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GROWERS

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Issue 103 • Spring 2026



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2026 BOARD OF DIRECTORS AND STAFF

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Vice Chair – Brendan Phillips – Hartney
Alex Burgess – Minnedosa
Ben Martens – Boissevain
Robbie Misko – Roblin

Bryce Pallister – Portage la Prairie
John Preun – St. Andrews
Frank Prince – Hartney
Ernie Sirski – Dauphin
Kevin Thompson – Ochre River

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2026 Committees and Representatives

MPSG Committees

The first named is chair.

Executive

M. Rattai, B. Phillips, A. Burgess

Governance H/R

B. Phillips, F. Prince, A. Burgess

Ag Policy & Market Development

B. Phillips, A. Burgess, E. Sirski, J. Preun, B. Pallister, R. Misko, F. Prince, K. Thompson

Finance/Audit

J. Preun, B. Phillips, M. Rattai

Resolutions

R. Misko, F. Prince, K. Thompson

Nominating

R. Misko, F. Prince, K. Thompson

Research & Communications

B. Pallister, F. Prince, B. Martens, M. Rattai, R. Misko, K. Thompson

MPSG Representatives

Canadian Grain Commission Pulse Sub-Committee

K. Thompson

Grain Growers of Canada

J. Preun (B. Phillips Alternate)

Keystone Agricultural Producers:

- Board – B. Phillips
- Delegate – J. Preun

Pulse Canada

B. Pallister, R. Misko

Soy Canada

M. Rattai, F. Prince

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Message from Board Chair

Melvin Rattai, Chair, Manitoba Pulse & Soybean Growers

AS CHAIR OF Manitoba Pulse & Soybean Growers (MPSG), I have the privilege of seeing firsthand how global events quickly influence decisions made on individual farms. As a farmer myself, I know that trade policy discussions and geopolitical uncertainty can feel far removed from day-to-day operations. That is, until they aren't. One thing is certain: Manitoba growers depend on international trade, and we must continue to trade globally and in a big way.

MPSG strongly supports the work of our national partners, Soy Canada and Pulse Canada, who are leading efforts to promote Canadian pulses and soybeans in international markets. We also work closely with Grain Growers of Canada to ensure that specific market access issues facing our sector are clearly identified and addressed. These organizations have been working overtime, and their efforts are critical as global trade dynamics continue to evolve.

Looking ahead, we are hopeful that upcoming trade discussions and coordinated government-industry efforts

will deliver positive outcomes for Manitoba growers. In particular, we are watching developments around Canada-United States-Mexico Agreement (CUSMA) closely, while also seeing important opportunities in the Indo-Pacific region and the European Union. Predictable, rules-based trade and science-driven decision making remain essential to maintaining Canada's reputation as a reliable supplier of high-quality agricultural products.

For Manitoba, our market priorities are clear. They include expanding food-type soybean markets, maintaining and growing opportunities to ship soybeans to U.S. renewable diesel crushers, strengthening dry bean markets both at home and abroad, and supporting market access for products coming from Manitoba's pea protein fractionation sector. Diversifying and defending these markets helps reduce risk and build long-term stability for our farms.

Trade uncertainty also reinforces the importance of strong domestic research and market development. Continued investment

in initiatives such as MPSG's On-Farm Network ensures growers have access to the tools, data and agronomic confidence needed to remain competitive – regardless of market conditions. Innovation on farm and collaboration across the value chain will remain key as trade relationships continue to shift.

While uncertainty is never easy, it highlights the value of strong, producer-directed organizations. By working collectively, supporting our national partners and staying engaged with policymakers, MPSG is helping position Manitoba pulse and soybean growers for resilience today and opportunity tomorrow.

Thank you for your continued support and engagement. Wishing you a safe and successful seeding season. ■

— Melvin

“

Innovation on farm and collaboration across the value chain will remain key as trade relationships continue to shift. ”

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Message from Executive Director

Patti Rothenburger, Executive Director, Manitoba Pulse & Soybean Growers

THIS YEAR HAS begun with strong momentum for Manitoba Pulse & Soybean Growers (MPSG), and I'm pleased to share my first message as executive director. Over the past several months, I've had the opportunity to connect with growers, industry partners and staff. Those conversations have reinforced both the strength of this organization and the opportunities ahead as we move toward a new growing season.

As I step into this role, my focus is on ensuring our work continues to deliver practical value to Manitoba farmers. MPSG's core pillars—research, agronomy, extension, market development, policy and advocacy and public/consumer engagement—guide everything we do. These priorities remain essential as the sector adapts to new pressures, evolving markets and shifting research capacity.

We began the year with our On-Farm Network (OFN) results meeting and appreciation dinner in January, held just ahead of Manitoba Ag Days. The OFN continues to demonstrate the power of farmer-generated data, empowering farmers to conduct simple, reliable research on their own farms. It remains one of MPSG's most important tools for delivering Manitoba-specific information to help growers evaluate practices under real-world conditions and reduce risk.

At Manitoba Ag Days, MPSG hosted our Thursday morning session in the MNP Theatre, where speakers delivered timely, research-grounded insights for pulse and soybean production. These extension efforts, along with our agronomy team's participation in events across the province, ensure our work remains closely aligned with emerging on-farm needs and the questions growers are asking heading into the season.

At Crop Connect, we held our annual general meeting and welcomed Kevin Thompson to the MPSG board. His

background in ag retail, independent agronomy and his family's farm operation gives him a strong understanding of the production realities facing Manitoba's pulse and soybean growers. His field-level perspective will strengthen MPSG's work on behalf of producers. We're also grateful to our returning directors for their continued leadership and commitment. Their experience provides important continuity as we navigate change across the sector.

A central priority for MPSG remains research and innovation. With Agriculture and Agri-Food Canada reducing research capacity and closing several research farms and stations, the focus now is on what future research delivery will look like and how to ensure this important work continues in ways that matter on Manitoba farms. We're working closely with government and industry partners on this transition and on identifying approaches that can maintain strong, regionally relevant research despite these changes. Growers have been clear that they rely on independent, trustworthy information, and MPSG will continue to advocate for systems that protect that.

Another positive development for growers was China's decision to remove tariffs on Canadian peas beginning March 1, 2026. While peas aren't grown on the same scale in Manitoba as in Saskatchewan and Alberta, they remain an important part of crop diversification on many farms. Improved access to this key market underscores the importance of stable, predictable trade relationships and coordinated policy engagement.

This development also reflects the important work of Pulse Canada, where MPSG is an active member. Through coordinated national advocacy, market access efforts and technical support to exporters, Pulse Canada plays a key role in advancing opportunities for Canadian pulses in global markets. MPSG's

membership ensures Manitoba growers have a strong voice at the national table and that prairie-specific priorities are represented in trade discussions and market development initiatives.

Our advocacy efforts have continued through national and international engagement. In January, MPSG board member Frank Prince represented Manitoba growers on the Soy Canada trade mission to China, Taiwan and Japan, strengthening relationships with key customers and reinforcing the reliability of Manitoba and Canadian soybeans. In Ottawa, John Preun represented Manitoba growers during Grains Week with the Grain Growers of Canada, contributing to national discussions at Parliament Hill with politicians on trade, research capacity, transportation and regulatory issues that directly affect Manitoba farms.

I want to sincerely thank Daryl Domitruk for his leadership and steady guidance throughout our transition. His commitment to growers and to building a strong, respected organization has strengthened MPSG's foundation, and I'm grateful for the work he has done to position us well for the years ahead.

As the growing season quickly approaches, there's cautious optimism for pulse and soybean production. I look forward to connecting with many of you at tours and events this summer. Wishing you and your families a safe and successful growing season ahead! Our team at MPSG is here to support you throughout the year. ■

— Patti

Events



Former MSPG Executive Director Daryl Domitruk samples the black bean brownies (L) and chocolate chip and snickerdoodle navy bean cookies (R).

Putting Protein on Your Plate with Pulse Party Snacks

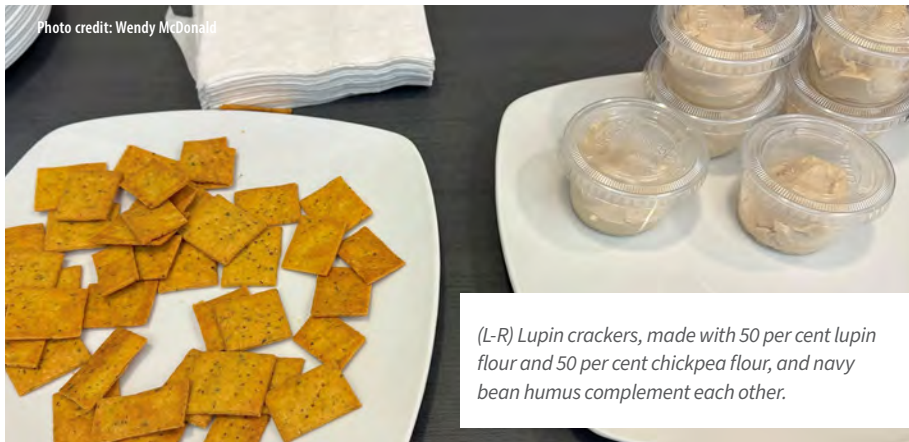
Wendy McDonald, Production Agronomist – West, Manitoba Pulse & Soybean Growers

THE DECEMBER MANITOBA Pulse & Soybean Growers (MPSG) board meeting was held at the Food Development Centre (FDC) in Portage la Prairie. This facility is home to the Product Commercialization, Value Added Branch of Manitoba Agriculture.

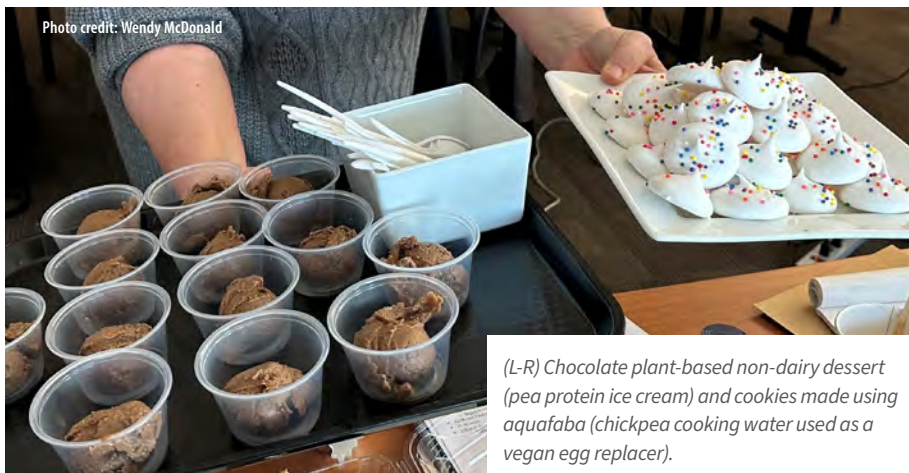
The FDC provides technical and research assistance for agri-food businesses. Using their expert sensory analysis, they can ensure protein-based food products they are working with can be adjusted to achieve the most desirable snacking taste and texture. In addition to testing functionality, nutrition, and market readiness, FDC helps with food product documentation and commercialization.

As part of the meeting, the MSPG board and staff were treated to a tour of the facility and a tasting of new products developed at the FDC.

Below: Product Commercialization Consultant Nona Schultz Ferris gave the MSPG board and staff a tour of the Food Development Centre facility.



(L-R) Lupin crackers, made with 50 per cent lupin flour and 50 per cent chickpea flour, and navy bean humus complement each other.



(L-R) Chocolate plant-based non-dairy dessert (pea protein ice cream) and cookies made using aquafaba (chickpea cooking water used as a vegan egg replacer).



Summer Staff Announcement



MPSG welcomes Bryce Melnick and Grace Thomson as our 2026 summer students.



Grace Thomson

Grace Thomson will be joining the On-Farm Network team as an agronomy assistant this summer. This will be her third year working with Manitoba Pulse & Soybean Growers.

“I’m looking forward to days in the field with the rest of the MPSG team and in my free time camping, hiking and reading,” says Thompson.

Thompson has her Bachelor of Science in Agroecology from the University of Manitoba and is studying for a master’s degree in Environmental Science.



Bryce Melnick

Bryce Melnick will be joining the On-Farm Network team as an agronomy assistant this summer. This will be his second year working with Manitoba Pulse & Soybean Growers.

“I’m looking forward to getting hands-on experience with crop scouting, research plots, and seeing how agronomy plays a key role in improving farm practices,” says Melnick.

Melnick plans to spend the summer outdoors travelling across Manitoba to different research trials. He’s eager to work closely with people who are passionate about agriculture.

MPSG Scholarship Winners



MPSG annually awards two \$1,000 scholarships to University of Manitoba students to encourage them to develop an interest and technical competence in pulse and soybean production, processing and marketing.



Ashlyn Whetter

Ashlyn Whetter is currently studying agriculture with a focus on agronomy at the University of Manitoba. Whetter plans to work rurally and help farmers to have a big impact on the agriculture industry in Canada and globally. She plans to stay involved in the industry beyond work, through volunteer opportunities and attending conferences. Receiving this scholarship has allowed Whetter to continue being a high-achieving student without financial burdens and without having to work during the school year. She’s beyond thankful for donors who support students in their education and contribute to the future of agriculture.



Madeline Vervaeet

Madeline Vervaeet is studying plant biotechnology at the University of Manitoba. Vervaeet, from Winnipeg, has a background in agriculture and mycology. Her academic interests and career aspirations in plant biotechnology and crop protection led her to pursuing a degree in agriculture. Vervaeet has a fascination with plants and mushrooms. She’s excited to receive this scholarship as it helps fund her education. Vervaeet is very grateful for the scholarship.



On the My Soil Test Report, do I add my 0 – 6 inch and my 6 – 24 inch soluble salt values together and use that grand total number for soluble salt when consulting the Iron Deficiency Chlorosis (IDC) field risk chart?

Field risk of IDC based on carbonate and soluble salt soil test levels.

Soluble Salt (mmhos/cm)	Carbonate (%)		
	0 to 2.5	2.6 to 5	>5.0
0 to 0.25	Low	Low	Moderate
0.26 to 0.50	Low	Moderate	High
0.50 to 1.0	Moderate	High	Very high
>1.0	High	Very high	Extreme

My Soil Test Report

Carbonate (CCE)	1.0%
0 – 6"	0.2 mmho/cm
Sol. Salts 6 – 24"	0.6 mmho/cm

Answers can be found on page 29.

Source: Agvise Laboratories

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DRY BEAN
bulletin

MANITOBA
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The Future of Manitoba Pulse and Soybean Research Starts Earlier than We Think

Katharine Cherewyk, Executive Director, Agriculture in the Classroom – Manitoba

THE FUTURE OF Manitoba’s pulse and soybean research doesn’t begin in a lab or a field. It often begins much earlier – in a classroom.

At Agriculture in the Classroom – Manitoba (AITC-M), we work with students from kindergarten to Grade 12 to help them understand where their food comes from and how agriculture fits into their lives. We help young people see that farming, science, technology and the environment are all connected and that agriculture is a place where their curiosity and skills can matter.

This matters because the world they are stepping into is changing quickly.

Across Manitoba, new tools and better soil knowledge are shaping how pulses and soybeans are grown and improved. Technology is helping researchers and farmers gather better information from fields, track how crops perform and respond to challenges like disease pressure, weather variability and changing market needs. At the same time, soil health is becoming a bigger part of the conversation, with more attention on how soil supports long-term productivity and resilience.

