

pulse *beat*

Summer • No. 78, 2016

**Minding Your MRLs
Ensure a Marketable Crop**

p. 19

**ULTIMATE SOYBEAN CHALLENGE
The Quest to Maximize
Soybean Yield and Profitability
in Manitoba**

p. 21

**2016 Approved
Funding for Research**

p. 22

**2015 DRY BEAN GROWER
SURVEY RESULTS**

p. 28

Taking your pulses to their full potential is more than science. It's advanced fungicide science.



Priaxor[®]
Fungicide

Only a more advanced fungicide gives you more advanced results. By combining the unique mobility of Xemium[®] with the proven benefits¹ of AgCelence[®], Priaxor[®] fungicide delivers more consistent and continuous control of key pea and lentil diseases including ascochyta and anthracnose. Plus, research shows it leads to increased growth efficiency and better management of minor stress – all working to help increase your crop's yield potential². Learn more at agsolutions.ca/priaxor or call AgSolutions[®] Customer Care at 1-877-371-BASF (2273).

 **BASF**
We create chemistry

¹ AgCelence benefits refer to products containing the active ingredient pyraclostrobin. ² All comparisons are to untreated, unless otherwise stated.

Always read and follow label directions.

AgSolutions is a registered trade-mark of BASF Corporation; AgCelence, PRIAXOR, and XEMIUM are registered trade-marks of BASF SE; all used with permission by BASF Canada Inc. PRIAXOR fungicide should be used in a preventative disease control program. © 2016 BASF Canada Inc.



Publisher Manitoba Pulse & Soybean Growers

Editors Toban Dyck MSPG
Laryssa Grenkow MSPG

Associate Editor Sandy Robinson MSPG

Design & Production Imprint Media Services Inc.

Manitoba Pulse & Soybean Growers thanks the authors who have taken the time to contribute to this publication.

Publications Mail Agreement #40016070

RETURN UNDELIVERABLE CANADIAN ADDRESSES TO:

Manitoba Pulse & Soybean Growers
P.O. Box 1760, Carman, Manitoba R0G 0J0
204.745.6488 Fax 204.745.6213
Email mppsg@manitobapulse.ca

Pulse Beat is the official journal of and published by Manitoba Pulse & Soybean Growers (MPSG) – a farmer organization funded by sales of pulse (beans, peas, lentils and faba beans) and soybean crops grown in the province of Manitoba. Circulation is approximately 3,900 and distributed to farmers, government, researchers, and industry involved in the pulse and soybean crops field.

The views expressed in articles and advertisements are those of the contributors and do not necessarily represent the views of Manitoba Pulse & Soybean Growers. Contents of this publication can only be reproduced with the permission of MSPG.

MEMBER PRIVACY POLICY

Member information is collected and used in accordance with the Personal Information Protection and Electronic Documents Act (PIPEDA) and is the property of Manitoba Pulse & Soybean Growers (MPSG). Information will not be shared, sold or viewed by any individual or group outside of the MSPG unless directly related to member communications.

Please direct your comments or concerns to Sandy Robinson at 204.745.6488 or email sandy@manitobapulse.ca

FOR ADVERTISING INQUIRIES

please contact Shannon at
Imprint Media Services
Phone 204 669-8107
Email imprint@shaw.ca

IN THIS ISSUE

■ ANNOUNCEMENTS

- 2 SMART Day – *Wednesday, July 20*
- 4 2016 Scholarship Award Recipient – *Jenilee Dyck*
- 6 Lewko Birth Announcement
- 8 MSPG Introduces Newest Staff Additions
- 13 Great Tastes of Manitoba
- 21 Agronomy at Your Fingertips! – *MPSG Bean App*

■ MSPG BUSINESS

- 2 2016 MSPG Committees and Representatives
- 3 Message from Board Chair
- 5 Message from Executive Director
- 9 We do a lot of good stuff here! Let's let our members know about it!

■ MARKET AND POLICY

- 12 Soy Canada – *Soybean Sector Delivers \$5.6 Billion Annually to Canadian Economy*
- 13 Pulse Canada – *Canadian Field Print Calculator*
- 15 KAP – *How Has KAP's Year Been, So Far?*
- 18 Clancey's Stats
- 19 Minding Your MRLs – *Ensure a Marketable Crop*

■ RESEARCH AND PRODUCTION

- 4 Soybean Scout
- 19 Variety Release Program Update
- 21 **Ultimate Soybean Challenge – *The Quest to Maximize Soybean Yield and Profitability in Manitoba***
- 22 **2016 Approved Funding for Research**
- 26 The Bean Report – *Working to Address Dry Bean Production Constraints*
- 28 **2015 Dry Bean Grower Survey Results**
- 31 Field Pea Production Tips
- 33 Seeding Rates and Foliar Fungicides for Field Peas
- 34 2015 On-Farm Edible Bean Fungicide Trial
- 35 2014 Soybean Acreage
- 36 2015 Edible Bean Acreage
- 39 Soybean Scout – *Answers*

■ OUTREACH

- 10 The Bean Team Has Been Busy!
- 11 Mission ImPULSEible – *2016 National Food Development Competition*
- 37 Farmer Profile – *Calvin Penner*
- 38 Manitoba Pulse & Soybean Buyer List
- 40 Recipe Corner

Cover photo courtesy of Dennis Lange – Manitoba Agriculture

Manitoba Pulse & Soybean Growers – 2016 Board of Directors and Staff

Elected Producer Directors

- Chair – Jason Voth – *Altona*
- Vice Chair – Frank Prince – *Deloraine*
- Ben Martens – *Boissevain*
- Calvin Penner – *Elm Creek*
- John Preun – *St. Andrews*
- Ernie Sirski – *Dauphin*
- Albert Turski – *La Salle*
- Rick Vaags – *Dugald*

Advisory Directors

- Anfu Hou, Agriculture and Agri-Food Canada – *Cereal Research Centre*
- Dennis Lange, Manitoba Agriculture
- Yvonne Lawley, Department of Plant Science, University of Manitoba

Staff

- Executive Director** – François Labelle
Email – francois@manitobapulse.ca
- Business Manager** – Sandy Robinson
Email – sandy@manitobapulse.ca
- Production Specialist** – Kristen Podolsky
Email – kristen@manitobapulse.ca
- Director of Communications** – Toban Dyck
Email – toban@manitobapulse.ca
- Research Technician** – Laryssa Grenkow
Email – laryssa@manitobapulse.ca
- On-Farm Technician** – Greg Bartley
Email – greg@manitobapulse.ca
- Program Administrator** – Wendy Voogt
Email – wendy@manitobapulse.ca

P.O. Box 1760, Carman, Manitoba R0G 0J0
Ph 204.745.6488 • mppsg@manitobapulse.ca

2016 MPSG COMMITTEES AND REPRESENTATIVES

MPSG COMMITTEES – *The first named is chair*

Executive – J. Voth, F. Prince, E. Sirski, F. Labelle

Governance/HR – F. Prince, E. Sirski, F. Labelle

Finance – J. Preun, R. Vaags, F. Labelle, S. Robinson

Resolutions – J. Preun, C. Penner, A. Turski, B. Martens

Nominations – J. Preun, C. Penner, A. Turski, B. Martens

Communications/Member Relations/Market Development – E. Sirski, R. Vaags, T. Dyck, C. Penner, F. Labelle, K. Podolsky, S. Robinson

Research – A. Turski, B. Martens, F. Prince, J. Preun, C. Penner, F. Labelle, K. Podolsky, L. Grenkow, W. Voogt, industry advisors

MPSG REPRESENTATIVES

Canadian Grain Commission Pulse Sub-Committee
– F. Labelle

Grain Growers of Canada – B. Martens

Keystone Agricultural Producers – R. Vaags, C. Penner, F. Labelle

• **General Council** – F. Labelle

• **Pulse/Oilseed Sub-Committee** – F. Labelle

• **Commodity Group** – R. Vaags, C. Penner

MCVET – L. Grenkow, D. Lange

PGDC/PRCPSC – B. Martens, L. Grenkow, D. Lange

Pulse Canada – R. Vaags, B. Martens (alt), F. Prince (alt)

• **Sustainability** – F. Prince

Soy Canada – E. Sirski

Western Canadian Pulse Growers Association

• **WGRF** – Corey Loessin (SPG)

• **CGC Western Grain Standards Committee** – E. Sirski
(exp. 2018) *This is a four-year term that rotates between APG, SPG and MPSG.*

SMART Day is an all-day educational event for farmers and agronomists to sharpen their soybean management skills!

MPSG has a major investment in agronomic research, many projects of which are conducted at the Carman research station. Attendees will tour agronomic research plots, learn how results can be applied to their farm and interact with researchers.

RESEARCH PROJECTS AND PRODUCTION QUESTIONS WILL INCLUDE:

- **Soil, Fertilizer and Biological N Dynamics**
Do soybeans benefit from starter N?
- **Soybean Aphids**
What role do beneficial insects play in action thresholds?
- **Seed Quality and Plant Establishment**
Why test seed for moisture, cracks or disease?
- **Foliar and Root Rot Disease**
When should you consider using foliar or seed treatment fungicides?
- **Weed Management**
What should I know about weed control for dicamba-resistant soybeans?

SMART DAY
SOYBEAN MANAGEMENT & RESEARCH TRANSFER

Wednesday, July 20, 2016

REGISTRATION 8:30 am | TOUR 9:00 am to 3:00 pm | LUNCH PROVIDED

University of Manitoba
Ian N. Morrison Research Farm
Carman, MB – 1.8 km west of the junction of Hwy 3 and 13

PRE-REGISTRATION IS REQUIRED FOR ALL ATTENDEES

Register online – manitobapulse.ca
or contact Toban at 204.227.8875

Registration is free for farmer members in good standing with MPSG.
Agronomist fee is \$50. CCA CEU credits will be available.

MANITOBA
Pulse Soybean
GROWERS



MESSAGE FROM BOARD CHAIR



Jason Voth
Chair

Spring has arrived and along with it comes a new season of excitement and change. My name is Jason Voth. I am writing my first article as the new chair for Manitoba Pulse & Soybean Growers. I farm southeast of Altona, Manitoba. I live on the farm with my wife and two children and farm with my dad and brother. We grow a mixed bag of crops including edible beans, soybeans, corn, wheat, canola, and since we grew peas last year and have some in the ground this year, I can call myself a pea grower, as well. I have been on the board for a number of years as vice chair to Mr. Kyle Friesen. I would like to thank Kyle for the leadership he has provided us during the last few years of substantial growth in the organization.

