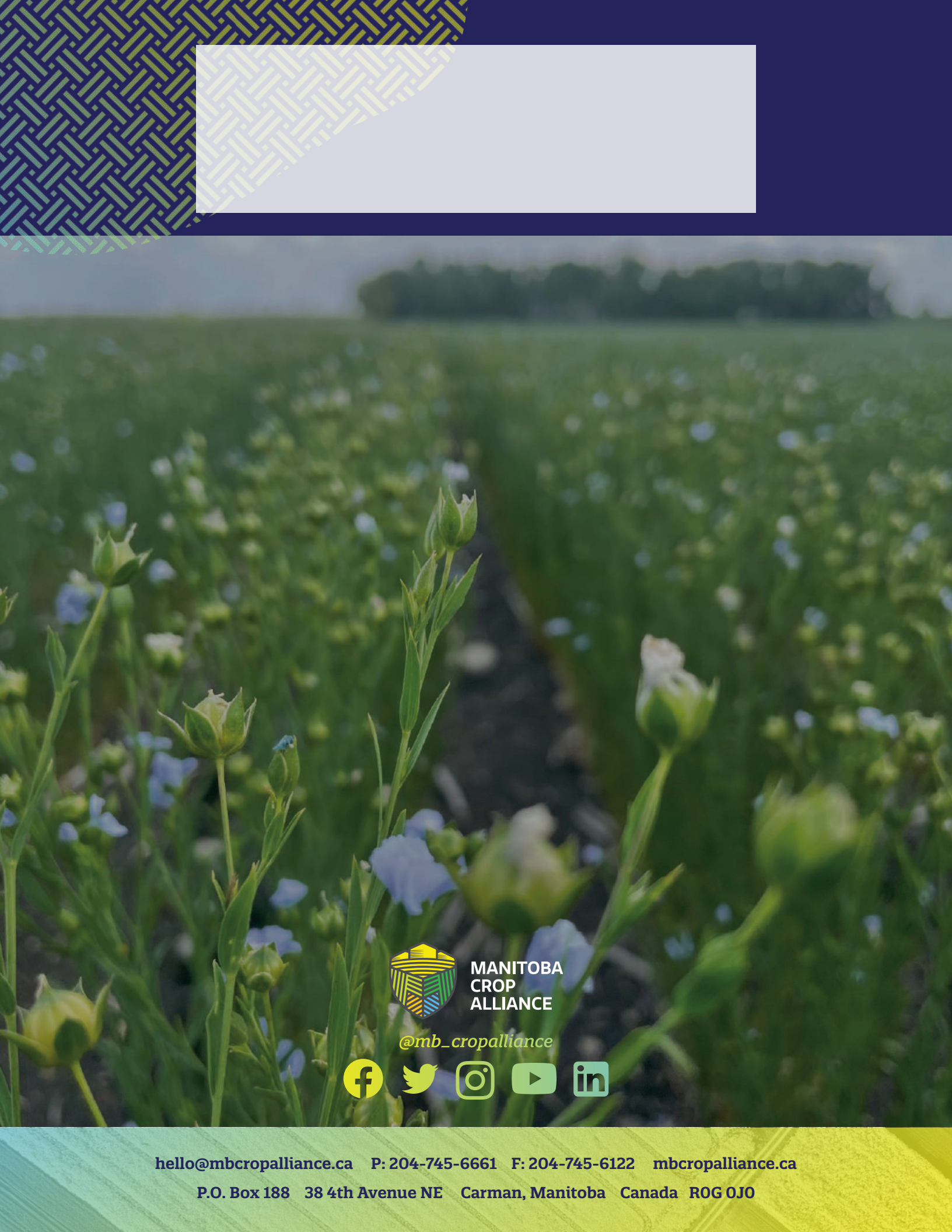
As always, I hope you find the spring 2022 edition of the Fence Post informative and timely. Subscribe to our monthly e-newsletter Heads Up and follow us on Twitter, Instagram, Facebook and YouTube to stay engaged throughout the year. Also, make sure to visit MCA's website mbcropalliance.ca, as it is the heart of our communication activities.

I wish you all a safe and prosperous 2022 growing season!

A handwritten signature in black ink that reads "Pam de Rocquigny".

Pam de Rocquigny
CEO
Manitoba Crop Alliance





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