Behind all of this is research that takes time. Developing a new pulse or soybean variety is a long process that can take a decade or more from early work to something a farmer can grow. It depends on steady support, strong teams, and people willing to build their careers in this space.

That’s where the classroom connects to the field.

In schools across Manitoba, students are starting to explore the same kinds of questions just at an earlier stage. They might compare how plants grow in different soil conditions, track changes in growth over time or talk with a local grower or researcher about how crops are tested and improved before they ever reach a farm. These activities don’t turn students into scientists overnight, but they do help them

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These activities don’t turn students into scientists overnight, but they do help them begin to think about how agriculture works and where they might fit into it.

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begin to think about how agriculture works and where they might fit into it.

For Manitoba Pulse & Soybean Growers and its members, this is about more than awareness. It’s about people.

Today’s students are tomorrow’s agronomists, plant breeders, soil scientists, data specialists, extension staff, ag-tech innovators and producers. They are the ones who will take on the challenges of climate change, market shifts and new technologies. But many young people never consider agriculture as a career path simply because they don’t see it, hear about it or experience it in a meaningful way while they are in school.

Through classroom resources, hands-on learning, career exploration and partnerships with industry, AITC-M works

to close that gap. We help students see agriculture as a modern, problem-solving sector that needs a wide range of skills from science and technology to communication, business and environmental thinking

Just as stable support is essential for long-term research and variety development, sustained support for agricultural education is essential for developing the people those efforts depend on. If Manitoba is to remain strong in pulse and soybean research, we need to pay attention not only to what is happening in the field and the lab, but also to what is happening in our schools.

Those of you growing pulses and soybeans across Manitoba already invest in the future of the ag sector every season through the crops you grow, the research you support and the land you take care of. Supporting agricultural education is another way that investment supports the industry.

If you are interested in being part of that work, AITC-M welcomes support from growers and industry members who want to help strengthen agricultural education in Manitoba. Whether through partnership, classroom involvement or financial support, there are many ways to help ensure the next generation is ready to step into the future of this sector.

Learn more at
www.aitc.mb.ca ■





Persistence Pays – How Canada Regained Access to China's Pea Market

PULSE CANADA

Jeff English, Vice President of Public Affairs, Pulse Canada

WHEN CHINA IMPOSED a 100 per cent tariff on Canadian peas in March 2025, farmers felt it immediately. Movement slowed, bids weakened and a key outlet for Canadian yellow peas effectively disappeared overnight. A market that growers had supplied reliably for decades was suddenly closed.

China was one of Canada’s most important pea customers. With India largely out of the market in recent years, China took the largest share of Canadian yellow peas from 2018 to 2023, supporting demand and positive returns across the Prairies. Losing that outlet created uncertainty and a massive decline in prices.

Rather than waiting for the situation to resolve itself, the pulse sector moved quickly to push for a solution. Led by Pulse Canada, the focus was clear from day one: restore access and get Canadian peas moving again to restore returns on the farm and across the value chain.

THE IMPACT OF THE TARIFF

The tariff was the result of a broader trade dispute, launched by China in response to Canada’s tariffs on Chinese electric vehicles, steel, and aluminum. While peas weren’t the original issue, they were caught in the crossfire.

The impact was significant. Over the past five years, exports of Canadian peas averaged more than 1.5 million tonnes valued at over \$700 million annually. When that demand vanished, the pressure showed up quickly in basis levels and price signals to farmers.

PULSE CANADA’S RESPONSE

From the outset, the sector viewed the tariff as a problem that required engagement, not escalation. “We believe the tariffs announced represent an invitation to negotiate,” said Pulse Canada President Greg Cherewyk in March 2025.

That approach was possible because relationships were already in place.

Throughout 2023 and 2024, before the tariff was imposed, Pulse Canada was working in China to reinforce Canada’s reputation as a reliable supplier and to establish the Canadian yellow pea as a preferred raw ingredient.

As Pulse Canada Chair Terry Youzwa noted at the time, “China is one of Canada’s largest markets for yellow peas – a market that Canadian farmers and exporters have been serving since the mid-1990s.” Chinese buyers know Canadian peas, trust the quality, and prefer them as an input.

Once the tariff hit, that groundwork mattered. Pulse Canada representatives were on the ground within 10 days of the tariff announcement. Throughout 2025, Pulse Canada stayed active in market – meeting directly with buyers, processors and government officials – while also pressing Ottawa to keep pulses front and centre in Canada–China discussions. Pulse Canada also worked alongside other impacted agricultural sectors to reinforce the message that restoring trade stability benefits both countries.

WHY CANADIAN PEAS MATTER IN THE CHINESE MARKET

By late 2025, the market reality in China was becoming clear. Chinese fractionators were running down inventories of Canadian peas as alternatives didn’t measure up. Costs were higher, quality was inconsistent and supply was unreliable.

Canadian peas remained the preferred option. That mattered. It reinforced that reopening the market wasn’t just a political outcome; it was a commercial necessity for Chinese buyers as well.

A RESULT THAT DELIVERS AT THE FARM GATE

In January 2026, following high-level meetings and a preliminary agreement between Canadian and Chinese leaders, China announced it would remove the 100 per cent tariff on Canadian peas effective March 1, 2026.

This decision reopens a market that accounted for roughly \$3.7 billion in Canadian pea exports between 2019 and 2024. More importantly for farmers, it restores a major source of demand, improves price discovery and stabilizes the outlook for the coming crop year.

“Over the past five years, exports of Canadian peas averaged more than 1.5 million tonnes valued at over \$700 million annually. When that demand vanished, the pressure showed up quickly in basis levels and price signals to farmers.”

WHAT THIS MEANS GOING FORWARD

Reopening China doesn’t just move product – it strengthens the entire pricing structure for peas in Western Canada. Strong export demand supports farmer bids, restores throughput and gives farmers more confidence with seeding and marketing decisions.

But the work isn’t finished. With a commitment to keep tariffs off until the end of 2026, the window to secure permanent tariff removal is now open. Maintaining this access requires ongoing engagement to reduce the risk of future disruptions and to ensure Canada remains a preferred supplier in an increasingly competitive global market.

For farmers, the takeaway is straightforward: persistence pays. By staying engaged with customers, governments and trading partners, the pulse sector helped reopen a critical market and reinforced long-term demand for Canadian peas. ■



Public Ag Research Is a Proven Investment – Canada Should Treat It that Way

GRAIN GROWERS OF CANADA

Scott Hepworth, Chair, Grain Growers of Canada

CANADA'S GRAIN SECTOR is built on innovation. Advances in plant breeding, crop management and agronomy have enabled farmers to grow more with less, strengthen resilience to weather extremes and meet the expectations of domestic and international markets. For decades, a strong public agricultural research system delivered consistent productivity gains across Canadian agriculture.

That foundation is now being tested.

As global competition intensifies and production risks grow, public investment in agricultural research hasn't kept pace with inflation, rising input costs or the increasing complexity of scientific work. Core funding has stalled, research capacity has been stretched, and the long-term innovation pipeline farmers rely on is showing clear signs of slowdown.

The numbers are telling. Canada's total public agricultural research and development spending declined from \$860 million in 2013 to \$680 million in 2022. Today, Canada ranks seventh among the Organisation for Economic Co-operation and Development countries for agricultural research and development investment intensity. Over the same period, agricultural productivity growth slowed to roughly one per cent per year, down from nearly two per cent in previous decades. These trends point to a research system that's no longer delivering innovation at the speed farmers and markets demand.

WHAT DOES THIS MEAN FOR YOU

For pulse and soybean producers, the consequences are felt directly in the field. Crop development and management research supports higher yields, better nutrient efficiency, reduced pesticide use and stronger tolerance to drought, heat and disease. These advances translate into greater farm profitability,

improved risk management and stronger export competitiveness. Without steady research investment, producers face rising uncertainty and fewer tools to adapt to changing conditions.

Research turns emerging risks into practical solutions on farms, a unique and irreplaceable role in delivering these outcomes. It supports long-term, pre-commercial work that private investment alone often cannot justify. Research into disease resistance, soil health, nitrogen fixation and region-specific agronomic practices benefits the entire sector and reinforces Canada's reputation as a reliable supplier of high-quality crops. The return on investment is clear. Public investments in wheat breeding alone generate more than \$30 in economic benefits for every taxpayer dollar invested, demonstrating the broad value of agricultural research to the economy.

Despite these returns, Canada's research system faces deeper structural challenges. Public agricultural knowledge generation has declined by approximately 15 per cent since 2010, reflecting reduced scientific capacity and limits on collaboration. Aging infrastructure, outdated laboratories and barriers to hiring and retaining skilled researchers are constraining innovation and making it harder to attract new talent.

FUTURE IMPACT

These pressures are expected to intensify. In the 2025 federal budget, the government announced up to 15 per cent in budget reductions to Agriculture and Agri-Food Canada over three years as part of broader efforts to reduce spending and realign programs. These cuts are expected to affect research, operations and scientific capacity, including the winding down of initiatives such as the Agricultural Climate Solution – Living Labs.



At Grain Growers of Canada, we're advocating for a renewed federal approach to agricultural research that supports farmers and strengthens the broader economy. We believe research policy must be focused on outcomes and long-term value. Research should be designed with producers' needs at the forefront, ensuring public investments deliver practical, on-farm results. Barriers to hiring and collaborating with public researchers must be addressed, and funding should prioritize efficient, outcome-driven crop breeding and agronomic research.

Equally important is rebuilding Canada's agricultural research capacity for the future. Modern facilities, updated equipment and stable funding are essential to attract skilled researchers and ensure innovation continues to reach farms. With global competitors accelerating their investments in agricultural research, Canada cannot afford to fall further behind. Reinvesting in agricultural innovation isn't only critical for grain, pulse and soybean producers, it's essential to maintaining Canada's productivity, competitiveness and reliability in global markets. ■



From Manitoba Fields to Asian Markets

SOY CANADA

Jeanine Moyer, Writer, Synthesis Agri-Food Network



(L-R) Sharing Canadian farmer perspectives during a seminar with Jeff Barlow, Frank Prince and Brian Innes.

Photo credit: Soy Canada.

MOST FARMERS DON'T get to see what happens to their crops once they leave the farm. For Manitoba farmer, Frank Prince, a recent trade mission to Asia changed that. Visiting processing plants and meeting soybean customers in China, Taiwan and Japan put real faces, and real expectations, on the global soybean market.

“What impressed me most was the strong reputation Canada has on the global stage for growing reliable, high-quality soybeans,” says Prince, a Manitoba Pulse & Soybean Growers director and Hartney farmer who grows barley, canola, corn, edible beans, potatoes, soybeans and wheat across 12,000 irrigated and dryland acres. The trade mission, coordinated by Soy Canada, was a first for Prince, who travelled

with a group of Canadian soy industry representatives from Jan. 10 to 23.

Over the course of the trade mission, the delegation of more than 20 exporters and farmers visited Beijing, Guangzhou, Taipei and Tokyo, touring food processing and soy crush facilities while meeting directly with customers who rely on imported soybeans for a wide range of end uses. For Prince, seeing how Canadian and Manitoba soybeans are handled and transformed once they leave the farm gate added perspective on his contribution to the global market.

“Seeing firsthand how customers are using Canadian soybeans, along with their respect and praise for the quality we produce and the systems we have in place really connects what we do in the field to what they need on their end,” he says.

TAKING CANADA'S SOYBEAN STORY DIRECTLY TO BUYERS

One of the most valuable aspects of the trip was the opportunity to speak directly with buyers and end users. Prince estimates he spoke with more than 250 customers over the course of the mission, sharing how soybeans are grown in Canada, specifically in Manitoba, and what goes into producing a consistent, high-quality crop. One customer near Beijing purchased more than



Photo credit: Soy Canada.

(L-R) Tasting flavoured tofu with Soy Canada chair and Ontario farmer Jeff Barlow, and Frank Prince.

one million tonnes of Canada's 2025 crop, including a significant portion from Western Canada.

Throughout the trade mission, Prince participated in one-on-one meetings with international customers and presented to industry representatives, including local tofu and soymilk processors. The Canadian delegation was made up of representatives from Soy Canada, provincial industry associations, exporters, the Canadian Grain Commission and soybean growers from Manitoba, Ontario and Quebec.

“A lot of customers want to understand where their soybeans come from,” Prince explains. “We talked about our production practices, our climate, last year's growing conditions and how quality and consistency are priorities for Canadian growers. It was clear throughout our conversations that the trust and transparency Canada provides really matters.”

Those conversations also reinforced an important reality: Canadian soybeans are well regarded, but competition is always present. Buyers have options from multiple countries, and maintaining Canada's reputation depends on continuing to deliver what customers value most.

“When we meet with customers, they're often much more familiar with what our



Photo credit: Soy Canada.

(L-R) Exporters Dwight Gerling and Jeff James with Frank Prince at a soy sauce factory that purchases 750,000 tonnes of non-GM beans annually.

competitors offer,” says Brian Innes, executive director of Soy Canada. “Bringing our value chain together to share what Canada can offer, is one small thing we can do to support the value that farmers see from the soybeans they sell.”

Prince points out that Canadian soybeans must compete with countries like Brazil and the United States. For Western Canadian commodity beans with a reputation for low and inconsistent protein, that means buyers expect significant discounts.

For some buyers in Japan and Taiwan, quality and traceability are more important, and that’s where Canada has an advantage,

especially with our Identity Preserved (IP) soybeans and Soy Quality Programs, explains Prince.

Touring soy food processing and crush facilities also brought that message home. Prince was struck by both the scale of operations, particularly in China, and the sophistication of the processing plants across the countries visited.

“But just as impressive is how advanced and precise these operations are, especially the soy food plants, where customers know exactly what they want from their soybeans, and trust Canada to deliver on their quality expectations,” says Prince.

While food-grade soybeans were part of the discussion, Prince emphasizes the mission was centered on Canada’s ability to deliver high-quality soybeans and a supply customers can trust. IP, or food-grade soybean production represents a small percentage of Manitoba soybean acres today, but it offers a clear example of how understanding customer needs can create added value – for end users and at the farm gate.

“There’s room to grow food-grade production, and that could mean opportunities for premiums on the farm” he says. “But the bigger takeaway applies to all soybeans – no matter what their end use is. Quality, consistency and trust are what open doors.”

BUILDING TRUST BEYOND BORDERS

One of the lasting impressions from the trip was the importance of face-to-face relationships. In an era of virtual meetings and digital communication, Prince says meeting with customers and touring their facilities helped build connections and trust.

“Not only do you learn a lot by being there in person, but you get a better sense of what’s important to end users, and they get to know you as more than just a supplier,” he explains. “The in-person meetings are also a key part of their business culture, which makes these outgoing trade missions especially valuable for everyone involved in Canada’s soybean sector.”

For Prince, the experience reinforced the value of global market development initiatives, and the importance of grower involvement in trade missions. Seeing global markets firsthand offers valuable insights and connections, while also highlighting how closely Manitoba farms are connected to customers around the world and gives buyers a chance to learn how Canadian soybeans are grown.

“It changes how you think about the crop you’re growing,” he says. “Once you see where it ends up and who’s relying on it, you realize every decision on the farm plays a role in maintaining, and building the reputation Canada has worked hard to earn, and just how proud I am to be a Manitoba soybean grower.” ■



Photo credit: Soy Canada.

The Soy Canada delegation at a tour of a crush plant.



Photo credit: Soy Canada.

Frank Prince at a tour of a crush plant in China that purchased one million tonnes of Canada’s 2025 crop.