Speaking of change, we now have a new political party running the province. I would like to extend a sincere thank you to Minister Ron Kostyshyn, the outgoing minister of agriculture. We really did enjoy working with you and we accomplished a lot. I would also like to congratulate Mr. Brian Pallister as he takes over the province. We look forward to working together with you to benefit the pulse and soybean farmers of Manitoba, as well as the agriculture industry in general.

As we head into the 2016 growing season, we are looking at a resurgence of pea acres in the province. With strong prices in winter and reduced inputs, farmers have been driven to seed peas in a big way. Since we don't have a pea breeding program in Manitoba, MPSG has been working with the Saskatchewan Pulse Growers to ensure that Manitoba farms have access to the latest pea varieties. MPSG has also been actively working with Pulse Canada to ensure that our Canadian pea export markets stay strong.

Also, according to Statistics Canada seeding intentions, we are looking at yet again a record soybean crop in

Manitoba. With multiple years of good yields, decent prices, and no early frosts, soybeans are fitting in very nicely into Manitoba farms rotations. MPSG is working towards adding value to those soybeans right here in Manitoba. We are trying to create a local market for soybeans. Two years ago, we did a feasibility study on having a crush plant here in Manitoba. Now with acres staying at or above the needed acres to crush here in Manitoba, we are optimistic that there could be a facility here in the future. MPSG's On-Farm Network is doing a lot of work around the whole province regarding agronomy in soybeans. I would encourage you to

take a look at some of the research we have done in previous years to see what you can learn. We are proud to publish independent, third-party results that farmers can trust and use on their own farm. If you are doing research on your farm and would like to be part of the On-Farm Network I would encourage you to get in touch with our On-Farm technician, Greg Bartley.

Edible bean acres in the province look to be holding flat around 100,000 acres this year. With soybeans and peas offering some good returns with lower risk, we are seeing the edible bean acres grown on edible bean ground only.

continued on page 4



LMC specializes in seed and grain processing equipment, pre-cleaning equipment, VistaSort Colour Sorters (with infrared and shape recognition options) and plant design. We also have manual and fully automatic weighing systems including bagging and robotic palletizing.



Processing Equipment

- Gravity Separators
- Vibratory Conveyors
- Gentle Handling Bucket Elevators
- Precision Sizing Shakers
- Destoners
- Bean/Pea Polishers
- Aspiration Machinery

Precision Air-Screen Seed Cleaners

VistaSort Colour Sorters

- Infrared Camera
- RGB Camera
- LED Lighting

Dust Control Equipment

Indent Separators

Spiral Separators

Bucket Elevators & Accessories

Pellet Mills and Hammer Mills

Manual & Fully Automated Packaging Systems



Lewis M. Carter Manufacturing (Canada) Ltd.

835 58th Street East
Saskatoon, SK S7K 6X5
Phone 306-242-9292 Fax 306-934-4840

www.lewismcarter.com

There are not very many farms that are pushing the acres on only marginal ground, given where prices are at today. I do not see this as a bad thing. It will hopefully provide a more stable bean market here in Manitoba, without the price swings we have seen in the past.

Lentils are a crop that I've heard my dad talk about growing in the past, but I don't have any experience with them. I have heard that there will be some lentil acres in the province and I look forward to seeing how they do again.

COLLABORATION

As chair of MPSG I will be encouraging more collaboration with others. On our farm we work together with two other farms. We have an equipment holding company that allows us to run some later model equipment that our small farm would not be able to run with just our acres. Since we harvest together there is also the added benefit of having the extra manpower around during harvest. This is the idea that we need to work towards with producer groups, governments, and universities. We need to work together to reduce overlap and increase efficiency. The universities, both here in Manitoba and across the border into North Dakota, are a huge resource that we need to utilize better.

Universities have a very deep resource pool of people that do some excellent work. We need to work together with both the provincial and federal governments. For them, agriculture is a great place to invest. It provides lots of revenue and jobs for both the province and the country.

SUMMARY

As the 2016 farming year progresses and the weather and markets go up and down, sleep deprivation becomes a reality. I would encourage you to stay safe, take time to spend with your families, have fun, and most importantly have a good attitude. ■

Soybean Scout

What type of herbicide drift caused injury to these soybean plants?



Answers can be found on page 39

Do you have a production question related to pulse or soybean crops that you just can't find the answer to? Maybe you're looking for an opinion or advice?

Write to us! Email: kristen@manitobapulse.ca



2016 University of Manitoba Scholarship Recipient

Each year, MPSG awards scholarships at the University of Manitoba and Assiniboine Community College. This issue, we are pleased to introduce our University of Manitoba diploma scholarship recipient, **Jenilee Dyck**.

Growing up on a farm near Winkler, MB, choosing to enroll in agriculture at University of Manitoba was an easy decision.

Jenilee began university in the fall of 2014, and in May 2016 graduated with her Agriculture diploma, with a focus in crop production.

"Receiving this scholarship has had a large impact on my schooling as it has allowed me to afford the extra expenses that come with living in the city while attending school, such as rent, transportation and food," says Jenilee. It has also allowed her to focus on her academics while not having to worry about working during the school year.

After graduation, Jenilee plans on attending a year of bible school in Germany and when she returns home, hopes to obtain a job in the agriculture industry.

MPSG congratulates Jenilee Dyck, 2016 University of Manitoba Scholarship winner!

"Thank you to Manitoba Pulse & Soybean Growers for this generous scholarship opportunity." – Jenilee Dyck

MESSAGE FROM EXECUTIVE DIRECTOR



François Labelle
Executive Director

The growing season is always exciting – planting the seeds, fighting off the weeds, insects and diseases that rob the crops of their full potential. Then, hopefully, a bountiful harvest to bring the season to a close. But we need to be mindful, once the crop is in that is not the end.

If farming was so simple as to be without any changes or challenges, it would not be nearly as exciting. It would almost be boring. The winds of change keep blowing. In our present marketplace, it's not only getting the right price and moving commodities off the farm. Transportation continues to be an issue, MRLs need to be watched more carefully, and the areas of sustainability and the environment are increasingly in the spotlight.

POLITICS

This year we are experiencing some political changes.

With Premier Brian Pallister – who came from a strong ag background – taking over the province and naming Ralph Eichler, an experienced politician with farm and business experience, as Agriculture Minister, we are confident we will be able to work as a team to advance ag in Manitoba.

But it is not only the provincial side. With Canada's new Liberal government, we are getting some new outlooks and programming.

On politics, I would personally like to say thank you to former Agriculture Minister Ron Kostyshyn. We enjoyed working with you and the staff. We'll try to finish what has been started.

GROWING FORWARD 3 (GF3)

You have heard us mention *Growing Forward 2* (GF2), and how we have accessed funding under this program primarily for research, but it does take into account much more. It is under

this program that Crop Insurance – AgriStability, Agri-Marketing, Science Research Cluster and more are funded.

These are five-year programs where federal and provincial funding flows to our industry. GF2 expires on March 21, 2018, and hopefully GF3 will all be in place by that time. There was a major shortcoming on the GF2. We had nearly a six-month lag before the program kicked off, which caused programs to slow down or even stop and new programs not to start on time.

The good news is lots of work is being done now: consultation with industry, grower groups, etc. The federal government is pushing to get the program rolling in time so we do not have this lag from one program to the next. We are hopeful this can happen.

These discussions between governments, researchers, and local and national grower groups is really helping to build stronger programs.

continued on page 6

Committed to Manitoba Dry Bean Production



- > HDC has invested in people and facilities to ensure that Manitoba's food producers receive maximum returns in today's global marketplace.
- > Together, we have built a good reputation for supplying end-use markets with contracted food-safety certified dry beans.

Make sure that you're part of the program!



For information please contact

Glen Last

Phone (204) 295-3938

E-mail glast@hdc.on.ca

www.hdc.on.ca

TRANSPORTATION

It's good to see the federal government is taking a hard look at the whole transportation file. The Canadian Transport Agency (CTA) report was released on Feb. 28, 2016 and there was disappointment from producer groups and the grain industry that it did not address concerns in many areas and that the report had a slanted view in favour of the railroad. One comment was made that it looked like the railroads had written part of the report.

On April 22, Minister Garneau and Minister MacAulay announced they would work with parliament to extend certain provisions of the *Fair Rail for Grain Farmers Act* for one more year. It was set to expire on July 31, 2016. This would allow them to have a better look at the file, as well as give some predictability to the industry that no changes will happen suddenly on July 31, 2016.

In the CTA report, comment was made to discontinue the extension of inter-switching catchment. It was previously 50 kms and was extended to 160 kms. When the study was first started, it was used less, but as time passed it is being used by several shippers, who say it is a helpful tool for orderly shipping.

I have said before: to get meaningful changes to the transportation sector is going to be a long game and we all need to keep it in our sights and work together to get it done.

STAFF – RESEARCH – PROGRAMS

Feel good this season. We have a full staff complement to advance our research and production objectives, showing value for your levy dollars. We have had to order more desks and we are getting maxed out on space. Comments have been made we will need to go up or out. We will not be making any sudden moves. There is lots of work to do, lots of questions to answer, but in all this we need to find the most efficient way of doing things: the best use of dollars as well as best use of our staff resources.

I would encourage everyone to keep in touch with what is happening – watch for *The Bean Report* – and Twitter. We

want to keep you aware of production issues as they happen, but we can only cover so much ground. If you are seeing things we should be aware of, let us know. If you encounter production issues, let us know so we can address them or add them to our work list.

INTERNATIONAL YEAR OF PULSES (IYP)

The year is half gone already, but it's interesting how much attention pulses have had. More people are talking about them. I made a presentation to the Parliamentary Trade Committee on Trans-Pacific Partnership (TPP) and was asked how the pulse promotion campaign was doing. The committee was interested. We are reaching lots of people. The office has had lots of contacts on IYP, which is great.

At my annual physical, I asked my doctor if he was eating his pulses. His comment to me was, "If everyone ate pulses, I would have less to do." This was an interesting comment. What we really need is to get the health community to embrace the health aspect of pulses and promote their consumption more as a preventative measure, and not a reactive one.

In closing, a comment on farm safety: MPSG is very supportive of KAP's initiative to make farms safer. We would like to encourage everyone to take time to review the safety manual.

A statistic that always stays with me from my past involvement in safety programs: on average, there are eight near-misses for each serious incident. If you have a program that addresses issues stemming from near-misses, then you have a much smaller chance of experiencing a major incident.

On serious incidents: we all hear of them, talk about them, but we never want to be involved in one. I have had some personal experience in this. I lost a brother to a farm accident. I also lost an employee in a workplace accident.

Please pay attention to safety. You do not want to have this happen to you.