Pulse and Soy Markets Follow Cycles

Chuck Penner, Owner, LeftField Commodity Research

ONE OF THE most dependable features of crop markets is summed up in the saying, “The best cure for low prices is low prices” and vice versa. The reason why this principle is so reliable is that it’s true. Low prices reduce supplies by discouraging acreage while also encouraging more consumption. Once that happens and supplies are scarcer, prices start to rebound, triggering more acreage and production, which starts the whole cycle over again. At least, that’s the theory.

For the most part, crop markets work that way, or at least they try to. Distortions occur when the weather doesn’t cooperate, like we saw in the 2021 drought when many crops experienced record high prices. On the flipside, sometimes the weather cooperates too much, like it did in 2025 and record yields drove prices lower. Crop markets are constantly trying to find a balance between supply and demand, but never really seem to get there, resulting in higher and lower price cycles. Throw in a few trade-related market distortions and things get a little “wonkier.”

Each crop has its own set of factors that affect supply and demand in Canada, North America and around the world. For pinto

and black beans, Canadian production is important, but crops in the United States are considerably larger and have more influence. In 2025, U.S. acreage of both types of beans spiked higher, including record seeded area for black beans. Thus, it wasn’t surprising that prices dropped to multiyear lows in the fall of 2025. At the same time, demand from Mexico started to soften as its own production started to rise (in response to high prices).

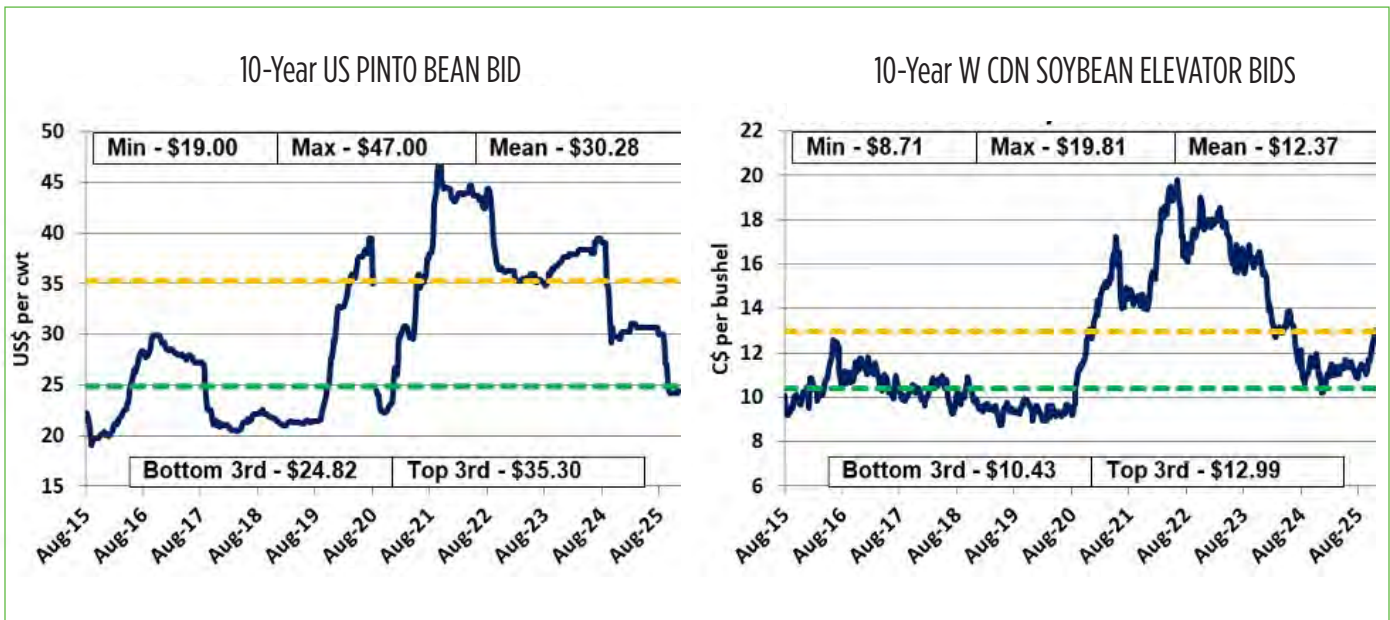
Now that bids have cycled lower, especially for black beans, and are in the bottom third of prices of the last 10 years, the market can start the process of low prices curing low prices. Farmers will reduce acreage in 2026, starting the next stage of reduced supplies and an eventual price recovery. As always though, the weather can complicate the outlook, for better or for worse.

This picture for dry beans also fits the pea market, especially for yellow peas. After the big 2025 crop, bids have dropped into the bottom third of the long-term range, and seeded area will decline in 2026. For peas though, the 2025/26 market cycle was distorted and the downward portion of the cycle was accelerated by import tariffs

from Canada’s two largest buyers. In the end though, this could set the stage for an even sharper reaction higher, if farmers pull back in a big way from planting peas this year.

The soybean market is in a slightly different place in the cycle. Prices had already dropped to multiyear lows in late 2024, which discouraged farmers from planting soybeans in 2025, at least in the U.S. Even with record yields this year, American soybean production declined, which has helped pull Canadian bids up toward the top third of the longer-term price range.

The key question for the soybean market is whether current prices, especially in relation to corn, will encourage more acres in 2026. Keep in mind that for soybeans, market dynamics aren’t quite that simple. Government intervention in the U.S. in the form of biofuel incentives and in China with tariffs have had a distorting effect, and those will continue to overshadow normal market behaviour. Even so, the soybean market will still be influenced by supply and demand factors and will follow a cycle. ■





Left: A drone in the field as part of Jiating Li's research at the University of Manitoba.

Jiatang Li, assistant professor in the Department of Biosystems Engineering at the University of Manitoba



“My research is taking the next step to break through the bottleneck by moving beyond drones.”

Using Drones in New Ways for Crop Checking

Ashley Robinson, Editor

WHEN JIATING LI started her studies, she never imagined she would be working with drones. The technology was new and Li had started her undergraduate studies focusing on sensors.

In her home country of China, she had studied gas sensors that monitored food quality such as the freshness of eggs. Her research path changed, though, when she received an offer to develop drone-based technologies in agriculture for her master's work at the University of Nebraska-Lincoln.

“Drones are related to digital technology. It involves different sensors and data analysis, which perfectly matched with my research interest,” Li says in an interview.

She found herself diving deep into this new emerging technology through her master and PhD studies at the University of Nebraska-Lincoln. She then furthered her research during her post-doctoral work at the University of Illinois Urbana-Champaign, which led her to her current work at the University of Manitoba (U of M).

“I think drones are getting into a plateau of this digital era,” Li explains. “That's why my research is taking the next step to break through the bottleneck by moving beyond drones.”

In 2024, Li joined the University of Manitoba as an assistant professor in the Department of Biosystems Engineering. She saw research opportunities and was excited to bring her drone research knowledge

to help farmers with the shorter growing seasons Manitobans face.

Previously, Li's research had focused on two areas – crop management support and monitoring crops throughout the growing season. For crop management, she used drones to check for diseases and crop nutrition to calculate yield potential. For crop monitoring, she worked with crop breeders to use drones equipped with optical cameras to monitor structural, biochemical and physiological crop conditions. She also did phenotyping work with a cable-suspended system – these operate at a lower altitude than drones and provide high-quality sensing data on crop growth and development.

“Nowadays I'm starting to develop the ground-based robotics sensing as well. My vision would be a multi-scale sensing platform that can be scalable to different projects,” Li adds.

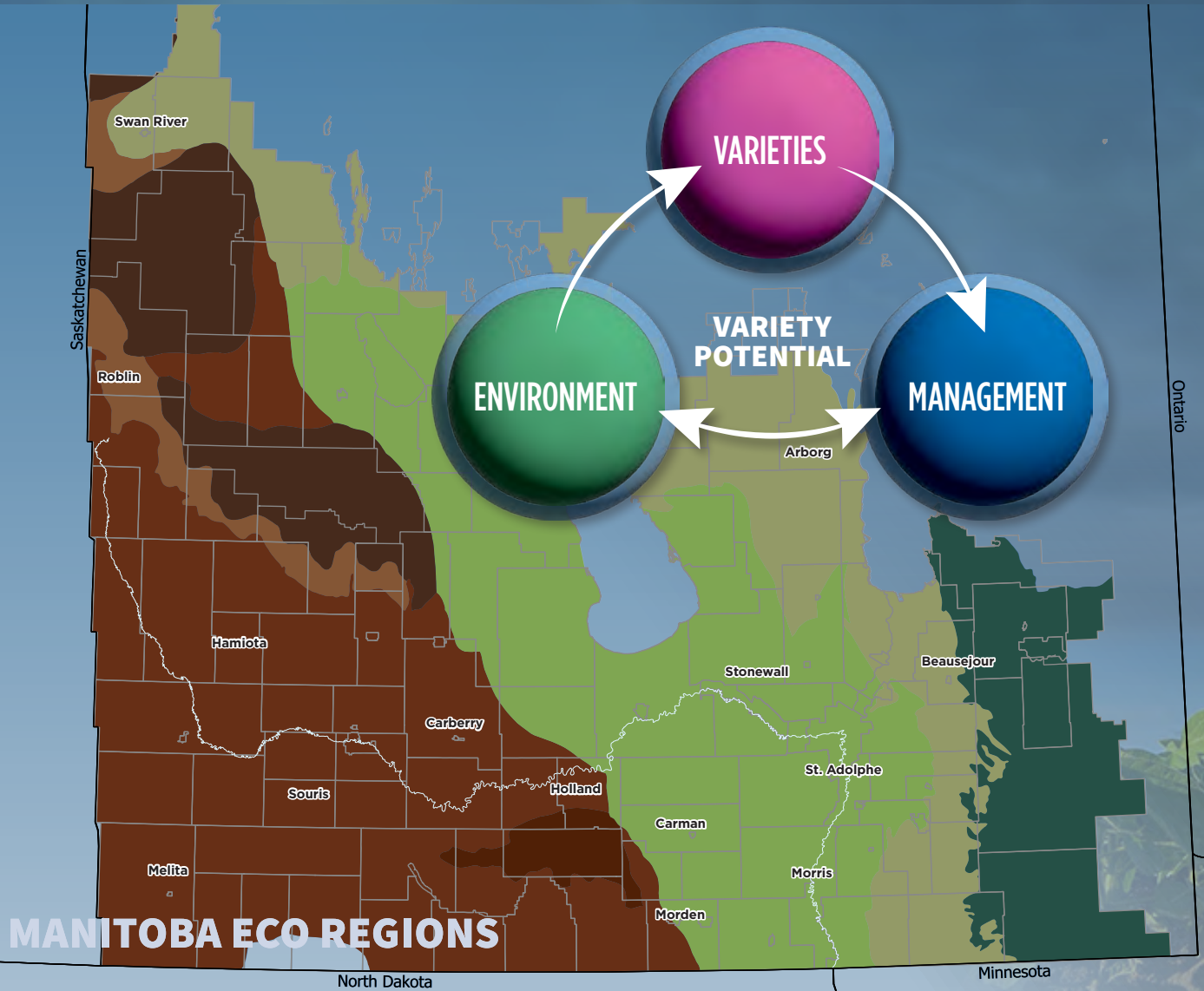
At the U of M, Li and her team are developing a ground-based robotic sensing arm for distinguishing plant disease. The robotic arm will be able to capture images from different sides of the plots – something that isn't feasible with drones as they only capture the top of the canopy. Li is also starting to work on yield forecasting by integrating mechanistic models and AI – also referred to as knowledge-guided AI.

Li is planning to work with Manitoba Pulse & Soybean Growers on a research project. She hopes to work on research projects focusing on biological nitrogen fixation in legume crops, specifically dry beans and soybeans.

“There is uncertainty on whether top dressing of nitrogen is needed even though soybean crops have their own nitrogen fixation,” Li says. “There is a gap of how the existing nutrients and water availability in the soil affect the biological nitrogen fixation

The research team wants to be able to provide farmers with better nitrogen application recommendations for their pulse crops. The research team will include Dilshan Benaragama at the U of M and Kevin Baron with Solum Valley Biosciences. ■

Field-Tested in Manitoba: Finding the Right Variety for Every Region



MANITOBA ECO REGIONS

ENVIRONMENT

- Soil type and texture
- Precipitation and temperature
- Disease and pests
- Field topography

VARIETIES

- Agronomics
- Abiotic/biotic stress tolerance
- Seed quality
- Root nodulation

MANAGEMENT

- Planting, seeding rate and row spacing
- Fertilization and inoculation
- Weed and pest control
- Harvest timing

Regional Variety Testing Program

The Regional Variety Trials (RVTs) program is a critical decision-making tool for Manitoba producers, helping them match crop genetics to local environments and management practices. By testing varieties under real-world conditions, RVTs narrow the choices to those most likely to succeed on specific farms.

FACTS

ABOUT

4,200

*small plots
annually managed*

ABOUT

175

*varieties annually
evaluated*

5

*crop types
included*

36

*soybean
trials*

Variety Performance

Gives growers a tool to compare how a variety performs (agronomics, disease resistance and quality) across different eco-regions in Manitoba.

Increasing Confidence

When a variety performs well at all sites in a given year, it increases confidence that it will perform consistently across different environments.

Successful Coordination

- Field pea trials are coordinated by Manitoba Crop Variety Evaluation Team (MCVET) and cosponsored by Manitoba Pulse & Soybean Growers (MPSG), MCVET and Manitoba Agriculture
- Soybean, dry bean, faba bean and lupin trials are sponsored by MPSG

16

*locations across
Manitoba*

10

dry bean trials

Uniform Results

*Accepted statistical
procedures applied
consistently by one
specialist provide
valid variety
comparisons.*

9

pea trials

2

faba bean trials

Sources: Seed Manitoba, MPSG Pulse and Soybean Variety Guide



FEATURE

*Tom Warkentin, professor and researcher
with the University of Saskatchewan's
Crop Development Centre.*

Breeding for Tomorrow

**Threats and opportunities driving pulse
variety development in 2026, and beyond**

Matt McIntosh, Writer and Farmer

HAVING ACCESS TO pulse and soybean varieties with consistently high yield, quality and resiliency is important to farmers in Manitoba.

Although breeding priorities and funding models differ for annual legume crops — soybeans benefit predominately from private-sector investment, and pulses and food-grade soybeans from both private and public sector investment — producer check-off dollars remain a critical part of this system. Together, these investments fuel breeding programs’ drive to develop varieties tailored to Manitoba’s soils and climate.

IMPROVING SOYBEAN IRON UPTAKE

According to Kevin Baron, research scientist at Solum Valley Biosciences, soybeans are particularly susceptible to iron deficiency chlorosis (IDC) – a condition linked to the high pH and carbonate content of many Manitoba soils that limits the plant’s ability to take up and utilize iron. Indeed, he says even relatively small problem areas, such as near road or laneways, can “really whittle away” at soybean yield averages in dry years.

While IDC and salinity can occur in the same fields, they are distinct stresses requiring different management and breeding approaches.

“What was a small problem area of the field in average to wet years can grow as the salts accumulate at the surface with evaporation of water and lack of rainfall to wash salts down into the soil profile,” says Baron. More generally, he estimates IDC ranks “as one of the top three yield robbers” in Red River Valley and Interlake regions.

“There are significant areas of Manitoba where you’d be suffering huge yield reductions from IDC. It’s maybe counterintuitive, but IDC is actually worse early in season for recently emerged seedlings when rains keep the high pH, high lime soil saturated, which creates bicarbonate ions, and in combination with nitrate and salts.”

IDC is often most severe early in the season, when saturated soils create conditions that interfere with iron uptake.

Baron adds the impact of prolonged dry conditions on soybean iron uptake should also not be underestimated when it comes to iron uptake issues.

HISTORICAL FOCUS ON SOYBEAN IDC, SALINITY LACKING

Taken together, both salinity and IDC continue to be challenges for Manitoba soybean growers because, says Baron, neither factor was historically taken into account when seed companies were

importing soybean germplasm from geographies further south.

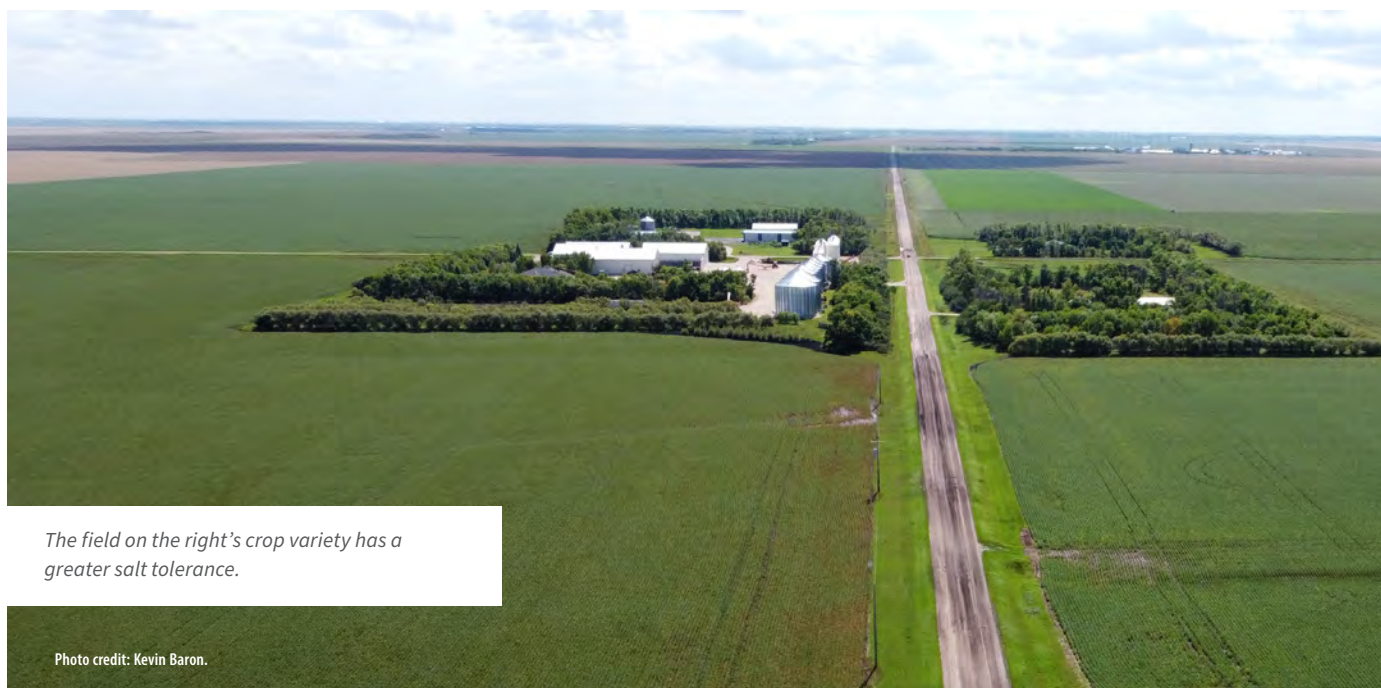
“Early on with soybeans, it came down to potential yield and maturity. That was the criteria being met. It was only later we realized little or no work has been done on drought or salinity. Soybeans have become a real indicator for revealing salinity issues,” he says.

“We’re also dealing with a compressed growing window. What are the traits you need to utilize that moisture when it’s available, and convert nutrients into yield?”

Moving forward, Baron says there is soybean germplasm from the United States that has proven to have improved salt tolerance. Work is being done to see if the germplasm could be effective in Manitoba, while the search for indigenous germplasm with similar capability is ongoing. Ideally, breeders would be able to stack tolerances for both iron deficiency and soil salinity.

“We’re working with soybean material that has proven itself for stress tolerance in other geographies, and being able to mesh that with early maturing material that works in my backyard and the growers I’m working with,” Baron says. He also suspects there is soybean germplasm already available in Manitoba that could check multiple boxes – it just needs to be identified.

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The field on the right’s crop variety has a greater salt tolerance.

Photo credit: Kevin Baron.

The field on the left shows bald patches due to compaction and salinity

Photo credit: Kevin Baron.

Dennis Lange, pulse and soybean specialist with Manitoba Agriculture, concurs salt tolerance in soybeans is a priority breeding area. Progress has been made, however, with many soybean varieties available to Manitoba growers now being tolerant or semi-tolerant.

PUSHING PROTEIN LEVELS

Progress has also been made in soybean protein levels, Lange says, particularly for food-grade soybeans. Such progress is partially a result of what he calls the “closed-loop” breeding environment, where end purchasers work directly with breeders to shape the product they want.

The same protein progress has not occurred in some pulses, namely, field peas.

Around six years ago, Lange says researchers noticed that protein levels in field peas were declining. Since then, a push has been made to implement minimum protein requirements for new pea varieties.

“Peas have been a big draw for companies like Roquette coming to Manitoba. They require certain parameters for pea quality, and pay a lot of attention to protein,” says Lange

Though some success has been achieved in improving pulse protein levels, Baron says the balance between yield and protein remains challenging for both peas and soybeans.



Photo credit: Kevin Baron

Performance of breeding lines and check varieties for tolerance to iron deficiency chlorosis and salt stress at a dedicated “stress” site near Warren.

“Photosynthesis and nitrogen uptake is a very sensitive biological process. For protein production, if that soybean or pea plant is totally reliant on nitrogen fixation, that can be a weak link to getting nitrogen into above ground biomass and converted to protein in the seed,” says Baron. For soybeans specifically, he says negative yield impacts mean protein levels can only be pushed so high.

“For a lot of regions when you’re pushing soybean protein, you can achieve high protein levels, but there’s a point where there’s a yield cost to it. The general range for Manitoba is around 38 to 38.5 per cent protein. We need to get to 41 or 42 per cent. But when we get up to 45 to 46 per cent protein, we get there without an associated yield hit. It’s a balance.”

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Effects of headland salinity include no germination and a reduced stand or premature senescence near Fortier.

“Good plant breeding aims to address the whole package. I don’t and would not want to release a pea variety that’s root rot resistant, but that’s also low yielding or with low protein.”

-Tom Warkentin



A field in Nesbitt with salinity issues with germination failure allowing for kochia and other salt-tolerant weeds to move in.



Photo credit: Kevin Baron.

WEEDS AND PATHOGENS

Effective weed control – something Lange says is one of the biggest factors in ensuring good yields – is a constant challenge in soybeans and pulses. For some soybean varieties, the incorporation of herbicide technologies such as dicamba and Enlist resistance have proven effective in recent years, though the length of time required for the crop to close the canopy remains a hurdle for prolonged in-season weed control.

When it comes to peas, improving resistance to *Aphanomyces* root rot is another important focus.

“*Aphanomyces* root rot is an ongoing challenge. Recent years have seen success in maintaining 50-plus bushel per acre average pea yield,” says Lange, adding the five- and 10-year averages are 51 and 49 bushels per acre, respectively.

“That’s from focusing on field selection, favorable weather and good weed control. We need to do that because we don’t have a lot of tools in the toolbox for *Aphanomyces* root rot in peas, aside from crop rotation. Rotation helps but its effect is limited,” says Lange. Looking ahead, he says *Phytophthora* root rot will be another area of focus for soybean breeders.

Tom Warkentin, professor and researcher with the University of Saskatchewan’s Crop Development Centre, agrees *Aphanomyces* root rot in peas has been a challenge across western Canada for two decades or more, though generally kept in check with crop rotation. The possibility of a wet year or

a series of wet years, however, continue threatening to exacerbate the disease. Breeding for *Aphanomyces* resistance, too, is a complicated process involving multiple different genes.

“Resistance as it exists in peas isn’t absolute. It’s partial resistance,” Warkentin says. “It’s a challenge for breeders to pyramid for resistance while also selecting for high yields, high protein, and other key things for western Canada ... Good plant breeding aims to address the whole package. I don’t and would not want to release a pea variety that’s root rot resistant, but that’s also low yielding or with low protein.”

NEW AND PROVEN TECHNOLOGIES

New crop assessment technologies are also supporting prairie pulse breeders. Baron says the use of molecular markers will continue to help guide trait selection in soybeans, particularly in cases where in-field selections or phenotyping efforts are hampered by poor growing conditions. While trait selection methods like gene editing could prove useful, too, the regulatory landscape associated with plants with novel traits creates an additional challenge, given the global nature of these crops.

“In contrast, applying editing techniques to pulses like field pea, or leafy greens like spinach or kale, may be more streamlined,” Baron says. Drones and satellite imagery can also be useful in soybean and pulse trait selection, such as when measuring

canopy wilt or leaf flipping during hot, dry conditions.

While not a new technology in itself, Warkentin says the cumulation of decades of plant breeding and plant pathology research, along with genome analysis and gene marker-assisted selection, is bearing fruit for breeders working with peas. Indeed, his lab alone has released three different yellow pea varieties – CDC Boundless, CDC Engage, and CDC Canuck – in the last two years, all featuring high yields, moderate to high protein levels, and good lodging resistance. CDC Cedar, a non-GM soybean variety with good yields, good protein levels, and extra early maturity was also released.

“I’m excited about those four crop varieties, and there will be more coming of course. I expect future pea varieties will also have improved resistance to the root rot complex,” says Warkentin. He expects Boundless will be available to growers in 2026, Canuck and engage in 2027, and Cedar in either 2027 or 2028.

GENETICS AS THE FOUNDATION

New tools and tried-and-true techniques aside, Lange reiterates improved genetics are the backstop of future success for western Canadian soybeans and pulses.

“You have to start with good genetics. That’s the best starting point by far. Having varieties that have some better yield potential and disease resistance is one way of making sure you’ll have long term viability of the industry,” says Lange. ■



FEATURE

Home Field Advantage

How Manitoba soils complement and challenge soybean and pulse production.

Taryn Dickson, Extension Specialist and Writer

WHILE THE MAJESTIC SILHOUETTE of a bison herd against a beautiful Prairie sunset may have been appreciated by pioneers arriving on the Manitoba landscapes, the reason they wanted to stay – and the reason farmer fields cover it today – is below the surface. Manitoba soils are less than 12,000 years old, which is relatively young on the pedology scale, and provide great diversity. There are over 700 soil series in the province, each with their own distinct characteristics that contribute to each farm's unique strengths and challenges.

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Marla Riekman, soil fertility specialist with Manitoba Agriculture, examines a soil profile.

Photo credit: Kevin Baron.

One of those famous farmland soils runs along the Manitoba Escarpment. The Almasippi soil series, which agronomist and retired Manitoba Agriculture Soil Fertility Specialist John Heard highlights as an example of one of the many unique soils in Manitoba. Granite and shale influence many Manitoba soils, but the Almasippi soil features limestone bedrock parent material. This limestone is to thank for the soil’s moderately calcareous quality, which acts as a natural pH buffer and generally prevents grain farmers from needing to apply lime.

“Sandier soils in other places tend to be acidic, but not in this province,” Heard explains. “Our poorly drained ‘wet sands’ like the Almasippi are not highly leached and have retained carbonates (in comparison to the leached sandy soils in other areas, which can have lower pH).

This region makes up this and many other Black Chernozemic soils in Manitoba, thanks to deposits left behind by the glacial Lake Agassiz. These clay particles offer a high water-holding capacity that helps hold nutrients but can result in waterlogging. The lack of leaching to the imperfectly drained Almasippi soil has to do with the small, fine-textured clay particles.

Soil texture—influencing deposits of silt and sand helped shape other provincial landscapes too, including ancient rivers leaving fluvial deposits in the Pembina and Assiniboine River Valleys, stony glacial till in the Interlake, and Southwest Manitoba and the wind-deposited (eolian) materials the Spruce Woods and Sandilands parks.

FIELD-SCALE SOIL CONSIDERATIONS

John Heard keeps soil properties in mind as he recalls the rise in Manitoba soybean acres and parallel growth in knowledge and production improvements over the last few decades, because that foundational knowledge continues to be relevant. This was the case with nodulation in soybeans, as the soil bacteria that support nitrogen fixation in soybeans are not native to Manitoban soils, but they can survive here. So, when soybean fields were first planted in Manitoba, a double inoculation was often required to support the rhizobial communities required for good soybean yields. But now farmers who regularly have

soybeans in their rotation are encouraged to consider many factors, including soil conditions and nutrient management, when choosing a suitable soybean inoculation strategy.

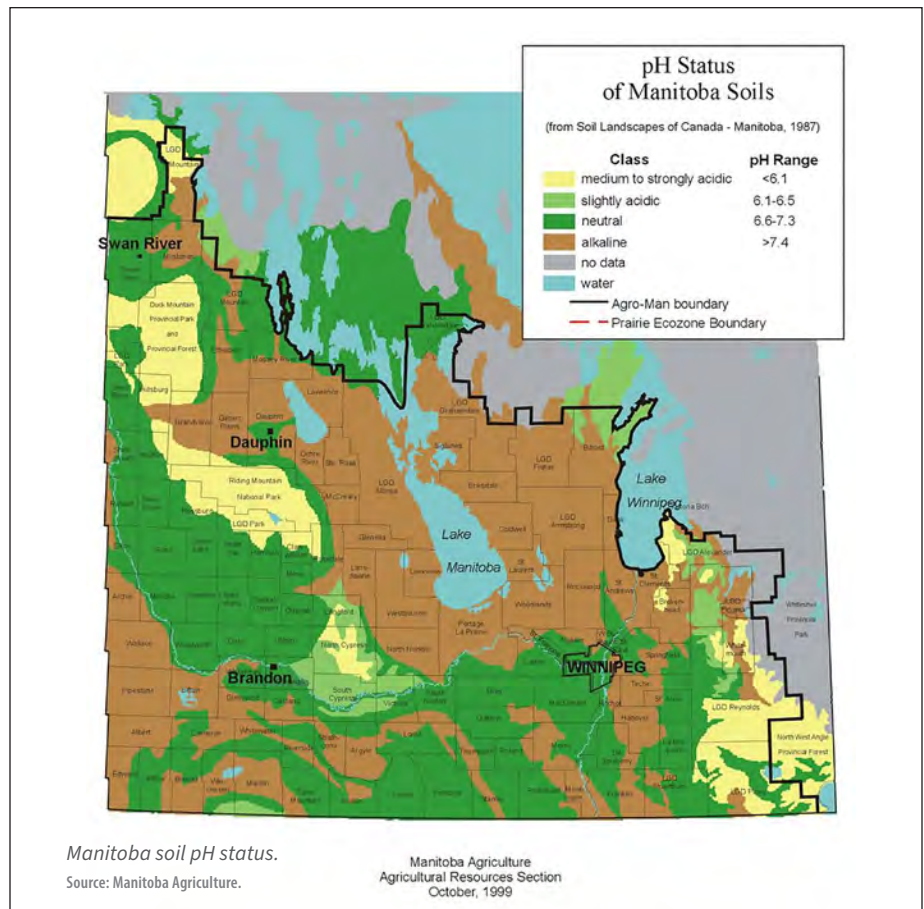
Similarly, in the initial years of soybean production in Manitoba, excess soil nitrate challenged successful nodulation, but it is less of a concern once rhizobium levels have been established in the soil. In cases where soils are testing high in nitrate, cereal or canola crops can better utilize those nutrients.