May you all have a safe season and a bountiful harvest. ■

DATES TO REMEMBER

Crop Diagnostic School
Carman, MB
July 5–7 | July 12–14

SMART Day – Carman, MB
Wednesday, July 20

**Canadian Pulse Research
Workshop (CPRW)**
Winnipeg, MB – October 26–28

Great Tastes of Manitoba
Saturday, December 10
6:30 pm – CTV Winnipeg

On November 25, 2015
Roxanne, Dean, Mason and Keira announced the arrival of a new addition to their family

Callie Marie Lewko
8 lbs 4 oz – 19 1/3 inches long

Congratulations to the Lewko family!

Your crops. Your coverage.

Your best choice for hail insurance

Insure your crops with flexible, competitive hail insurance coverage from the Manitoba Agricultural Services Corporation (MASC). MASC representatives are ready to customize an affordable hail insurance program for your farm business.

MASC hail insurance provides:

- Competitive rates
- Convenience – apply online, by phone, mail, fax or in person
- Automatic adjustment of your Individual Productivity Index (IPI)
- Accidental fire coverage for all insured crops
- Coverage for vegetables, forages, forage seed and hemp grain, even if they are not insured under AgrilInsurance

Apply today

Contact your MASC insurance office early to ensure you have coverage for the entire hail season.

Apply online

Visit masc.mb.ca or contact your MASC insurance office to register for online services.



Lending and Insurance
Building a strong rural Manitoba



MPSG INTRODUCES THE NEWEST STAFF ADDITIONS

Manitoba Pulse & Soybean Growers is pleased to announce agronomy researcher **Greg Bartley** and communications professional **Toban Dyck** have joined the MPSG team.

The additions represent an exciting time for MPSG, as it continues its trajectory of growth propelled by the determination to bring increased value to Manitoba's pulse and soybean farmers, to deliver initiatives and campaigns surrounding the UN's declaration of 2016 as the

International Year of Pulses, and to ensure the implementation of its strategic plan, which includes the organization's expanding On-Farm Network.

"The level of expertise represented in Greg and Toban will help us raise the standard for the value we deliver to our membership, pulse and soybean farmers," says MPSG's Executive Director François Labelle.



Greg Bartley

Greg knows farming and has research experience in the field of wheat residue management for soybean production in Manitoba. He joins MPSG as its new On-Farm Technician.

Greg grew up on a grain farm near Roland, Man., and completed his Bachelor of Science in agronomy in 2013 at the University of Manitoba, where he is currently finishing his M.Sc in plant science.

He has experience coordinating and implementing residue management experiments with the U of M in consort with MPSG's On-Farm Network. Greg also held an NSERC Industrial Postgraduate Scholarship with MPSG, which allowed him to gain valuable industry experience.

"I'm looking forward to working with the On-Farm Network and the research team at MPSG," says Bartley. "It'll be great to collaborate with farmers, conducting research on their own farms."



Toban Dyck

Toban took to agriculture journalism after returning to the family farm in 2012.

Before deciding to take over a farm that has been in his family since 1886, his journalism experience included jobs at the National Post, CBC Manitoba, and a few other news outlets. He is taking on the role of Director of Communications at MPSG.

"There's strong, exhilarating momentum here," says Dyck. "There's a wealth of expertise in this office, and I'd like to help every pulse and soybean farmer tap into it."

Toban is an award-winning columnist with Grainews magazine, and has written articles for Maclean's, the Economist, National Post, Globe and Mail, and many more publications. He also teaches a writing course one evening per week every fall at Red River College in Winnipeg.

COMING TO A FIELD NEAR YOU

This summer MPSG welcomes three agronomy interns to assist with the delivery of extension activities and implementation of our research strategy.



Geertje Doornbos
AGRONOMY RESEARCH INTERN
from Carman, MB

- Will assist MPSG Research and Production staff with data collection and the management of small-plot research trials, including hail simulation and seeding date trials



Carlene Dmytriw
AGRONOMY ENGAGEMENT
INTERN from Minnedosa, MB

- Will engage and inform agronomists and farmers about MPSG activities and initiatives related to research and production of soybeans and pulse crops



James Carriere
AGRONOMY INTERN
from La Salle, MB

- Will contribute to the MPSG Research and Production program by scouting soybean and pulse crops and assisting with field days

Toban Dyck

Director of Communications, MPSG

I am only a few weeks into my new job as the director of communications at Manitoba Pulse & Soybean Growers, and I could have said these words. I didn't, though. It was a board member, who knows first-hand the good MPSG does. He knows first-hand how your check-off dollars are spent.

To say there are benefits to being a member of MPSG is saying too little. It reduces what we do here to a cliché that registers too much like a plea. The benefits are real, tangible, and many.

This is a plea, kind of. Though not one of desperation. We're doing well. Our team is excited about what we do for you, the farmer. And the board is equally so. We want you to know this.

Indulge me for a paragraph or two: I can write – love it – and am honoured to do it as part of my job and for a good cause. But I also farm. I grow soybeans (and wheat), and can speak to the benefits of MPSG membership.

MY FIRST DAY AT MPSG – I enter the office in Carman, MB, nervous, excited, dressed up. I notice a stack of cardboard boxes full of what looks to be laminated, single-page resource material containing pictures of soybeans in various stages of growth. Yes, I was correct. The double-sided page also contained graphs, research findings, and guides, all related to disease scouting soybeans.

As a farmer, few things are more valuable than having access to quality research distilled into easy-to-understand bites by experts, with pictures, in an easy-to-use format. And, all that produced on something you can get dirty, keep in your truck, and toss around without ripping. It's brilliant. It's what we do.

Again, I'm new, but I've noticed a few things: without a doubt, MPSG's team is 100 per cent motivated by the belief that you, the farmer and MPSG member, deserve the best, most independent and up-to-date research; deserve access to informative events with expert presenters; and that you should be able

to connect with the MPSG team for relevant, sound advice tailored for you to make the best decisions possible on your farm.

They're motivated by this, and they make it happen, delivering value to MPSG members on a daily basis. I've seen it, eavesdropped on conversations between our experts and farmers, and I got out of the way when they, smiling, tore open a box of new resource material, destined for you, that just arrived from the print shop.

The Bean Report MPSG produces is also testament to this. If you're a pulse and/or soybean farmer, I can say without exaggeration that this report is worth signing up for. It's current, relevant information delivered to your inbox during the growing season. Sign up for it at: manitobapulse.ca/the-bean-report/

Then there's the Bean Team, a pair of educated ag enthusiasts visiting schools and groups across the province, educating people on what pulses are, how healthy they are, and how versatile they can be. The initiative is tied to the UN's declaration that 2016 is the *International Year of Pulses*. One of the team is dressed up in a bean costume, so, yes, if you see an adult-sized bean in Manitoba, don't be too alarmed; it's just the Bean Team doing the wonderful, important work of promoting pulses.

We also meet with people regularly, keeping relationships with policy makers and lawmakers strong and friendly, ensuring pulses, soybeans, and agriculture, in general, are understood and continually regarded with optimism.

This is where your check-off dollars go. To all these great things.

ENTER ME – *MPSG communications will advance awareness among farmers, industry and the public.*

Strategies

- Inform farmers and demonstrate value
- Increase agricultural awareness positively
- Excellence in events
- Address issues of opportunity and concern expressed to us

- Positively communicate the MPSG brand and image
- Enable and facilitate connections/collaboration

It's my job to make sure you know about all this great stuff we do. And there's lots of it. For instance, did you know MPSG produced a Bean App for iPhone? It's fantastic.

If we can't answer how a task is bringing value to farmers, we won't do it. There are benefits to an MPSG membership. We do a lot of good stuff here. ■



NOTICE TO MEMBERS

In accordance with updated bylaws, any active member who wishes to bring forward a resolution to the annual general meeting (AGM) must provide notice to the board of directors by December 1 of the year prior to the AGM.

Resolutions to be presented at the 2017 AGM must be received by December 1, 2016.

Please forward to Sandy Robinson at sandy@manitobapulse.ca on or before that date.

Wheat
AC Brandon
Cardale

Oats
Souris
CS Camden *NEW!*

Soybeans
Conventional
OAC Prudence
OAC Erin

RR2 Varieties
PROUD GROWER
AND DEALER OF

NorthStar
Richer Tilston
Sanford Gladstone

Trust our Experience

agassiz
seed farm ltd

Celebrating our 20th Year of Soybeans!

Contact
Murray Froebe or Jannie Van Workum
at (204) 745-6655
Homewood, Manitoba

THE BEAN TEAM HAS BEEN BUSY!



Kid Bean and Toba the Polar Bear

The MPSG Community Engagement Team, or the Bean Team, has been busy going to schools and community groups to educate Manitobans on pulses! Lindsey, Brandon, and Kid Bean have been all over the province from Fisher Branch to Beausejour to Winnipeg informing students and the public about the benefits of pulses and celebrating the *International Year of the Pulse*. Cooking with pulses is always a highlight of their presentations and they have made pizza, crêpes, brownies and more.



Kid Bean and a portrait of Mr. Bean – all made out of beans!

The Bean Team was also very excited to be part of the Ag in the Classroom Manitoba event and the Amazing Agriculture Adventure, in Russell, Manitoba. We presented to 250 grade four and five students about the nutritional health and environmental advantages of pulses. They loved feeling the dry pulse samples we provided and playing a fun matching game. Kid Bean, Brandon and MPSG director, Ernie Sirski were also featured on *CTV Morning Live!*

The Bean Team and MPSG are currently running two promotions. The first is the *Pulse Pledge* where people pledge to eat pulses at least once a week. They then receive access to educational materials. Sign up at www.manitobapulse.ca/pulsepledge/.

We are also running a *Why Pulses? Challenge* where schools and community groups have the opportunity to receive up to \$50,000 for deserving ideas that increase awareness or consumption of pulses.

More information can be found at www.manitobapulse.ca/why-pulses-challenge/.

The Bean Team would like to thank all the farmers who read to classes during Canadian Agriculture Literacy Week. If you know of any teachers or groups that would like a visit from the Bean Team, send either Brandon or Lindsey an email at brandon@manitobapulse.ca or lindsey@manitobapulse.ca

Be sure to follow our adventures on Twitter: @eatMBpulses ■

UPCOMING EVENTS

- June 5 – Demonstration at Sobey's Rivergrove
- June 7 and 8 – *Amazing Agriculture Adventure* in Brandon
- July 8 and 9 – Gilbert Plains/Grandview Rodeo



Attention Soybean Growers

An AWS Air Reel can help reduce header loss by 1 to 3 bushels per acre.

At \$12 soybeans, that's an extra \$12-\$36 per acre in your pocket!