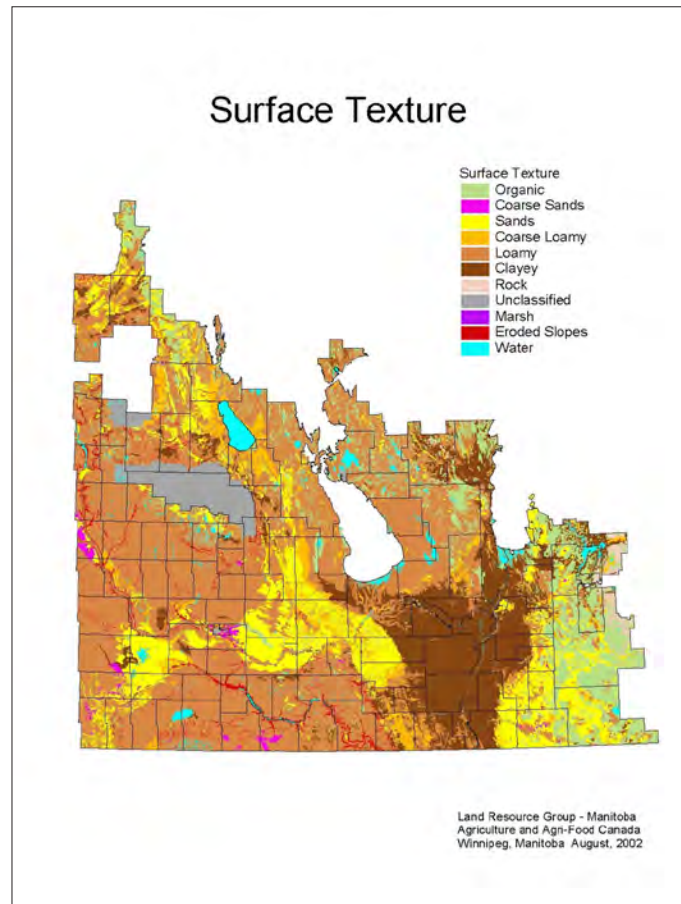
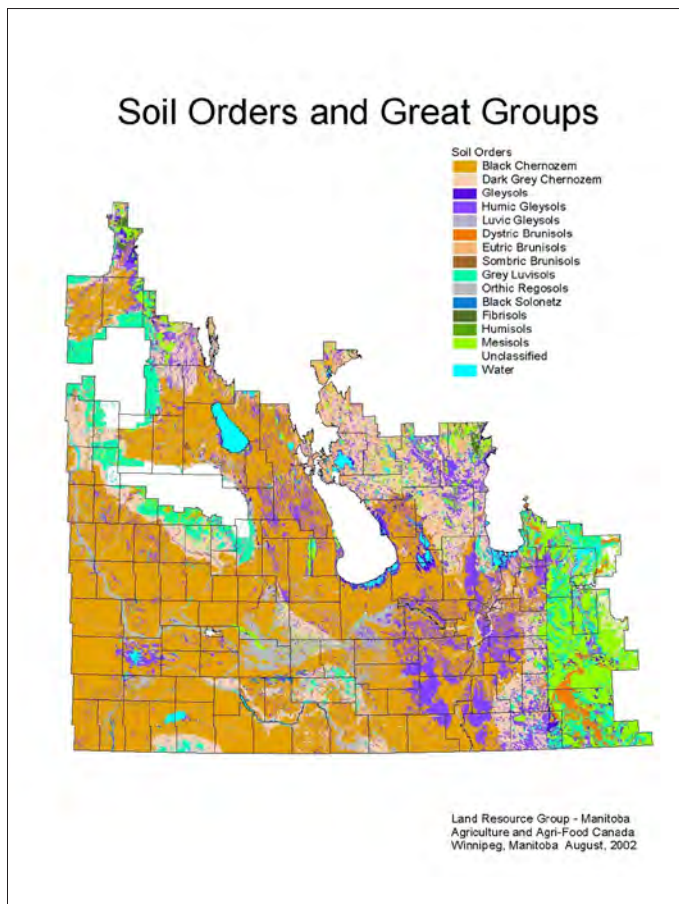
There are also some challenges in Manitoba related to soil characteristics.

Water is critical to all crops (and soybeans can handle great amounts of water), but, water and salinity management are related. When a high-water table is combined with a high-soluble salt content in the subsoil, the result can be soluble salts moving into the root zone or to the soil surface. This is especially challenging for soybeans, peas and field beans, which all have relatively low tolerance to salinity compared to other field crops in Manitoba.

Though this province isn’t known for its varying altitude, topographical variation within a Manitoba field should be considered, because it can contribute to variability in soil pH. For example, the erosion of topsoil on slopes can expose alkaline subsoil, which results in areas of higher pH – and potentially lower productivity – at the top of the knoll. It can also lead to lower pH in the depressions and lower slope positions.

From a nutrient perspective, Manitoba soils offer some assets and some drawbacks. While the clay and clay loam soils in Manitoba are naturally high in potassium, this isn’t the case with the sandy textured or peat soils in the province. Although they aren’t high in potassium, the sandy textured or peat soils offer sufficient iron content to sustain any crop type. However, soils rich in calcium carbonates can create environmental conditions that impede the crop’s ability to take up nutrients through the roots, which can result in plant nutrient deficiencies, such as iron deficiency chlorosis (IDC) in soybeans.





KEY TAKEAWAYS

- Identify soil properties in each field and keep them in mind when making management decisions.
- Use soil test results to inform annual decisions and to monitor trends in annual results for long-term tracking.
- Access, use and share MSPG resources with your agronomist before discussing any field-specific questions with them.
- Select IDC (iron deficiency chlorosis) resistant soybean varieties for fields with high IDC risk.
- Keep watching for and learning from new agronomic research findings from the University of Manitoba Soybean and Pulse Agronomy Lab.

Fortunately, there are management options that start at the soil level. This can include determining which fields have a high risk of IDC (based on their carbonate and soluble salt soil test levels), scouting for symptoms, and selecting IDC resistant soybean varieties for fields with high IDC risk. Varieties are rated on a 1-to-5 scale, where ≤ 1.7 is tolerant (T), 1.8 to 2.2 is semi-tolerant (ST), and ≥ 2.3 is susceptible (S). Ratings are taken every year in Manitoba and are averaged over multiple years. These ratings can be found in both the *2026 Manitoba Seed Guide* and *2026 Manitoba Grower's Guide Pulse & Soybean Varieties*.

Although soybean response to potassium (K) fertilizer may be infrequent, soybeans remove K at a much greater rate than most other crops in Manitoba. Manitoba Pulse & Soybean Growers research on "Soybean Response to Potassium Fertilization in Manitoba" reported that using estimated soybean removal rates and yields to calculate the amount of K fertilizer required to maintain K fertility throughout a rotation to support

yields of other crops can be a useful long-term plan. For instance, current soil test recommendations are to apply 30 to 60 lbs K20/ac as a broadcast and incorporated application in fields with <100 ppm soil test K.

DIGGING A LITTLE DEEPER

The key to optimizing production from these unique and valuable Manitoba soils throughout any growing season maintaining a solid understanding of the soil properties and characteristics. From a landscape perspective, this starts with checking out resources like Manitoba Agriculture's AgriMaps for soil, water and landform information. Then creating detailed maps and datasets from more intensive, representative soil sampling to understand and effectively manage the variation in fields. It also requires good record keeping and monitoring fields for problem areas and investigating patches of low productivity. Calculating annual nutrient balances to inform nutrient plans that fit with a

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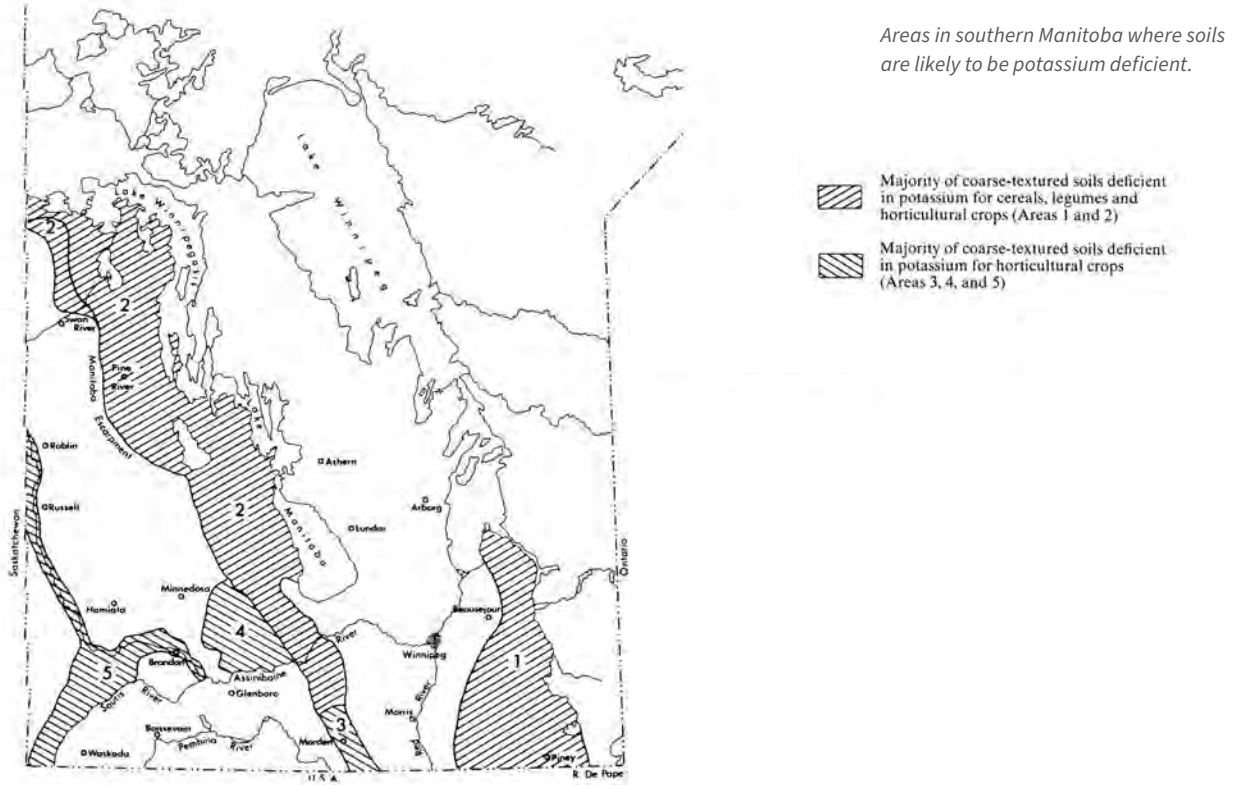
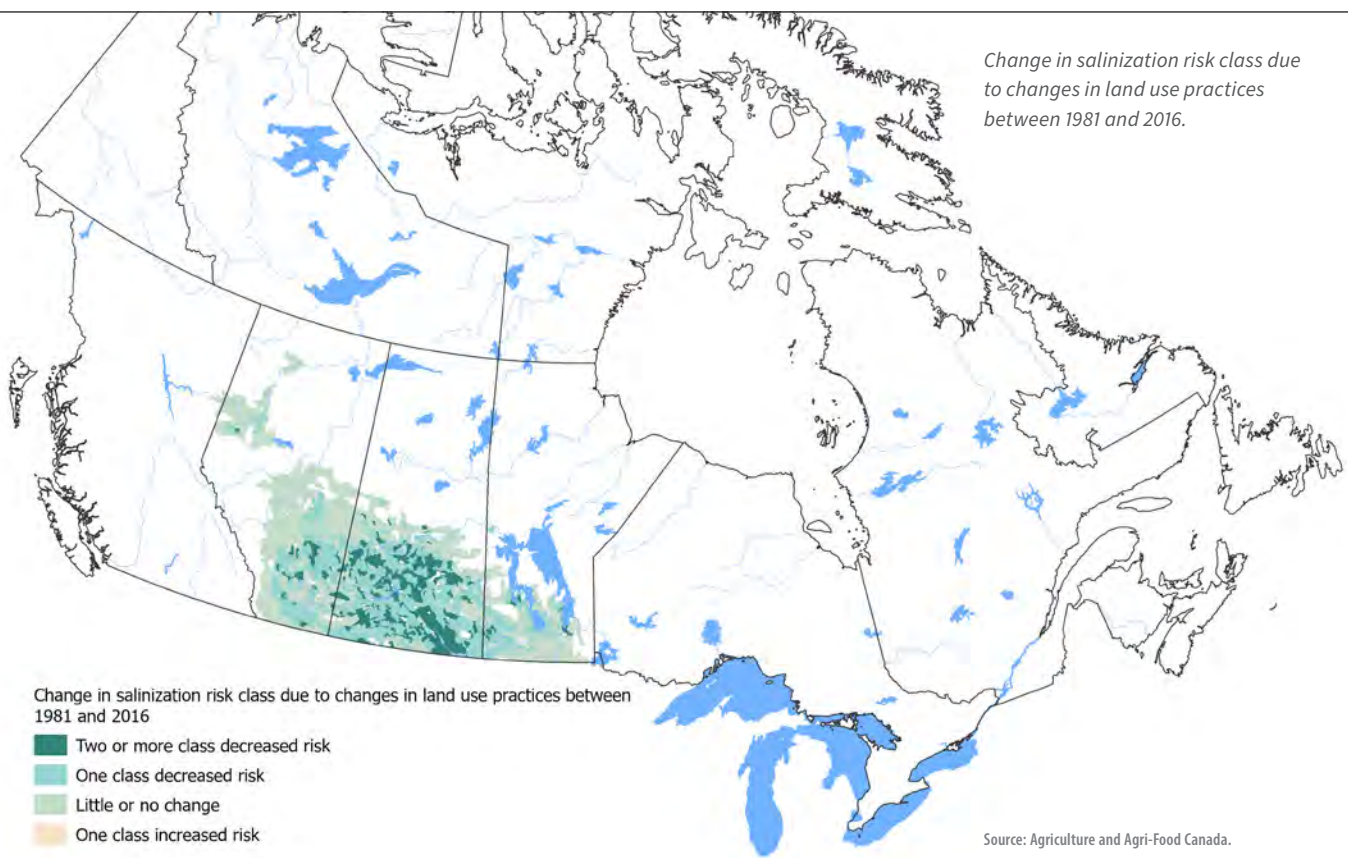
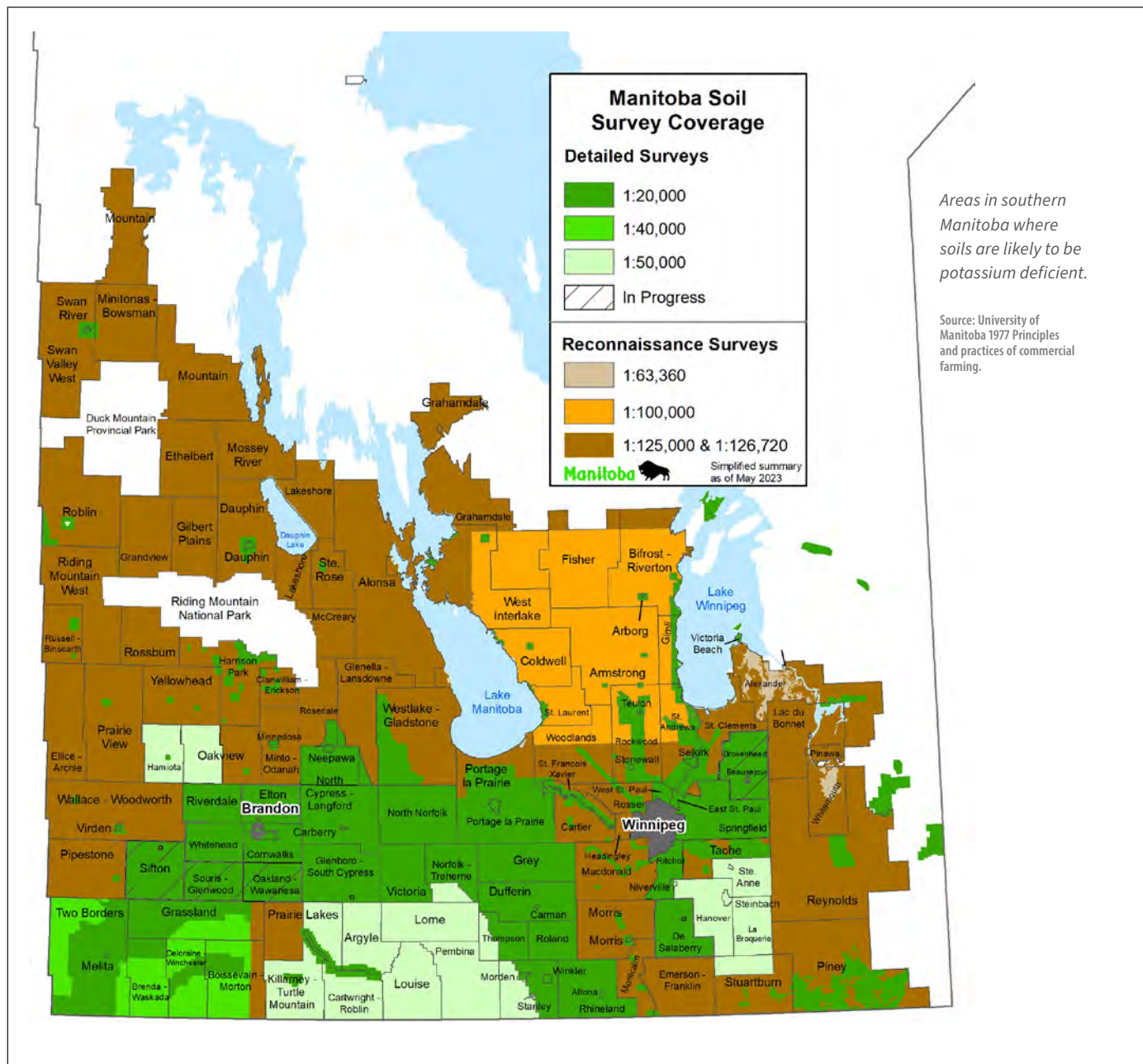