SEE WHAT YOU'VE BEEN MISSING.



TEMP FARM EQUIPMENT

Visit our website: www.awsairreels.com

1-877-348-0066 or 519-276-8376



Christine Farkus
 Manager, Food Product & Culinary
 Innovation, Pulse Canada

An innovative, nutritious, high-fibre meat extender was crowned national champion in the ninth annual Mission: ImPULSEible food product development competition on February 23, 2016. *Fiberger*, created by Caileigh Smith and Evelyn Helps of the University of Guelph, is made from red lentils, green peas and chickpeas and is used to extend animal protein in a range of culinary applications such as burgers, meatloaf, meatballs and more. The competition was held in conjunction with the Canadian Institute of Food Science & Technology National Conference in Burnaby, British Columbia. For

2016 International Year of Pulses, Canadian post-secondary students were tasked with recreating traditional food products with Canadian pulses (peas, lentils, beans and chickpeas).

Second place in the competition went to Austen Neil, Chandre Van de Merwe and Nicolle Mah of the University of Alberta for their *Biotagelata*, a gelato-inspired dessert made with fermented bean milk. *Biotagelata* is both dairy- and gluten-free. Third place went to Lisa Cook and Hailey Madill of Mount St. Vincent University in Halifax for their *Vital Impulse Bar*, a breakfast bar containing faba bean flour, chickpea flour and green lentils.

Other innovative products included, *Sensible Sauces*, a trio of dips using chickpeas, black beans and red lentils. Creators of this product were culinary students from Red River College, Mattaus Buelow, Vien Salimbacod, Brittany Peto and Hilary Michelle Collins.



Anne Frazer McKee, Sonia Périllat Amédée and Tamao Tsutsumi from McGill University created *Pum Crisps*, a sweet dehydrated chip made with cranberry pomace, pea protein and chickpea flour.

Pearl Lam, Carmina Paterno, Olivia Tong and April Xu from the University

continued on page 12

All 2016 Mission ImPULSEible Teams



TRADERS, PROCESSORS, ORIGINATORS OF DRY BEANS
 Pinto, Black & Small Red Bean Processors - New Crop Contracts - Western Certified Seed

<p>PROCESSING & RECEIVING FACILITY Walhalla Bean Company Darryl Berg Highway 32 North, P.O. Box 67 Walhalla, ND 58282 Toll Free: 1.800.227.4494 Ph: 701.549.3721 / Fax: 701.549.3725 email: dberg@columbiagrains.com</p>	<p>MARKETING OFFICE, PROCESSING & RECEIVING FACILITY Walhalla Bean Co. (Merrifield) John Berthold Jamie Carlson 7400 55th Street South, Grand Forks, ND 58201 Ph: 701.775.3317 / Fax: 701.775.3289 email: jberthold@columbiagrains.com jcarlson@columbiagrains.com</p>	<p>RECEIVING FACILITY Walhalla Bean Canada Ray Penner 655 George Ave., P.O. Box 761, Winkler Manitoba Canada R6W 4A8 Ph: 204.325.0767 / Fax: 204.325.0768 email: rpenner@columbiagrains.com</p>
--	--	--

www.walhallabean.com

"Where our customers send their friends"

www.columbiagrains.com

SOYBEAN SECTOR DELIVERS \$5.6 BILLION ANNUALLY TO CANADIAN ECONOMY



Chris Masciotra

Director, Corporate Affairs, Soy Canada

Soy Canada has been focused on a number of priorities for the soybean sector including profile building with the federal government, working on market access and trade issues, establishing the groundwork for an industry research and innovation strategy, and many other projects. It's been a busy year for the soybean sector and we continue to tackle issues head-on.

Manitoba Pulse & Soybean Growers members are welcome to attend Soy Canada's second Annual General Meeting in Carman, Manitoba on June 29, 2016. Members from across Canada will come together to review association priorities and projects. With the help of MPSG, this year's AGM will take place on farmland on the outskirts of Winnipeg where members will have the opportunity to view new crops, farming equipment, nearby variety trials, and visit the University of Manitoba research station. We have also extended an invite to Manitoba's new Minister of Agriculture to speak to the value-chain. Our membership is expanding and we are looking forward to working with our members on a number of core issues affecting the growth of our industry.

This month, Soy Canada will hold a research and innovation workshop aimed at developing a shared understanding of soybean research and innovation needs; building a consensus on research objectives; and developing an overall innovation strategy that determines the best approach for the industry to collectively position itself to achieve its strategy and leverage government funding programs.

This meeting is the first step towards a collective strategy and will bring together industry members, producer organizations, cluster research groups, Agriculture and Agri-Food Canada representatives, public and private sector researchers from across the country. MPSG Executive Director François Labelle will participate in the workshop and speak to the research needs for the soybean sector in western Canada. A summary report of the meeting will be developed and used to guide future industry consultations on the direction of research and innovation in the soybean sector.

Soy Canada is keeping a close watch on the Government of Canada and its work relating to international free trade agreements. We urged the federal government to ratify both the Canada-European Free Trade Agreement as well as the Trans-Pacific Partnership as soon as possible to provide enhanced market access and opportunity to the Canadian soybean industry. Soy Canada brought this message to the House of Commons Parliamentary

Committee on Agriculture and Agri-Food as well as the Senate Standing Committee on Agriculture and Forestry, asking committee members to push for ratification of both agreements in Parliament.

Soy Canada recently released an economic impact analysis of the Canadian soybean industry. The report entitled *Canada's Soybean Industry: Economic Impact Study* quantifies the economic contribution of the soybean sector to the overall Canadian economy. Key findings reveal that the soybean sector in Canada contributes over \$5.6 billion to Canada's annual GDP and is directly and indirectly linked to over 54,400 full-time equivalent jobs.

The data provided in the study re-emphasizes the rapid growth of the Canadian soybean sector and the economic contributions of different segments of the value-chain. It will serve as a key marketing tool for our industry and assist in demonstrating to our trading partners that the Canadian soybean market is thriving.

We welcome everyone to contact Soy Canada with any questions about the association and its role in working for soybean growers in Manitoba. Visit us at www.soycanada.ca or email at info@soycanada.ca for more information. ■

continued from page 11

of British Columbia created *Cocopea2*, a decadent chocolate fudge made with chickpea and lentil flour, and roasted split red lentils.

The national event had a great line up of judges from industry, academia and government, including:

- Chef Vikram Vij, Entrepreneur, Author and Television Personality
- Dr. Michael Nickerson, Ministry of Agriculture Strategic Research Chair – University of Saskatchewan
- Paul Wong, Vice President of Research & Development – Daiya Foods

• Councillor Paul McDonell, City of Burnaby
Smith and Helps will now represent Canada at the Global LovePulses Product Showcase on July 19 during the Institute of Food Technologists Expo (IFT) in Chicago. There they will present *Fiberger* to 10 other countries that have been invited to be a part of the showcase, which will demonstrate the versatility of pulses to the world's leading food professionals.

Mission: ImPULSEible challenges Canadian post-secondary students

to get creative in producing new food products featuring Canadian pulses (peas, lentils, beans and chickpeas). This year, 42 student teams from 17 schools from across the country developed a delicious and healthy food product using pulses that showcases innovation in traditional foods and celebrates the *2016 International Year of Pulses*.

All provincial competitions as well as the 2016 national competition images and product information can be found on the Mission: ImPULSEible Facebook page. ■



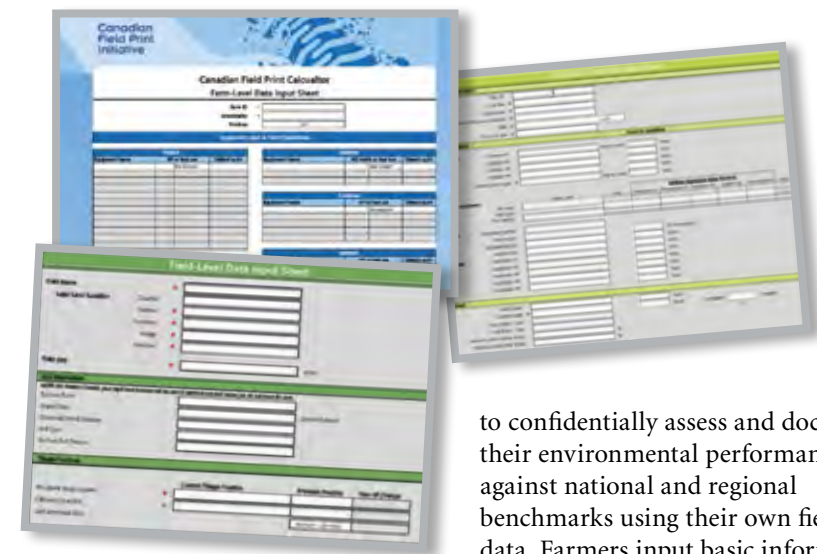
Anya McNabb
Pulse Canada

Almost every week, a food company or retailer makes an announcement about the food they are selling to consumers. Many of these announcements focus on the sustainability of their product supply. Unilever has announced that 100% of its agricultural raw materials – which include soybean and canola oils, durum wheat, mustard and pulses from Canada – will be sustainably sourced by 2020. General Mills has also committed to the sustainable sourcing of 100% of 10 key ingredients – crops like oats, wheat and corn – by 2020.

“These goals are difficult enough to achieve on their own, but what makes the challenge even more daunting is that companies each have their own strategies to achieve sustainability,” said Denis Tremorin, director of sustainability with Pulse Canada.

“The Canadian agricultural industry needs to help ensure that the food industry approaches sustainability with a harmonized approach. And that’s where the Canadian Field Print Initiative (CFPI) comes in,” added Tremorin, who has taken a lead role in the CFPI.

Since 2009, Pulse Canada has been working with a number of Canadian agricultural associations, agricultural companies and food companies on the CFPI to measure the environmental



impacts of crop production at national, regional and farm levels.

In 2014, Pulse Canada began leading the charge to develop sustainability metrics for the Canadian cereal, oilseed and pulse sectors. Funded by the Manitoba Pulse & Soybean Growers, Canadian Canola Growers Association, CropLife Canada, Fertilizer Canada, Grain Farmers of Ontario and Pulse Canada, this work is focused on three areas:

- The development of a survey on fertilizer management in Canada
- The development of methodologies to measure environmental impacts of crop production
- The development of a farm-focused Canadian Field Print Calculator

The Canadian Field Print Calculator is an easy-to-use, farm-level measurement tool that allows farmers

to confidentially assess and document their environmental performance against national and regional benchmarks using their own field data. Farmers input basic information about their farming practices, soils and climate into an Excel tool. The calculator then provides them with their crop’s estimated sustainability based on four indicators:

- Land Use Efficiency
- Energy Use
- Climate Impact
- Soil Erosion Risk

“While many food companies’ sustainability programs have a broad sustainability focus – on economic, social and environmental factors – the calculator is designed to focus on environmental outcomes at the farm and field level,” said Tremorin. “The companies and associations performing this work believe that there is a need to focus sustainable agriculture activities on ‘measuring what matters.’”

continued on page 14

Don't Miss
GREAT Tastes OF MANITOBA

Saturday, December 10, 2016
from 6:30 pm–7:00 pm on
CTV Winnipeg

Celebrating International Year of Pulses

To celebrate *International Year of Pulses*, host Dez Daniels together with MSPG’s Roxanne Lewko will feature *pulse recipes from around the world* on the 27th season of *Great Tastes of Manitoba*.

Three recipes will be featured – **The Ultimate Can ‘EH’ dian Salad** (national dish of Canada), **Falafel** (national dish of Israel) and **Lentil Gnocchi** (recipe from United States).

Manitoba Liquor Marts will also be there to select wines, beers or spirits to pair with each dish.

For recipes featured on the show visit greattastesmb.ca

2016
INTERNATIONAL
YEAR OF
PULSES



In Canada, this means environmental outcomes. In regions of South America, Africa or Asia, there may be more need to focus on social (do children go to school?) and economic outcomes (are farmers paid a fair price?).

Since 2012, the calculator has been field-tested on 120,000 acres from 500 western Canadian fields, and is now being used in regional pilot projects from Alberta to Ontario. Pilot projects are coordinated by grower organizations, individual companies and other CFPI participants. They allow farmers to compare their results anonymously with other farms in their region. Information is shared with participating farmers through workshops highlighting how best management practices lead to better profitability and better environmental outcomes. One of the goals is to demonstrate how tools like the Canadian Field Print Calculator can be used in ways that provide value to all

participants – farmers, food companies and everyone in between.

Two pilot projects in eastern Manitoba and Melfort, SK are being driven by General Mills and its sustainable sourcing program for Canadian oats. The winter of 2015–16 saw 25 farmers participate in these pilot projects, and working directly with Paterson Grain, North American Food Ingredients and AgriTrend. The pilot project involved several points of contact with farmers, including field visits from General Mills, kick-off meetings to inform farmers of the project, wrap-up meetings to present results back to farmers and to create a discussion, and finally an invitation by General Mills to tour the Cheerios plant near Minneapolis. These pilot projects will expand in terms of the number

of farmers, industry participants and geographic scope next year. General Mills is also integrating additional sourcing strategies into this pilot project, in particular their gluten-free strategy for oat sourcing. To read more about what General Mills is up to in this area, visit the company's blog.

The initial pilot projects of the Canadian Field Print Calculator demonstrate that it is a tool that is easy for a farmer to use, and does not create a heavy burden of work. In addition, the pilot projects demonstrate that the Canadian agricultural industry can provide sustainability information to the marketplace in a way that offers value to all participants in the supply chain. For more information on the Canadian Field Print Calculator, please visit www.fieldprint.ca. ■

For more information on General Mills gluten-free strategy for oat sourcing visit: <http://www.blog.generalmills.com/2016/04/farmers-see-what-makes-cheerios-gluten-free/>

FERKAR UNIVERSAL MILL

Unique single-stage milling & classification

- Consistent particle size
- Reduced energy consumption
- Reduced maintenance
- Applications include: **pulses**, byproducts, whole grain flour and whole grain semolina



Grain Processing Systems, Inc.

Authorized representative for Jaymark

905-938-2882

darryl.tateishi@gmail.com

www.ferkar.com

74 Dorchester Blvd ▪ St. Catharines, ON ▪ Canada L2M 6V2

Crop Diagnostic School

2016

**July 5–7 and
July 12–14, 2016**

Daily Workshops – \$175

**Ian N. Morrison Research Farm
Carman, MB**



*Improve your
scouting and
troubleshooting
skills*

www.cropdiagnostic.ca

To register call **204.745.5663**

CCA credits will be offered



UNIVERSITY
OF MANITOBA

Manitoba
Agriculture, Food
and Rural Development

HOW HAS KAP'S YEAR BEEN, SO FAR?



An interview with **Dan Mazier**,
President, KAP by **Toban Dyck**,
Director of Communications, MPSG

Manitoba group Keystone Ag Producers is a general farm policy organization that works with government, industry, and stakeholders to ensure "primary production in Manitoba remains profitable, sustainable, and globally competitive." It takes direction from its membership, which includes farmers and farm commodity organizations. And it concentrates its efforts on issues that affect all farmers.

KAP President Dan Mazier was on his farm near Justice, MB starting to think about seeding when Manitoba Pulse & Soybean Growers spoke with him for this question and answer-style article. KAP presidents have to be farmers, we learned.

Mr. Mazier began his KAP presidency in 2015, after serving as vice-president for four years.

"In addition to his commitment to KAP, Dan is also committed to serving his community," according to KAP's website. "He is currently president of Elton Energy Co-operative – a proposed community-owned, wind power project – and has served as a trustee for the Rolling River School Division and as a board member for the Mid-Assiniboine Conservation District.

"Dan is a graduate of the University of Manitoba's Agriculture Diploma Program and holds a fourth-class power engineering certificate. In addition to farming, he worked in the fertilizer industry for 17 years."

HOW HAS KAP'S YEAR BEEN, SO FAR?

Very good. My presidency started January 30, 2015 immediately after our annual meeting, and we pretty much went right into election mode. We talked to voters, and to parties and candidates, about agriculture issues – including support for young farmers, our opposition to the education tax on farmland, the need for more funding

for ag innovation and research, and the necessity of fixing rural infrastructure.

If I could back up a bit to last fall when we had the federal election, I would like to point out that we worked with the Canadian Federation of Agriculture to put forward the issues that are important at the national level. Support for environmental programs was a major request, including water management. Trade was another issue we worked on.

Between the newly elected federal ministers in Ottawa and the Manitoba election here, things have been pretty quiet in terms of new developments. But once our new governments get comfortable, we're going to see some action on policy development very quickly. Federally, standing committees are meeting throughout the summer. And I am pretty sure our new provincial government will want to quickly set a new path for Manitoba.

continued on page 16



Save up to 15% or more on your crop hail insurance.

*"After two years & two claims, AG Direct is simply the best in the industry."
Scotstown Farms Ltd. – Unity, SK*

*"The claim process and settlement speed was excellent."
Daniel Gullias – Eden, MB*

*"With the 'direct' concept we saved over \$25,000.
AG Direct puts money back in farmers' pockets."
Bergen Farms – Cardston, AB*

Exceptional Rates. Superior Service. Professional Adjusting.

"It's no wonder AG Direct Hail is the largest and fastest growing direct crop hail insurance provider across the Prairies."

www.agdirecthail.com
1-855-686-5596



HOW HAS ACCESS TO GOVERNMENT BEEN FOR KAP?

We've had some difficulties with the previous federal government, as many groups did, but now I see an opening of communication channels and a willingness to listen. For example, KAP was invited to meet with Greg Meredith, assistant deputy minister for strategic policy with Agriculture and Agri-Food Canada.

Provincially, I expect now that so many ministers are from rural Manitoba, the government will be looking at agriculture and rural development with a new lens. I anticipate this will mean more lines of communication for KAP.

ARE THERE ANY POLICY INITIATIVES FROM THE PREVIOUS GOVERNMENT THAT YOU CAN BRING TO THE TABLE NOW?

Provincially, school tax on farmland is a major issue in Agro-Manitoba because farmers pay a hugely disproportionate

share of this tax. We worked with the previous government to achieve an 80 percent rebate of the tax – although it put some restrictions into place recently, including a \$5,000 cap on the rebate. Our first priority will be to ask the new government to remove this cap, and a longer term goal will be to ask for an overhaul of the way taxes are collected. This is very important to our membership.

Provincially and federally, I would say business risk management (BRM) is something that will come forward. There were many changes to BRM programs in *Growing Forward 2* that didn't make it feasible for many farmers to enroll in AgriStability. For *Growing Forward 3*, we need to put the strength back into this program, as well as into AgriInvest, to make them perform better for producers.

Federally, there's the Canada Transportation Act review initiated by the previous government and now

complete. Some recommendations are welcomed by farmers and shippers, but some simply are not – including the elimination of the maximum revenue entitlement. The new government will be consulting with producers and farm groups, and KAP will be involved.

The review is a complicated document, and it will be a long journey to begin to fix our rail system. The whole supply chain is working together on this, because we're all on the same page.

Also on the transportation file, we lobbied the new government for an extension of provisions contained in the Fair Rail for Grain Farmers Act (Bill C-30), enacted by the last government. And now that has happened.

Another transportation issue is the replacement of the rail car fleet. What we're trying to do at KAP is start that conversation. The first fleet set to expire

continued on page 17



YOUR CROPS. A WORLD OF OPPORTUNITY.

From your field to destinations around the globe, you can rest easy knowing Scoular People have been working with growers like you for more than a century to find the very best market for your grain.

Special Crops

Pulses

Traditional Grains + Oilseeds

CONTACT US:
204-829-2326
tinascott@scoular.com

scoular.com
scoularspecialcrops.com

is the Alberta fleet in 2022. Backing up two and a half years, because that's the backlog for fixing or replacing rail cars, so, in 2019, we're going to have to come up with a plan for how to start replacing that fleet.

HOW DOES KAP BENEFIT FROM HAVING SO MANY FARM AND COMMODITY GROUPS AT THE TABLE?

The more at the table, the stronger our voice. We had an advisory council meeting recently and we had great participation, including many commodity groups. In fact, we passed a resolution put forward by the Manitoba Beekeepers Association regarding the labelling of honey.

Individual producer members, of course, are also very important to KAP. Every farmer can be a member for \$200, either through check-off or a one-time payment. I might add that our numbers have been increasing. At the close of the 2015/2016 year, we had 23 commodity-group members and 4,500

farm members – and we're on track to exceed that this year.

WHAT IS IT LIKE JUGGLING THE VARIOUS INTERESTS OF THE COMMODITY GROUPS AND THE GENERAL MEMBERSHIP?

While some decisions made by government can put one commodity against another, it is important that KAP, as a general farm organization that represents all farmers, does not take one side or the other. Our goal is to move the entire agriculture industry forward by addressing the issues that affect all farmers – so that we can make our farms more profitable and sustainable.

IS THERE A FUTURE WHERE KAP AND OTHER ORGANIZATIONS LIKE IT WORK TOGETHER? AND IF SO, WHAT DOES THAT FUTURE LOOK LIKE?