Figure 4.1 Areas in Southern Manitoba Where Soils are Likely to be Potassium Deficient

Source: University of Manitoba 1977 Principles and practices of commercial farming.



Source: Agriculture and Agri-Food Canada.



multi-year rotation and creating long-term fertility goals are also effective ways to maximize the benefits of Manitoba soils to soybean production.

In addition to knowing your soil, Megan Westphal, Manitoba Agriculture’s new Soil Health Specialist, cautions that “different soil types react differently to different management, so always compare against baselines of the same soil types for useful interpretations.”

The use of new technologies can assist with monitoring and assessing soils. Ongoing research at the University of

Manitoba Soybean and Pulse Agronomy Lab, started in 2024, is investigating if drones with remote sensing technology can accurately assess crop productivity in soybeans, dry beans and peas, as a way to help assess management practices.

COLLECTION OF QUALITIES AND CRITICAL RESOURCE

Manitoba soils are more than just a collection of unique characteristics, and they have recently been recognized as such in a national report. The Honourable Robert Black, Senator and chair of the Standing

Senate Committee on Agriculture and Forestry specifically recognized the black soil zone in Manitoba as “a highly productive soil that is more resilient in the face of degradation” in the 2024 report Critical Ground: Why soil is essential to Canada’s economic, environmental, human and social health.

With a good foundation, valuable qualities and youth on its side, Manitoba soils aren't only resilient, they are also a key reason to farm in this province. ■



ON-FARM NETWORK

Soybean Seeding Speed Trials

Chris Forsythe, On-Farm Network Agronomist, Manitoba Pulse & Soybean Growers

LAST YEAR MANY farmers told us they were curious to know the effects of increasing seeding speed on seed placement, plant stand and yield in their soybean fields.

Advancements in seeding and planting equipment technology is allowing farmers to seed faster without reducing plant stand or sacrificing yield. Every field and seeding tool is different, but when conditions are ideal, it may be advantageous to get as many acres seeded as possible within an optimal soybean seeding window to maximize yield. Current Manitoba recommendations suggest seeding soybeans the second and third weeks of May to maximize soybean yield potential while reducing the risks associated with cold soil and late spring frost.

Of course, air seeders and planters, and even different models within each equipment type, have different optimal speed ranges. So, it's important to know the speed capability of your equipment and match your ground speed with the soil conditions and a tractor with the appropriate horsepower. Seeding faster usually requires more horsepower.

In 2025, the On-Farm Network established eight soybean seeding speed trials with farmers using their own fields and equipment. The objective was to do an in-depth investigation into what exactly are the effects of varying seeding speed on seed placement and yield.

Three sites tested seeding at 5 mph versus 7 mph, and five sites tested 5 mph versus 7 mph versus 9 mph. To be noted, the 7 mph at each site was considered the farms' traditional speed with the slower and faster comparisons. Six of those trials were established with a planter, and two were established with an air seeder or an air drill.

First, we looked at seed depth. Across the three seeding speeds, we didn't detect any differences in seeding depth at any site.

Next, plant counts were recorded at early season vegetative growth stages. The same areas were revisited later in the

season at reproductive growth stages. Changing seeding speed didn't affect plant stand establishment or late season plant survivability at any site.

At the same time as the early season plant stand counts, we measured plant-to-plant spacing, or how uniformly spaced the plants are at each seeding speed. Plant-to-plant spacings was lowered significantly when going from 7 mph to 9 mph at two sites and, at both, planters were used. Plant-to-plant spacing at those two sites was similar when going from 5 mph to 7 mph. There were no differences in plant-to-plant spacing among the different speeds at the other six trial sites.

Finally, yield measurements showed that regardless of seeding equipment or speed, there were no significant yield differences between the three seeding speeds of 5 mph, 7 mph and 9 mph at any trial site.

It's important to note that, due to the ability of soybeans to compensate for yield in less-than-ideal conditions, seed singulation in soybean production isn't as important as it is for corn for maintaining yield potential. This is one reason why soybeans can be grown successfully with a planter or with an air seeder.

The economics of changing seeding speed were not quantified but preliminary fuel consumption data determined for each tractor used in this study showed that total fuel consumption per quarter section was reduced when increased seeding speed from 5 to 9 mph. Fuel efficiency in gallons per hour decreased when seeding faster but the time required to cover the same area was decreased, which more than compensated for the increased fuel consumption per hour, and total fuel used per acre was reduced.

This is one on-farm trial type where a non-response to a treatment – in this case varying seeding speeds – is a useful outcome. Seeding at faster speeds may not always be warranted. However, knowing that when seeding faster, quality and yield may not fall off a cliff is important when you need to get that quarter section in quickly.

Please note that with only one year of data, more testing is required to inform any potential future soybean seeding speed recommendations. We hope to replicate this trial again this year. If you're interested in participating, please get in touch with us. ■

A planter is used as part of the soybean seeding and planting speed trials in spring 2025.



Photo credit: Chris Forsythe.

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your farm,
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Optimize
your farm
productivity
and
profitability

Interested in a trial?

Contact **Chris Forsythe**
Chris@manitobapulse.ca
204.751.0439

or sign up at
manitobapulse.ca/on-farm-network

Have a different trial idea?
Let us know!

2026 Pulse & Soybean Trial Options

- Seeding Rate
- Seed Treatment
- Inoculant
- Biological
- IDC
- Fungicide
- Row Spacing
- Variety
- Nitrogen
- Weed Control
- Insecticide
- Rolling
- Strip Till
- Planting Date
- Precision Agriculture

By Farmers, For Farmers



Q: On the My Soil Test Report, do I add my 0-6 inch and my 6-24 inch soluble salt values together and use that grand total number for soluble salt when consulting the Iron Deficiency Chlorosis (IDC) field risk chart?

Answer:

No, we don't add the soluble salt numbers together to use the chart.

According to John Breker from Agvise Laboratories, the IDC risk chart they developed, which our team at Manitoba Pulse & Soybean Growers uses, only considers the soluble salts found in the 0-6 inch-depth. The reasoning is that 0-6 inches deep is where the soybean roots will be hanging out during the growing season.

During a quick phone call with Manitoba Soil Fertility Specialist Marla Riekman, she made a great point that it's important to keep in mind the soluble salt levels detected in the 6-24-inch sample too. This way you can estimate if salts could be a compounding problem to move upward in the soil profile during the growing season if the conditions turn out to be prime for soluble salt upward movement.

Carbonate, Soluble Salts Are Primary Risk Factor in IDC

Carbonate is reported as the calcium carbonate equivalent (CCE) per cent by weight. The carbonate soil test measures all carbonate species (e.g., calcium carbonate, magnesium carbonate, sodium carbonate). Carbonate should be determined on the topsoil (0-6 inch).

Soils with a pH of less than 7.3 contain little or no carbonate. Soils with a pH of more than 7.3 contain some amount of carbonate, but the soil carbonate test is

necessary to determine if the amount is low or high.

Salinity is measured as the electrical conductivity of dissolved ions (soluble salts) in the soil solution. The greater the electrical conductivity, the higher the salinity. Soluble salts are mobile in the soil solution and move with soil water via leaching or capillary rise (e.g., high water table).

Soybean IDC severity is made worse in cool, wet springs or in heavy clay fields such as the Red River Valley of Manitoba. Soil saturation can limit iron solubility. Excess nitrates and root rot can also intensify the effects of IDC.

Soil pH isn't a good indicator of soybean IDC risk because some high pH soils lack high carbonate and salinity.

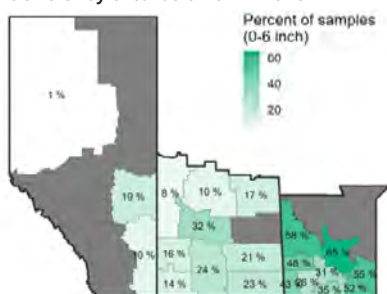
What If I Don't Know My Carbonate or Soluble Salt Level?

Agvise Laboratories aggregated their data from all the soil samples they received in 2025 and published this map of Western Canada.

Within a field, IDC symptoms are usually confined to hotspots with high carbonate and salinity. Zone soil sampling may indicate certain areas in the field that are most likely to experience IDC.

When in doubt, always choose a soybean variety with an IDC rating between 1.7 to 2.2.

Soil samples with high soybean iron deficiency chlorosis risk in 2025



Data not shown where n < 100
AGVISE Laboratories, Inc.



Seeking Out the Right Research

Daryl Domitruk, Research Director, Manitoba Pulse & Soybean Growers



EACH YEAR MANITOBA Pulse & Soybean Growers (MPSG) notifies Canada’s research community of the topics that will be eligible for project funding. In response, researchers convey their ideas to MPSG staff, and if an idea warrants further development, a short proposal is presented to MPSG’s research committee. Ideas that pass the committee’s muster are developed into fully costed long-form proposals. Those proposals are vetted by the research committee and subsequently submitted to various funding agencies who are asked to share the cost with MPSG.

Related priorities for MPSG’s On-Farm Network program are developed under a parallel system of farmer and agronomist observations and consultation.

Soybean researchers are concentrated in Ontario and Quebec (with a growing presence in Manitoba), while pulse research occurs from Ontario through to Alberta with a concentration in Saskatchewan. As a result, MPSG extends its notifications far and wide.

Priority topics are established through the observations of MPSG staff as they walk hundreds of fields and speak with

growers across the province. Additionally, observations from industry and government agronomists are included in the prioritizing process. Researchers themselves maintain a handle on reports published in scientific journals. This knowledge is combined with the field observations to come up with research hypotheses.

It’s helpful if the community of agronomists and researchers are familiar and speak the same agricultural language. This can be a challenge. Fortunately, MPSG staff and their colleagues in Manitoba Agriculture and the Agronomist-in-Residence positions at University of Manitoba and Assiniboine College are experts at translating between the farm and lab.

Here are the topics researchers were asked to consider for new projects this year.

SHOWCASING THE ENVIRONMENTAL BENEFITS OF ANNUAL LEGUMES IN A CROPPING SYSTEM

Due to biological nitrogen (N) fixation, annual legumes play a significant role in reducing greenhouse gas emissions (GHG) when incorporated into cropping systems.

Expansion of knowledge of legume-induced GHG reductions in Manitoba will help farmers demonstrate the sustainability of their businesses.

ABIOTIC STRESS MANAGEMENT FOR SOYBEANS

Abiotic stressors like drought, salinity and frost remain obstacles to soybean production in Manitoba, though not always on a consistent basis. Solutions that are both innovative and practical (e.g., field zone management, genetic resistance) are needed to improve soybean’s adaptation to Manitoba and to improve the management of risk on the farm.

IMPROVING AGRI-ECOSYSTEM AND SOIL HEALTH RELATED TO SOYBEANS AND PULSES

MPSG seeks to build a comprehensive story on annual legumes from a soil health perspective. Possible research areas may include zero-tillage, estimating residual N-credits at various sites across Manitoba and continuing to explore microbial activity in soils under annual legumes.



“
It’s helpful if the community of agronomists and researchers are familiar and speak the same agricultural language.
”

PREVENTION AND MANAGEMENT OF THE TOP PESTS IN SOYBEANS, PEAS AND DRY BEANS

We must find solutions to prevent and manage the top pests affecting soybean, pea and dry bean crops in Manitoba. Root rots like *Aphanomyces euteiches* or various fusarium species in field peas or *Phytophthora sojae* in soybeans are among the top concerns. Which management techniques can be used in an integrated approach to minimize pest risks? How can we identify and reduce the spread of pesticide resistance (e.g., broader scale testing for *Mycosphaerella* blight group 11 resistance)? Can we revisit outdated pest assessment techniques for more accurate results (e.g., updated pea aphid thresholds for Western Canada for current pea varieties)?

FINE TUNING PRODUCTION PRACTICES FOR DRY BEANS, SOYBEANS AND FIELD PEAS

With basic agronomic practices now established for pulses and soybeans in Manitoba, there is a need to take our knowledge to the next level to improve production potential and to answer outstanding questions. Examples are:

- Dry beans – How different seed handling systems impact seed damage, ideal seed depth range, replanting thresholds and replant seeding rates, land rolling, early seeding dates in central Manitoba, late seeding dates in southwestern Manitoba, expanded investigation of integrated weed management techniques.
- Soybeans – Assessment of pre-seed rolling in Manitoba on fields with various types of crop residue, rolling to cause damage that induces branching and blooming.
- Field peas – Validation of starter N practices, rescue N treatments and integrated management of pea leaf weevil and other pests.