We're living it. KAP works together with all farm organizations in the province – and across the country, for that matter.

The one comment that has concerned me is the talk that there's too many farm organizations and there's overlap. KAP, as a policy organization, works on policy issues for the entire industry – such as taxation, water management, regulations, and BRM programming. These are topics commodity groups may have a hard time addressing, since they are often focussed on research and growth of their sector. Sometimes this line may get blurred, but as long as we support each other in getting things done, I see no reason to think there are too many.

In closing, I would like to congratulate Manitoba Pulse & Soybean Growers on their exceptional efforts to promote the *International Year of Pulses*. It's an excellent event that will help grow the pulse industry at home and around the world. Thank you. ■

Follow us!  @eatMBpulses

FARMERS – You Now Have a Choice!

MCGA offers one-stop shopping for crops under the Advance Payments Program

MANITOBA CORN GROWERS ASSOCIATION (MCGA) can now provide Cash Advance loans on most crops grown in Manitoba.

For almost 40 years, MCGA has been helping farmers with their cash flow needs by administering the federal Advance Payments Program offering CASH ADVANCE LOANS on most crops grown in Manitoba.

Each producer is entitled to \$100,000.00 interest-free and an additional \$300,000.00 at prime -1/4%. The totals must be the combined value of all Advances from ALL Administrators.

The 2016 program begins on April 1, 2016 – Contact us in mid-March to begin the application process.

CROPS AVAILABLE FOR 2016

Alfalfa Seed	Flax	Other Coloured Beans
Barley	Great Northern Beans	Peas
Buckwheat	Hay (domestic sales)	Pinto Beans
Camelina	Hemp Seed	Rye
Canary Seed	Honey	Rye Grass Seed, Annual
Canola	Kentucky Blue Grass Seed	Rye Grass Seed, Perennial
Chickpeas, Desi	Kidney Beans	Soybeans
Chickpeas, Kabuli	Lentils	Sunflowers, Confectionary
Corn	Millet	Sunflowers, Oil
Cranberry Beans	Mustard	Triticale
Durum	Mustard, Ethiopian	Wheat
Fababeans	Oats	White Pea Beans (Navy)



For courteous service and QUICK ACCESS to your Cash Advance dollars contact

MANITOBA CORN GROWERS ASSOCIATION

www.manitobacorn.ca TOLL FREE **1.877.598.5685** PHONE **204.745.6661**

or visit us in Carman at 38–4th Avenue NE – east of the car wash

CLANCEY'S STATS

Brian Clancey

Senior Market Analyst and Publisher
STAT Communications

North American pulse production could be 42% above the recent five-year average, reflecting substantial increases in field pea and lentil production. By contrast, this year's dry edible bean and chickpea crops could be below average.

Seeding intentions estimates from the USDA and Statistics Canada discovered farmers hope to plant 13.67 million acres of pulses this year, compared to 11.45 million last year and the recent five-year average of just 9.6 million acres.

A return to average yields would see production of all pulses hit 11.56 million metric tonnes, compared to 8.94 million last year and the recent five-year average of 8.14 million metric tonnes. However, available supplies of pulses are not expected to rise as sharply as production because this summer's carry over will probably be 24% lower than normal at 1.27 million metric tonnes.

Coinciding with the *International Year of Pulses*, combined output in Canada and the United States are setting records for peas, lentils, total pulse production as well as the available supply of pulses. Production and stocks of dry edible beans and chickpeas are well below their record highs, but those declines were more than offset by the gains in the other two pulses grown in those two countries.

Record supplies of any commodity carry significant price risks for farmers and exporters. However, both spot and new crop markets reacted to the seeding intentions as if demand will outstrip supply for at least another year. The net result is that returns from pulses should be higher than normal relative to grains and oilseeds through at least the end of the calendar year.

Many market participants expect to see prospective returns from the crops return to more normal relationships, but there is a solid argument about whether this will happen during the coming marketing year or 2017-18. It

would be nice to say that better than average returns from pulses compared to other crops is the new normal. That was said about grain and oilseed values a few years ago, even though agriculture analysts like STAT said in 2008 and 2009 that the bull run in those commodities would be over by 2015.

There is one simple reason pulse values will return to levels which result in a more normal income relationship with other crops. As long as they generate unusually high incomes, production will expand, ultimately pushing ahead of demand, resulting in lower average prices.

The question is whether this is happening this year.

In the case of dry edible beans, the answer is no. Production in Canada and the United States is expected to be down from last year. This is happening at the same time as there are problems with crops in Mexico, Africa and Brazil. Import needs will likely be greater than the kind of exportable surpluses expected during the 2016 calendar year, contributing to a firmer tone for most classes of beans.

On a global basis, dry edible bean production could be down almost 695,000 metric tonnes at 22.4 million. Residual supplies of dry edible beans are also down, with the result the available supply of beans will drop from 23.9 to 23.1 million metric tonnes. Given the locations where production is falling, exportable surpluses are also expected to drop. The net result is world consumption of beans will decline, contributing to a situation where prices may need to rise to levels which discourage consumption.

The difficulty facing consumers is that chickpeas and lentils are not a more economical replacements. Field peas have always been the cheapest pulse available on world markets, suggesting that people who want to eat beans might already be eating as many peas as they are willing. To the extent that this is the case, dry edible bean markets should experience underlying support. ■

CONVEY-ALL INDUSTRIES INC.

Looking for reliable equipment for your agri-business? Check out our extensive product line:

- Transfer Conveyors
- Tube Conveyors: 35' - 120'
- Commercial Seed Tenders
- Bean Tenders
- Custom Under-Bin Conveyors

1.800.418.9461 convey-all.com

CONVEY-ALL INDUSTRIES INC.
INNOVATIVE QUALITY SOLUTIONS

Jeanette Gaultier
Manitoba Agriculture

It used to be that you could bank on a crop once it was in the bin – or so the saying goes. Nowadays, a farmer needs to be both an agronomist and a savvy marketer to produce a crop and sell it, too.

Consider pesticide residues. The herbicide, fungicide and insecticide products used to protect against crop pests help produce the high yielding, top quality crops that Canadian farmers have become known for. Although the decision to apply a pesticide is based on agronomic necessity, it may have inadvertent and negative effects on crop marketability.

Pesticide tolerances are an increasingly common trade barrier in our global marketplace. In 2015, prairie farmers were unsure if Manipulator treated wheat, quinclorac treated canola and pre-harvest glyphosate treated milling oats could be delivered to buyers. Pulse farmers are no stranger to pesticide related rejections, either. Although largely resolved, glyphosate residues can still cause occasional issues for dry bean, lentil and soybean exports.

WHAT IS AN MRL?

To ensure the safety of our food, maximum residue limits (MRLs) set the maximum amount of a pesticide residue allowed on a crop or crop product (e.g. oil or flour). Residues are assessed for all pesticide registered on crops grown for food. MRLs even exist for pesticides or pesticide uses not registered in Canada to account for residues on imported crops and food.

Health Canada's Pest Management Regulatory Agency (PMRA) is responsible for setting MRLs in Canada. To determine an acceptable residue limit for a particular crop-pesticide combination, the PMRA considers all dietary exposures to that pesticide (and possibly others) based on an average Canadian's daily and annual diet. This already small number is further reduced by applying a safety factor of 100 times or more to account for any uncertainties, such as a person's age or actual diet. This

value is the basis for the MRL for that pesticide applied to that crop.

The PMRA then compares measured residue values from test crops treated with the pesticide. Crop-pesticide uses with residues below the MRL are eligible for registration, pending other regulatory assessment. Uses that result in pesticide residues that exceed the MRL are not registered.

Health Canada's method of setting MRLs is robust, scientific and efficient – and specific to Canada. Importing countries set their own MRLs that Canadian crop exports are subject to. Differences in MRLs among global markets contribute to trade irritations, but aren't the only problem. The time required to establish an MRL also varies by country, often resulting in a

patchwork of approvals that is confusing for farmers.

A harmonized, global approach to MRLs may seem like an obvious solution but is unlikely to happen anytime soon. Codex Alimentarius is a global MRL standard developed by the Food & Agriculture and World Health Organizations. While there are many countries that do rely on Codex, many other markets, including Canada, the United States, China and Japan, still opt to set their own MRLs.

MANAGING MRLS

Some MRL issues are out of a farmer's control, but others are directly related to decisions made at the crop production level. A few recommendations to avoid unacceptable pesticide residues:

continued on page 20

VARIETY RELEASE PROGRAM – UPDATE

The Variety Release Program (VRP) is a seed distribution program managed by Saskatchewan Pulse Growers (SPG) where Select Seed Growers can access breeder seed of new varieties developed by plant breeders at the Crop Development Centre (CDC) at the University of Saskatchewan.

The program's purpose is to facilitate rapid uptake and acceptance of new and improved pulse varieties. Any nationally recognized Select Seed Grower whose provincial pulse grower organization has an agreement with SPG is eligible to apply for breeder seed through this program.

MPSG resubscribed to SPG's Variety Release Program in 2016

Manitoba Select Seed Growers who are members in good standing with MPSG now have the opportunity to purchase Breeder pea (yellow, green, maple, forage) and faba bean seed from CDC.

In 2016, Manitoba seed growers requested and have been allocated seed for yellow peas (CDC Amarillo, CDC Inca, and CDC 2936-7) and forage peas (CDC 3548-2).

To ensure that new pulse varieties are made available to commercial producers quickly and at a reasonable cost, the VRP provides Breeder seed with no royalty collection requirements; however, all farmers contribute to the development of new varieties with levy collected through MPSG. Manitoba seed growers who request a refund of their levy submitted to MPSG are unable to participate in the VRP.

-----> For more information please contact
Laryssa Grenkow, MPSG
laryssa@manitobapulse.ca or
204.745.6488 ext. 6



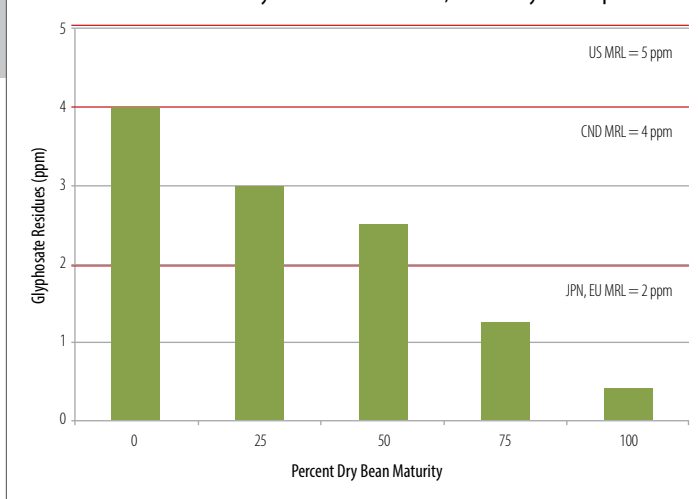
MRLs are measured in *parts per million*. Ten soybeans in a 3-tonne truckload = 1 ppm

Read the product label. MRLs are set based on the registered use of a pesticide. Applying products at higher than labelled rates or outside labelled application stage can result in residues that exceed an MRL. Using products that are not registered on a crop may also cause residue woes since such uses often don't have a set MRL and default MRL values range from very low to zero tolerance (e.g. 0.01 or 0 ppm).