VALUE-ADDED RESEARCH ON SOYBEANS TO IMPROVE MARKET QUALITY AND CAPTURE NEW MARKETS

Along with Soy Canada and Pulse Canada, MPSG seeks knowledge on soybean qualities that enhance demand in feed and human food markets. For example, this includes

studies on soybean crude protein content, seed size and nutritional value in various animal diets.

ELEVATING ALTERNATIVE ANNUAL LEGUME CROPS (E.G., NON-GM SOYBEANS, FABA BEANS, LUPINS, ADZUKI BEANS) BY FILLING RESEARCH GAPS

Do one or more of these alternative legume crops have potential for a significant foothold in Manitoba if supported by additional research? For example, a lack of cost-effective, selective weed control options for non-GM/conventional soybeans has been identified as a major production obstacle. Beyond agronomic practices, what other focus areas along the production chain might elevate one of these lower-acre legume crops in Manitoba?

VERIFYING SMALL-PLOT RESEARCH RESULTS USING COMMERCIAL SCALE ON-FARM TESTING METHODS

MPSG encourages researchers to explore opportunities to test practices and principles at the farm level in order

to validate small-plot trial results and encourage better uptake of research results.

UTILIZING REPLICATED SMALL-PLOT MULTI-LOCATION VARIETY YIELD TRIALS TO TEST OTHER RESEARCH HYPOTHESES

MPSG conducts an extensive regional variety evaluation program through replicated small-plot trials at up to twelve locations across Manitoba. All commercially available varieties of soybean, dry bean, pea, faba bean and lupin are tested. These trials are available for researchers to sample or superimpose studies on plant pathology, crop quality and other agronomic factors.

To see a database of MPSG research results see here. ■



CDC TURTLE MOUNTAIN

- Early maturity
- Improved harvestability

CDC BLACKSTRAP

- Earliest bean on test
- Proven high yield

Contact Ben Martens at **204.534.8370**



Research Projects Currently Underway

Project Title	Principal Investigator(s)	Institution or Company	MPSG Investment
Improve Yield and Capture New Markets			
Accelerated genetic gain and improvement in dry bean yield, N fixation, disease resistance and seed quality	Valerio Hoyos-Villegas, Jamie Larsen	Michigan State University, AAFC-Harrow	\$310,954
Development of improved pea cultivars to enhance Canada's leading role in international pea markets	Tom Warkentin	University of Saskatchewan	\$37,398
Breed for top-performing field pea varieties and develop SNP-based markers for marker-assisted selection for grain and protein yield, maturity, standability and seed size	AAFC staff	AAFC-Lacombe	\$30,000
Reducing GHG emissions by lengthening short season crop rotations with soybean	Elroy Cober	AAFC-Ottawa	\$229,805
Diversity set for genomic improvement of faba bean	Nicholas Larkan	AAFC-Saskatoon	\$27,000
Characterizing the protein and amino acid composition of Manitoba-grown soybean to support commercial value-added applications	Rotimi Aluko, Maneka Malalgoda	University of Manitoba	\$87,483
Can we improve the GHG footprint and profitability of dry beans by reducing nitrogen fertilizer use?	Kristen MacMillan	University of Manitoba – MPSG Agronomist in Residence	\$112,848
Mitigating soybean production risks to stabilize production at a level that fully captures soybean's economic and environmental benefits	Kristen MacMillan	University of Manitoba – MPSG Agronomist in Residence	\$68,782
Developing bio-inoculants for dry beans using a genomics driven approach to promote N-fixation	Ivan Oresnik, George diCenzo	University of Manitoba, Queens University	\$100,000
Development of remote sensing tools to evaluate the in-field results of adopting best management practices (BMPs) for soybeans and pulses	Dilshan Benaragama	University of Manitoba	\$140,024
Optimizing nitrogen and phosphorous management for dry bean production in southwestern Manitoba	Ramona Mohr	AAFC-Brandon	\$55,340
Effects of preceding residue management on dry bean in southwestern Manitoba	Ramona Mohr	AAFC-Brandon	\$25,476
Breeding adzuki beans for Manitoba	Pete Giesbrecht	Pulse Genetics Inc.	\$63,920
Resilience to flooding and drought in dry bean	Jamie Larsen, Kirsten Bett, Juan Osorno	AAFC, U of Sask, NDSU	\$89,523
Sustainable legume production through enhanced efficiency in N and P metabolism	Krzysztof Szczylowski	AAFC- London	\$63,200
Quantify the agronomic impacts of commercial biostimulants in soybean	Baljeet Singh	Assiniboine College	\$8,256
Manitoba Centre for Digital Agriculture	Chris Bidinosti/Michael Beck	University of Winnipeg	\$155,000
Pet food market development	Pulse Canada	University of Manitoba, University of Saskatchewan	\$100,000
Accelerating Canada's Protein Industry Forward with an AI-Driven Genomic Selection Pulse Breeding Consortium	Global Institute for Food Security	University of Saskatchewan	\$50,000
Reduce Losses to Pests			
Towards a better understanding of dry bean root rot and soybean cyst nematode management	Owen Wally	AAFC-Harrow	\$48,280
The prairie weed monitoring network: surveillance, risk assessment, and forecasting	Charles Geddes	AAFC-Lethbridge	\$50,000
Protecting Manitoba's soybean industry from soybean cyst nematode	Mario Tenuta	University of Manitoba	\$39,139
Staying on top of soybean root diseases under climate change in Manitoba	Yong Min Kim	AAFC-Brandon	\$49,830
Investigating pea crop rotation length and sequence for sustainable protein production in Manitoba	Kristen MacMillan	University of Manitoba – MPSG Agronomist in Residence	\$99,544
Accelerate discovery of root rot solutions for pea and lentil	Sabine Banniza	University of Saskatchewan	\$35,342
Faba bean in crop rotation: Impacts on pea and soybean root rot, soil chemistry, microbiome and yield of most important crops in Western Canada	Ahmed Abdelmagid	AAFC-Morden	\$98,460
Oospore dynamics to validate a risk prediction tool for pea root rot	Syama Chatterton	AAFC-Lethbridge	\$26,251
Impact of Bradyrhizobium japonicum & Arbuscular Mycorrhizal Fungi Inoculation on Soybean Response to Fusarium Root Rot & Yield Under MB Field Conditions	Ahmed Abdelmagid	AAFC-Morden	\$63,680
Optimizing sustainable pest management in annual legumes	Anand Aneja	Assiniboine College	\$281,600
Improve Soil Quality and Agroecosystem Health			
Building resilient soils with cover crops in Manitoba	Afua Mante	University of Manitoba	\$126,068
Soil and water management R&D site in an undulating landscape	David Whetter, Bruce Shewfelt	AgriEarth Consulting, PBS Water Engineering	\$52,253
Irrigated and rainfed field trials to maximize biological nitrogen fixation: Assessing the legacy impact of soybean and pea on residual soil nitrogen and yield of cereal and oilseed crops	Kevin Baron	N49 Genetics Inc.	\$14,625
Effect of using low ground pressure (LGP) traffic systems for seedings on soil compaction and yield in different soil types	Lorne Grieger	Prairie Agricultural Machinery Institute	\$39,165
Soil and environmental conditions driving N-fixation in soybean	Oscar Molina	AAFC-Morden	\$103,400
TOTAL			\$2,571,691



VIEW FROM THE FIELD

Wendy McDonald, Production
Agronomist – West, Manitoba
Pulse & Soybean Growers

SHOVELLING UNDER THE SNOW

The field pea disease survey in Manitoba starts early – specifically hunting for *Aphanomyces*. Soil samples are collected prior to planting and used to determine the soil's potential for disease establishment, such as root rot, where peas or any susceptible crop is going to be planted.

We pick two sites within each field and mark these sites with GPS coordinates. We choose one site with heavier soil or a depression area with/without stagnant water, and the other site is an upper slope of a small hill or an area with lighter soil or better drainage. Using a trowel, we scrap away the stubble layer and sample the top six inches of soil, placing approximately two kilograms of soil from each site into a large freezer bag.

This soil is sent off to Syama Chatterton, at the Agriculture and Agri-Food (AAFC) Lethbridge Research and Development Centre, where bioassays are conducted. The results come back as either yes, *Aphanomyces euteiches* DNA was detected in the soil sample, or no, it wasn't.

Again, during the growing season, at six-node or up to pre-flowering growth stage – the flowering stage is too late – we go back to the same sites and sample five to 10 plants with roots and soil attached. Those plants are examined by Yong Min Kim and staff at AAFC Brandon Research and Development Centre for incidence and severity ratings of many different field pea diseases. *Fusarium* root rot and *Mycosphaerella* blight are almost always detected.

Soil samples undergo molecular testing, which can find even the smallest amounts. A result of “present” means yes it was found but it doesn't necessarily indicate it was present at a high enough level to impact the crop – 100 oospores per gram of soil or more may affect yield.

In 2025, *Aphanomyces euteiches* DNA was detected in 29.8 per cent of all surveyed Manitoba pea fields, compared to 62 per cent of fields in 2024, and 98 per cent of fields in 2022. *Aphanomyces* root rot is often severe during years when a cool, wet spring is followed by dry, warm weather. The 2025 survey results are still pending.

To be noted, faba beans and soybeans are more tolerant to *Aphanomyces*.

Photo credit: Wendy McDonald



An unexpected snowstorm made it easy to find the low spots in this field in St. Lazare on April 23, 2025.



In April 23, 2025, we sampled from a high spot in the field where we hoped to not find *Aphanomyces* present.

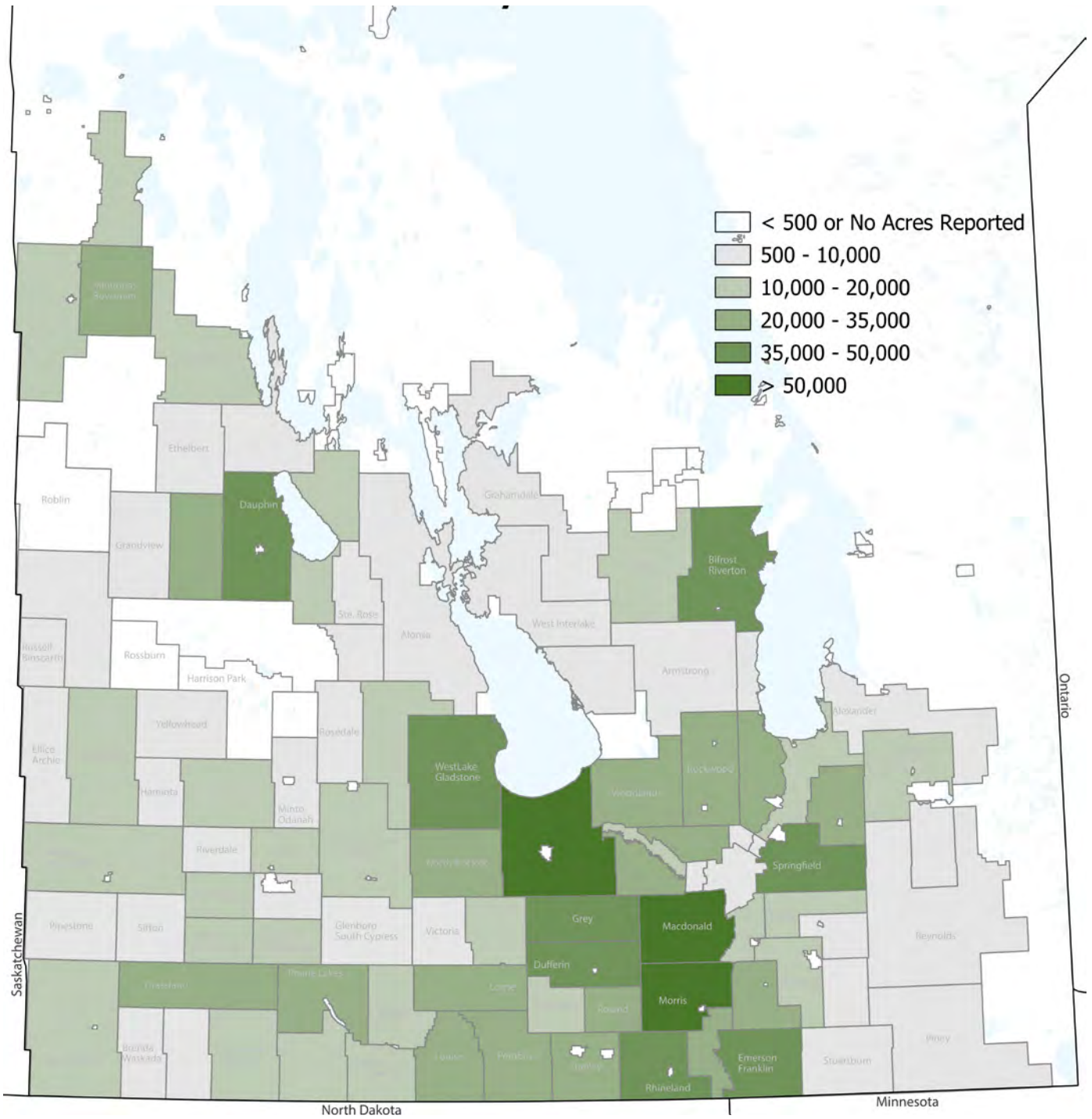
Photo credit: Wendy McDonald



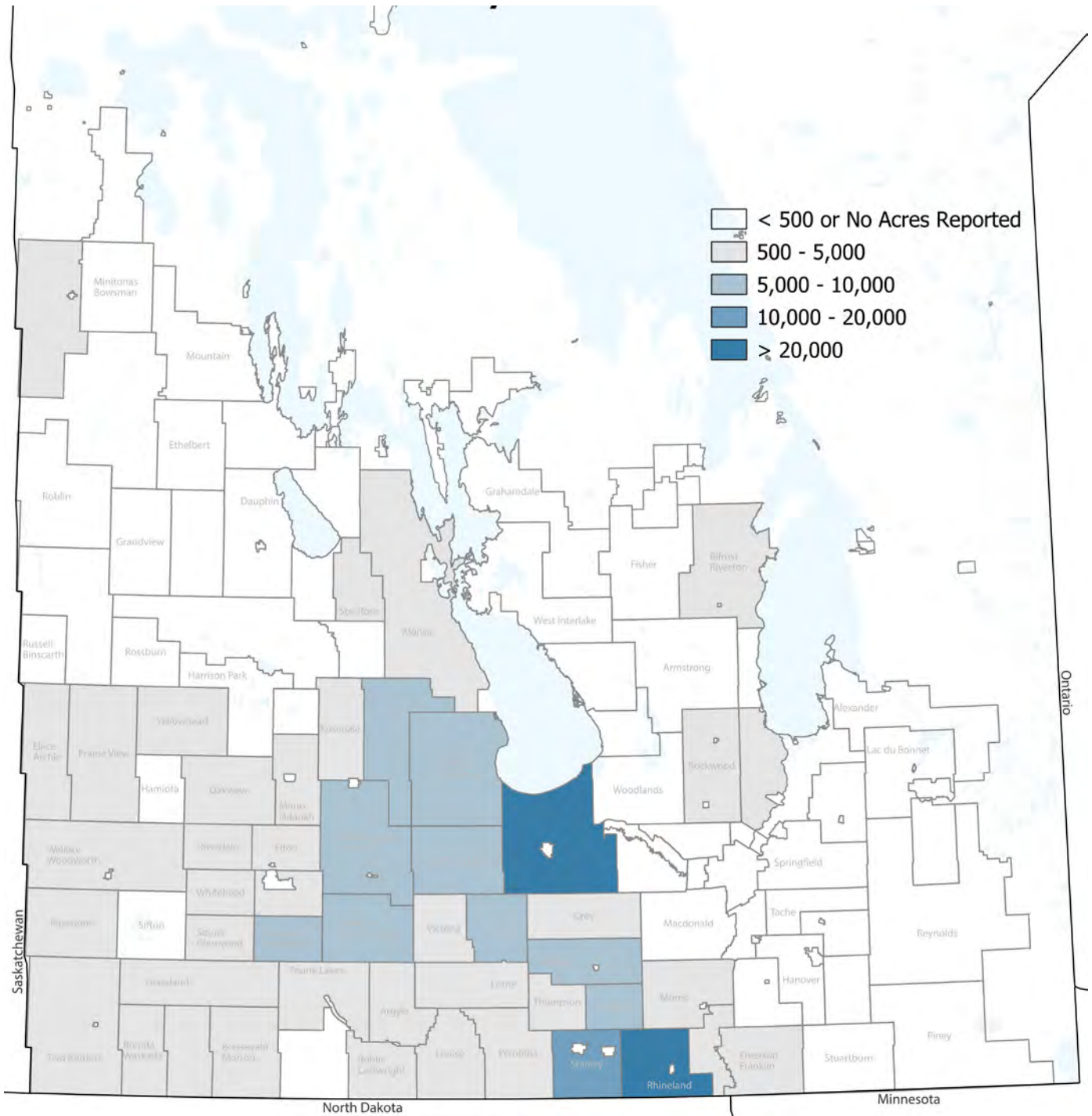
A pea crop planted in the field we sampled near St. Lazare on June 25, 2025.