Timing is everything. Pre-harvest intervals (PHIs) are another important piece of information on product labels. The PHI indicates the number of days that must pass between the application of a particular pesticide and crop harvest. It's especially important to consider product PHIs when making late season pesticide applications. White mould fungicides registered for dry beans, for example, have PHIs ranging anywhere from 0 to 30 days.

Certain pesticides, like seed treatments and pre-seed/pre-emergent herbicides, may not have PHIs because their application timing is very specific. Desiccants and pre-harvest aids are another example. But, as pulse farmers know, labelled desiccation timings (e.g. less than 30% moisture content) can be difficult to assess in-field. Unfortunately, research consistently shows that using glyphosate and desiccants before a crop has reached a certain maturity level sharply increases the risk of exceeding MRLs (see Figure 1 as an example in

Figure 1. Glyphosate residues in dry bean when applied at 0, 25, 50, 75 and 100% maturity. Source: Chris Gillard, University of Guelph.



dry beans). Chemical companies have tried to address this by added visual and physiological crop maturity indicators to desiccant and glyphosate labels. Refer to 'Desiccant Use this Season' fact sheet prepared by the prairie pulse grower associations for more information.

Talk to your buyer. Commodity buyers are the experts when it comes to crop specifications desired/required by various markets, including pesticide residues. A five minute phone call before you apply a product could save hours of marketing frustration after harvest. Realistically, a farmer is unlikely to discuss each and every pesticide application for all crops they grow with a buyer. Here's a list of situations that may be worth picking up the phone to determine if MRLs are in place:

1. Registration of a product(s) with a new active ingredient for a crop

2. Addition of a new use pattern (e.g. higher rate, different application timing) for a product already registered for that crop
3. Generic product(s) marketed before the parent chemical company product, especially in cases 1 and 2 above

The majority of pesticide applications to Canadian crops will not result in MRL-related trade issues with importing countries. However, it only takes a few cases of unacceptable MRLs – real or perceived – to impact our crop's global reputation and marketability. Although commodity buyers absorb most of the risk, on-going MRL issues can affect crop prices and markets, and therefore you, the farmer.

So, while agronomics may be first thing on a farmer's mind, these days, marketing can't be far behind. Because, while getting the crop in the bin is important, you can't bank on it until it's delivered. ■

Wild Oats Grain Market Advisory

This weekly newsletter covers crops grown in Manitoba – *canola, wheat, oats, flax, soybeans, peas, canary, edible beans and barley.*

- Read** ► the news that affects these crops
- analysis making sense of the market action
 - specific marketing recommendations for each crop
 - detailed Manitoba farmgate prices



Subscriptions are \$295 a year. To subscribe call **1-800-567-5671** or email **admin@canadagrains.com**

THE QUEST TO MAXIMIZE SOYBEAN YIELD AND PROFITABILITY IN MANITOBA!

ULTIMATE SOYBEAN CHALLENGE

MEET THE TEAMS AND THEIR STRATEGIES

TEAM A Kristen Podolsky,

MPSG Production Specialist

Strategy – follow best management practices, choosing practices and inputs that are most likely to maximize net return.

TEAM B Dennis Lange,

Manitoba Agriculture Industry Development Specialist

Strategy – maximize yield and return by reducing costs of big ticket items (seed) but spending more on small costs items.

TEAM C Curtis Cavers, CMDC

Agronomist

Strategy – Choose novel practices to ensure differences in production are observed and to alleviate concerns of a “home field advantage.”

WHAT IS IT? Three teams have been tasked with selecting their own unique combination of soybean management practices and crop inputs in the quest to be crowned the winner of the Ultimate Soybean Challenge! The winner will be determined in two categories: yield and profit. The goal is for each team to take on a unique strategy for crop management, representing the different approaches that farmers take in crop production.

WHERE AND HOW? At the Agriculture and Agri-Food Canada (AAFC) site in Portage la Prairie, MB, side-by-side replicated field trials will be established with each teams’ selected management strategy. Seeding date, speed, soil characteristics and harvest dates will be the same across treatments. All other management practices will be determined by the team leaders. Updates on crop progress and management will be provided throughout the growing season. Stay tuned to @MBPulseGrowers on Twitter!

FIELD DESCRIPTION The USC challenge will be on a 15-acre parcel seeded into spring tilled millet residue comprised of an imperfectly drained clay loam soil. Soil pH is 8 with relatively high soil organic matter, low soluble salts and high fertility (84 lbs/ac N, 22 ppm P, 289 ppm K).

Strategies

	Team A – Kristen	Team B – Dennis	Team C – Curtis
Variety selected	Akras R2	S007-Y4	Dekalb 23-60
Inoculant(s)	Liquid	Liquid	None
Seed treatment	None	CruiserMaxx Vibrance + Heads Up Plant Protectant	Evergol Energy
Seeding equipment	Air seeder 9" spacing	Planter 30" spacing	Twin-row planter
Seeding rate (seeds/ac)	190,000	150,000	150,000
Anticipated Weed Control	2 passes glyphosate	3 passes glyphosate	1 pass glyphosate + inter-row tillage
Fungicide product	None	Yes	None
Tissue Testing	None	None	Yes
Foliar nutrients	None	Yes	Depending on tissue test

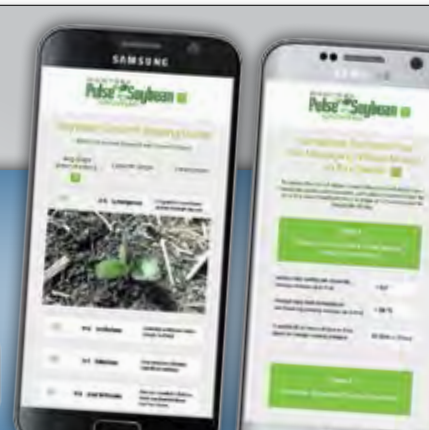
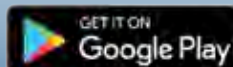
AGRONOMY AT YOUR FINGERTIPS!

The Manitoba Pulse & Soybean Growers **BEAN APP** features five interactive tools to assist soybean and dry bean farmers with important crop production decisions.

- ▶ Soybean growth staging guide **NEW!**
- ▶ Dry bean white mould risk assessment **NEW!**
- ▶ Updated soybean seeding rate calculator
- ▶ Updated soybean plant stand assessor
- ▶ Soybean yield estimator

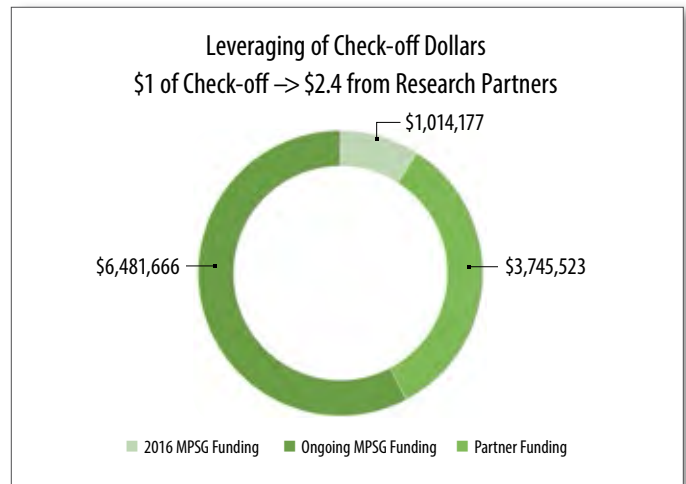
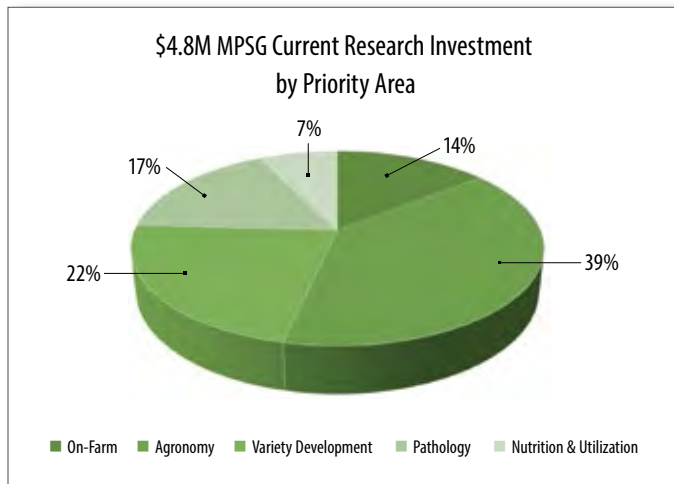


DOWNLOAD NOW!



2016 APPROVED FUNDING FOR RESEARCH

Numbers at a Glance



NEW RESEARCH AIMS TO MONITOR *FUSARIUM* ACROSS MULTIPLE CROPS AND DEVELOP AN EFFECTIVE INOCULANT FOR DRY BEANS

Fifty-two percent of the MSPSG annual budget, equating to \$1.55M, has been invested towards 22 new research projects (80%) and innovative programming for 2016 (20%). We have continued targeted research investments based on new priorities that were released in 2015. The new research investment is a balance of expanding current focus areas and exploring new ideas that aim to advance soybean and pulse crops over the next five to 10 years.

A 15% target towards On-Farm research has been maintained for 2016 to address current, applied questions. On-Farm in 2016, the efficacy of *Soygreen* for iron deficiency chlorosis will be evaluated in soybeans. We will also advance the in-furrow vs. seed applied inoculant project, which ended in 2015, towards testing the effect of seed applied inoculant vs. no inoculant in fields with at least a three-year history of soybean. Along the lines of inoculant, one of the most innovative agronomy projects will begin to explore the potential of developing an effective inoculant for dry beans. This is an example of an exploratory research investment that has the potential to

provide a tremendous financial benefit to farmers in Manitoba by reducing nitrogen fertilizer costs.