Photo credit: Wendy McDonald

2025 Soybean Acres



2025 Dry Bean Acres



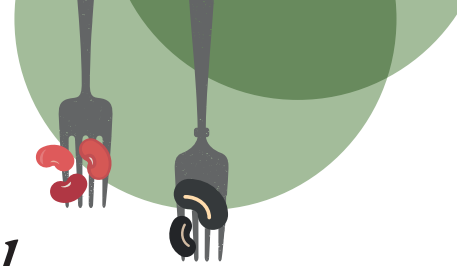
Manitoba Pulse and Soybean Buyer List – January 2026

The Canada Grain Act requires some elevators and grain dealers to have a Canadian Grain Commission (CGC) license and post security to cover their liabilities (what they owe) to farmers. Grain dealers and operators of primary, terminal, and process elevators in western Canada are licensed by the CGC. Seed cleaning plants, which do not purchase grain, and feed mills do not have to be licensed.

It is the responsibility of farmers to satisfy themselves that any company they deal with is financially sound. Questions regarding licencing and security should be directed to the CGC at 800-853-6705 or 204-983-2770.

MPSG's pulse crop buyers list contains the names of companies that have registered with MPSG and are actively purchasing pulse crops in Manitoba. The word registered does not imply endorsement. The complete list is available on our website manitobapulse.ca.

COMPANY	EDIBLE BEANS	FABA BEANS	LENTILS	PEAS	SOYBEANS	PHONE	LOCATION	CGC REGULATED
Adroit Overseas Enterprises Ltd.	✓	✓	✓	✓	✓	604-930-4855	Surrey, BC	✓
Agassiz Global Trading	✓			✓	✓	204-745-6655	Homewood, MB	
Alliance Pulse Processors Inc. dba AGT Foods Canada	✓	✓	✓	✓	✓	306-525-4490	Regina, SK	✓
All Commodities (AC) Trading Ltd.			✓	✓		204-339-8001	Winnipeg, MB	✓
Avena Foods Ltd. dba Best Cooking Pulses Inc.			✓	✓		306-586-7111	Rowatt, SK	✓
B.P. & Sons Grain and Storage Inc.					✓	204-822-4815	Morden, MB	
Bayer - Crop Science Monsanto Company					✓	314-694-5764	St. Louis, MO	
Belle Pulses Ltd.		✓		✓		306-423-5202	Bellevue, SK	✓
Besco Grain Ltd.		✓		✓		204-745-3662	Carman, MB	✓
Brett-Young Seeds Ltd.				✓	✓	204-478-2204	Winnipeg, MB	
Broadgrain Commodities Inc.	✓	✓	✓	✓	✓	416-504-0070	Toronto, ON	✓
Bunge Canada Inc	✓	✓	✓	✓	✓	306-569-4581	Regina, SK	✓
C.B. Constantini Ltd.	✓	✓	✓	✓		604-669-1212	Vancouver, BC	✓
Cargill Ltd.					✓	204-947-0141	Winnipeg, MB	✓
Columbia Grain Inc. (CGI) (Walhalla Bean Co.)	✓					701-549-3721	Walhalla, ND	✓
Delmar Commodities Ltd.	✓		✓	✓	✓	204-531-3696	Winkler, MB	✓
ETG Commodities	✓	✓	✓	✓	✓	416-900-4148	Mississauga, ON	✓
G3 Canada Limited				✓	✓	204-983-0239	Winnipeg, MB	✓
Gavilon Grain LLC					✓	816-584-2210	Omaha, NE	✓
Global Food and Ingredients Inc.	✓	✓	✓	✓		416-840-8590	Toronto, ON	✓
Hensall District Co-operative Inc.	✓			✓		204-750-0529	Winnipeg, MB	✓
Horizon Agro Inc.					✓	204-746-2026	Morris, MB	✓
Kalshea Commodities Inc.			✓		✓	204-488-0251	Winnipeg, MB	✓
Knight Seeds			✓		✓	204-764-2450	Hamiota, MB	
Linear Grain Inc.	✓	✓		✓	✓	204-745-6747	Carman, MB	✓
Lyft Commodity Trading Ltd.	✓	✓	✓	✓	✓	604-355-4275	Vancouver, BC	✓
McDougall Acres Ltd.	✓	✓	✓	✓	✓	306-693-3649	Moose Jaw, SK	
Merit Functional Foods Corporation				✓		204-223-7020	Winnipeg, MB	✓
Natural Proteins Inc.					✓	204-355-5040	Blumenort, MB	
Nutri-Pea				✓		204-239-5995	Portage la Prairie, MB	✓
NuVision Commodities Inc.	✓			✓	✓	204-758-3401	St. Jean Baptiste, MB	
Parrish & Heimbecker Ltd.				✓	✓	204-987-4329	Winnipeg, MB	✓
Paterson Grain	✓			✓	✓	204-956-2090	Winnipeg, MB	✓
Prairie Fava Ltd.			✓			204-721-4715	Glenboro, MB	✓
Prairie Flax Products Inc.				✓		204-252-2940	Portage la Prairie, MB	
Providence Grain Group			✓	✓	✓	780-997-0211	Fort Saskatchewan, AB	✓
PS International, LLC dba Seaboard Special Crops		✓	✓	✓		306-565-3934	Regina, SK	✓
Rangen of Canada, Ltd	✓	✓	✓	✓	✓	403-328-3311	Lethbridge County, AB	✓
Richardson International Ltd.			✓	✓		306-525-0205	Regina, SK	✓
Richardson Pioneer Limited				✓	✓	204-934-5627	Winnipeg, MB	✓
Tri Lake Agri Limited				✓	✓	204-934-5652	Winnipeg, MB	✓
Roquette Canada Ltd.				✓		204-428-3722	Portage la Prairie, MB	✓
Rudy Agro Ltd.	✓		✓	✓		306-867-8667	Outlook, SK	✓
Scouler Canada Ltd.	✓	✓	✓	✓		403-349-5077	Calgary, AB	✓
Seed-Ex Inc.				✓	✓	204-737-2000	Letellier, MB	✓
Semences Prograin Inc.					✓	450-469-5744	Saint-Césaire, QC	✓
Shafer Commodities Inc.	✓	✓	✓	✓	✓	204-822-6275	Morden, MB	✓
Simpson Seeds Inc.			✓	✓		306-693-2132	Moose Jaw, SK	✓
Sollio Agriculture - Livestock Production				✓	✓	204-914-9554	Winnipeg, MB	
Southland Pulse Inc.			✓	✓		306-634-8008	Estevan, SK	✓
Sunrise Foods International Inc.					✓	306-657-4541	Saskatoon, SK	✓
SureSource Commodities, LLC				✓		1-866-697-5960	Petrolia, ON	✓
The Andersons Inc.			✓	✓		419-891-6464	Maumee, OH	✓
Vandaele Seeds Ltd.		✓		✓		204-665-2384	Medora, MB	✓
Vanderveen Commodity Services Ltd.				✓	✓	204-745-6444	Carman, MB	✓
Western Harvest Bean ULC	✓					204-515-7331	Winnipeg, MB	
XPT Grain Inc.	✓			✓		306-525-0205	Regina, SK	✓
XPT Grain Inc.	✓			✓		306-525-0205	Regina, SK	✓



Turkey Turmeric Power Bowl



Photo: Great Tastes of Manitoba

Courtesy of GREAT TASTES OF MANITOBA and MANITOBA TURKEY PRODUCERS

SERVINGS: 6 | PREP TIME: 15 min | COOK TIME: 25 min | TOTAL TIME: 40 min

Ingredients

SEASONING

1 Tbsp (15 mL) each of turmeric, paprika and curry powder

½ tsp (2 mL) garlic powder

1 tsp (5 mL) seasoning salt

TURKEY

2 Tbsp (30 mL) canola oil

1 small onion, diced

1 lbs (454 g) ground turkey

1 - 19 oz (540 mL) can chickpeas, drained and rinsed

COUSCOUS

1 ¼ (300 mL) cups water

1 cup (250 mL) couscous

2 Tbsp (30 mL) raisins

1 tbsp (15 mL) seasoning mix (above)

SAUCE

1 Tbsp (15 mL) seasoning mix (above)

1 cup (250 mL) plain yogurt

1 Tbsp (15 mL) lime juice

1 tsp (5 mL) sriracha (optional)

½ tsp (2 mL) granulated sugar

1 Tbsp (15 mL) chopped fresh mint (optional)

VEGETABLES

2 carrots, diced

1 celery rib, diced

1 bell pepper, seeded, diced

1 handful cilantro, chopped

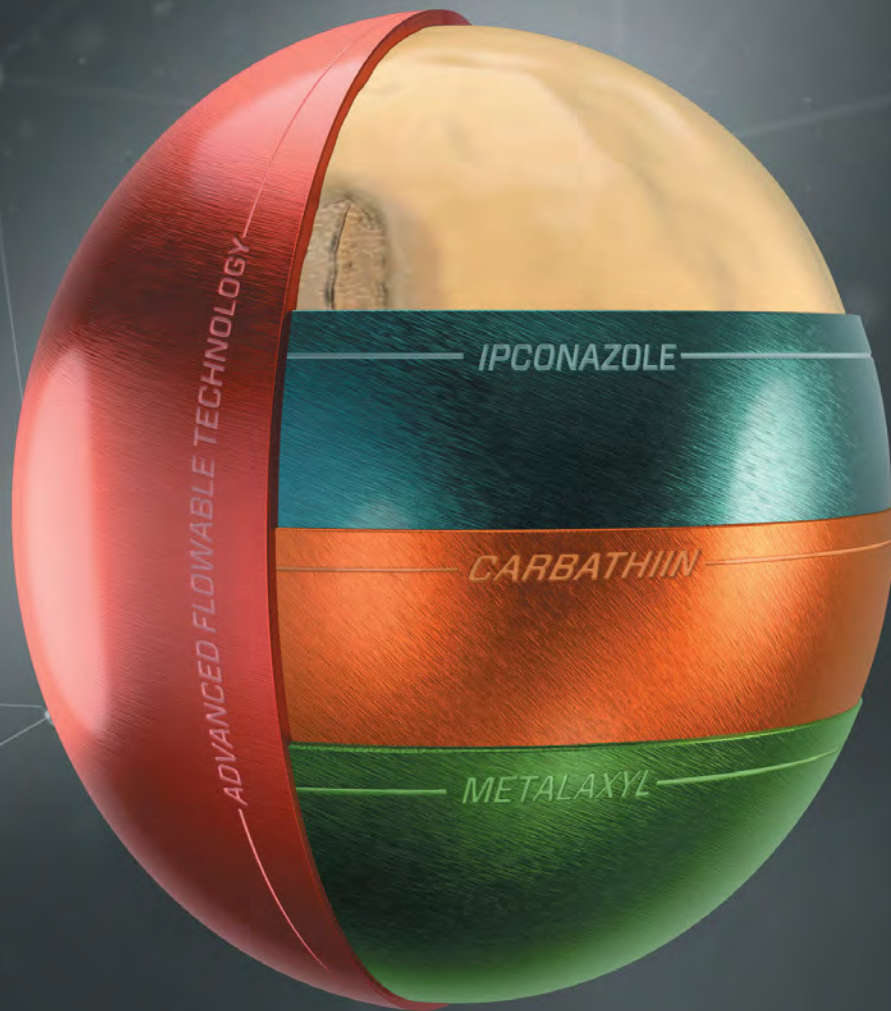
Method

- In a small bowl, whisk together ingredients for seasoning mix. Set aside.
- In a large frying pan, heat canola oil over medium heat. Add onion and ground turkey. Break up the turkey into small pieces as it cooks. Cook until no longer pink.
- Add in chickpeas and 1 ½ Tbsp seasoning mix. Cook for five minutes.
- In a small pot, bring 1 ¼ cups of water to a boil. Add 1 Tbsp seasoning mix, raisins and couscous. Stir to combine. Immediately remove from heat. Cover with lid. Set aside for 5 minutes. Fluff with a fork.
- In a medium bowl, whisk together sauce ingredients.
- Prepare vegetables.
- Assemble bowl starting with couscous on the bottom and then a layer of turkey/chickpea mixture and vegetables.
- Top with a spoonful of sauce.



View the recipe online:





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RECIPE CORNER

Black Bean and Lentil Salad with Chili-Lime Dressing

Photo: Great Tastes of Manitoba

Courtesy of GREAT TASTES OF MANITOBA
AND HELLO CANOLA

SERVINGS: 10 | COOK TIME: 15 min | TOTAL TIME: 15 min

Ingredients

SALAD

1 - 19 oz (540 mL) can black beans,
rinsed and drained
1 - 19 oz (540 mL) can lentils, rinsed
and drained
1 avocado, peeled and chopped
1 medium tomato, chopped
1 orange or yellow pepper, chopped
½ cup (125 mL) thinly sliced red
onion

CHILI-LIME VINAIGRETTE

¼ cup (50 mL) canola oil
½ tsp (2 mL) grated lime zest
¼ cup (50 mL) fresh lime juice
1 Tbsp (15 mL) honey
1 Tbsp (15 mL) chopped fresh
cilantro
1 garlic clove, minced
½ tsp (2 mL) crushed red pepper
flakes
½ tsp (2 mL) ground cumin
½ tsp (2 mL) coriander

Method

CHILI-LIME VINAIGRETTE

In a measuring cup or small bowl,
whisk together all ingredients.

SALAD

In large bowl, combine salad ingredients.
Stir in vinaigrette and toss lightly.

View the
recipe online:



great
TASTES MB

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Optimize[®] FXC DS



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¹ Results on file.
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