Agronomy (30%) and pathology (17%) remain a core part of the 2016 research investment. Pathology sees a notable increase compared to 2015 (11%) due to the key priority area, *identification, surveillance and modelling of crop pests and beneficial organisms*, which we will see addressed in multiple ways beginning in 2016. The first ever comprehensive foliar disease survey will use new technology to identify disease pathogens in soybeans that may not be visible to farmers and agronomists or may currently be misdiagnosed. The *Fusarium* pathogen will also be looked at in a new way, collaboratively across multiple crops. With so many crops grown in rotation that are host to various species of *Fusarium*, we want to investigate the potential for cross-pathogenicity of fusarium strains that infect the major crops grown in Manitoba. Lastly, we are contributing towards a province-wide survey to quantify weed species distribution, including herbicide resistant weeds.

Two new projects in variety improvement (22%) will look at enhancing water stress tolerance in soybeans and determining the effect of cultivar and environment on nutritional qualities in Manitoba-grown beans. A 7% investment towards

nutrition, utilization and value-added projects will also continue. Projects in this area focus on advancing the opportunity to use pulse flours in baking. The flour market is currently dominated by wheat, but consumers are interested in pulse flours for increased protein. Any advance in this market could significantly increase demand of Manitoba-grown pulse crops.

The \$1.55M investment in 2016 contributes to MSPSG's overall research investment of \$4.8M, which spans a total of 62 ongoing research projects. Every dollar invested by MSPSG is matched by industry and government partners with an additional \$2.4M allowing us to deliver a research program valued at \$11.2M. But research is not our only investment. At the heart of the Research and Production program is our mission to *provide production knowledge to Manitoba pulse and soybean farmers*. To achieve this, 20% of the annual research budget is targeted towards **program delivery and extension**. In these activity areas we work on making research reports available, interpreting research results and delivering production knowledge through initiatives such as *The Bean Report*, SMART Day and Getting it Right, to name a few. Stay up to date on research and production activities by visiting www.manitobapulse.ca.

continued on page 23

RESEARCH LEAD	PROJECT TITLE	START DATE	END DATE	MPSG TOTAL FUNDING	TOTAL VALUE
ON-FARM NETWORK					
TAC	Effects of Seed Applied Inoculant on Soybean Yield – On-Farm Trials	2016	2017	\$84,000	\$84,000
TAC	Effects of Soybean Seed Treatment on Yield – On-Farm Trials	2016	2016	\$37,275	\$37,275
TAC	Comparing Accuracy of Yield Data between Calibrated Yield Monitor and Scale	2016	2016	\$7,350	\$7,350
Antara	Product Evaluation for Prevention of Iron Deficiency Chlorosis	2016	2016	–	\$13,000
Agri Skills	Soybean Special Input Trial	2015	2016	\$33,600	\$33,600
Agri Skills	Pinto Fungicide Trial	2015	2016	\$33,600	\$33,600
Agri Skills	Suitability of Pinto and Navy Bean Varieties for Direct Harvest	2015	2016	\$115,000	\$115,000
Agri Skills	Pea Canola Intercropping	2015	2016	\$46,200	\$46,200
TAC	Effects of Lower Seeding Rates on Yields – Western Manitoba	2015	2017	\$75,600	\$75,600
U of M – Lawley	Soybean Residue Management	2014	2017	\$68,616	\$255,850
TAC	Evaluating Effect of Foliar Fungicides on Soybean Yield and Maturity	2014	2016	\$177,250	\$117,250
SOYBEAN – Agronomy					
Linnaeus – Eynck	Relay-Cropping of Winter Camelina and Short-Season Soybeans	2016	2016	\$7,000	\$10,000
Manitoba Agriculture – Gauthier	Manitoba and General Herbicide-Resistant Weed Surveys	2016	2016	\$8,078	\$121,862
U of M – Gulden	Defining and Refining the End of the Critical Period of Weed Control in Soybean for Manitoba	2016	2017	\$57,500	\$115,000
U of M – Oresnik	Determining Efficacy of qPCR to Determine <i>Bradyrhizobium japonicum</i> Populations in Fields	2016	2017	\$26,443	\$52,885
MPSG	Soybean Inoculant Trial	2016	2016	\$8,960	\$8,960
MPSG	Soybean Hail Damage Regrowth Assessment	2015	2017	\$44,710	\$132,030
MPSG	Late Planting of Early Maturing Soybeans	2015	2017	\$25,719	\$51,438
U of M – Flaten	Phosphorus Fertilization Beneficial Management Practices in Soybeans in Manitoba	2014	2016	\$64,653	\$193,959
U of M – Entz	Research and Technical Support for On-Farm Transition to Organic Soybean Production	2014	2016	\$20,000	\$180,300
U of M – Tenuta	Soybeans for Improved Soil Health	2014	2017	\$322,348	\$322,348
AAFC – Mohr	Effect of Soil Temperature at Different Planting Dates and Residue Management on Soybean	2014	2017	\$49,600	\$148,800
AAFC – Mohr	Enhancing Manitoba Soybean Yield and Quality Under Sub-Optimal Conditions	2014	2017	\$136,074	\$176,698
AAFC – Mohr	Agronomic Management of Soybean in Manitoba	2013	2016	\$163,900	\$163,900
U of M – Gulden	Economic and Biological Implications of Volunteer Canola in Soybean	2013	2017	\$86,667	\$140,000
AAFC – Larney	Comparison of Dry Bean and Soybean for Agronomic Traits, Inputs, Diseases and Nitrogen-Fixing Benefits to Following Crops, Water Use and Harvest Losses	2013	2017	\$15,000	\$59,087
SOYBEAN – Pathology & Variety Improvement					
BU – Cassone	The Most Comprehensive Survey of Foliar Diseases in Manitoba Soybean	2016	2018	\$112,509	\$112,509
U of M – Daayf	Characterizing the Fusarium Species that Affect Major Crops in Manitoba	2016	2017	\$47,400	\$174,800
U of M – Stasolla	Enhancing Water Stress Tolerance in Soybean Through Phytoglobin Manipulations	2016	2018	\$123,000	\$173,000
AAFC – Hou	Evaluation of Soybean Breeding Lines for Iron Deficiency Chlorosis (IDC) Resistance in Greenhouse	2015	2016	\$52,000	\$52,000
AAFC – Hou	Soybean Protein Content Variation Among Genotypes Grown in Manitoba and Ottawa	2015	2017	\$144,000	\$144,000
AAFC – Savitch	Supporting Western and Northern Expansion of Soybean and Corn in Canada	2015	2016	\$42,525	\$147,050
U of L – Belzile	SoyaGen: Improving Yield and Disease Resistance in Short-Season Soybean	2015	2018	\$160,000	\$375,000
AAFC – Morrison	Variation in Soybean Seed Quality Parameters: The Manitoba Advantage	2015	2016	\$62,400	\$134,400
U of M – Daayf	Alternatives to Reduce Root Rots in Soybean and Other Pulses	2014	2017	\$105,000	\$240,000
AAFC – Cober	Short-Season Soybean Improvement and Very Short-Season Herbicide Tolerant Soybean Development	2013	2017	\$90,000	\$748,535
AAFC – McLaren	Prevalence, Incidence & Virulence of Phytophthora Root Rot of Soybean in Manitoba Soybean Fields	2013	2017	\$300,000	\$683,908

continued on page 24

RESEARCH LEAD	PROJECT TITLE	START DATE	END DATE	MPSG TOTAL FUNDING	TOTAL VALUE
DRY BEAN – Agronomy					
U of M – Oresnik	Development of an Effective Inoculant for Dry Beans	2016	2020	\$200,000	\$440,000
MCVET	Manitoba Crop Variety Evaluation Trials for Dry Beans	2016	2016	\$34,447	\$34,447
U of M – Gulden	Optimizing Plant Spatial Arrangement and Weed Management for Dry Bean Production	2015	2019	\$236,325	\$236,325
U of M – Tenuta	Identification and Significance of Plant Parasitic Nematodes of Pulse Crops and Soybean	2013	2017	\$165,776	\$770,158
U of M – Ayele	Mitigating the Deleterious Effects of Above Normal Soil Moisture on the Productivity of Pulse Crops Through Seed Treatment	2014	2016	\$80,000	\$80,000
AAFC – Marsolais	Developing Herbicide Tolerance in Dry Beans	2013	2017	\$50,000	\$368,550
U of G – Gillard	Dry Bean Agronomy and Pest Management Studies	2013	2017	\$50,000	\$969,915
DRY BEAN – Pathology & Variety Improvement					
CGC – Wang	Effect of Cultivar, Growing Location and Year on Dietary Fiber Contents, Trypsin Inhibitor Activity and Oligosaccharides in Manitoba-Grown Dry Beans	2016	2017	\$43,200	\$43,200
AAFC – Hou	Development of Dry Bean Cultivars/Germplasm with High Yield, Disease Resistance and Marketable Seed Quality for Production in Manitoba	2013	2017	\$325,000	\$695,129
AAFC – Conner	Identify Advanced Dry Bean Breeding Lines or Coop Entries with Resistance to Common Bacterial Blight, Anthracnose and White Mould. Develop New Methods for Controlling Halo Blight in Dry Beans	2013	2017	\$75,000	\$203,993
AAFC – Conner	Evaluation of Root Rot Resistance in Dry Bean Cultivars	2013	2017	\$60,000	\$60,000
AAFC – McLaren	Root Rot Pathogens of Dry Bean; Identification, Distribution and Risk Assessment in Manitoba	2013	2017	\$45,000	\$366,947
FIELD PEA					
MPSG	Evaluation of Seeding Rate and Fungicide Use in Field Pea	2016	2016	\$14,150	\$14,150
CDC	Variety Release Program: Variety Development of Field Peas and Faba Beans	2016	2016	\$22,000	\$22,000
AAFC – Conner	Evaluation of Root Rot Resistance in Field Pea Cultivars	2013	2017	\$10,000	\$40,000
AAFC – McLaren	Root Rot Pathogens of Field Pea; Identification, Distribution and Risk Assessment in Manitoba	2013	2017	\$45,000	\$153,100
NUTRITION, UTILIZATION & VALUE-ADDED					
Cigi – Frohlich	Influence of Pre-Milling Thermal Treatments of Field Peas, Dry Beans and Faba Beans on the Flavour and End Product Quality of Baked Products	2016	2016	\$53,458	\$53,458
LM Food Tech	Effect of Genotype and Environment on Pulse Flour Quality and Baking Performance	2016	2017	\$25,000	\$425,001
OBG	Reduction of Blood Glucose with Beans: Defining the Minimum Dose	2016	2016	\$16,000	\$149,306
CCARM – Zahradka	Effect of Processing on Health Benefits Associated with Bean Consumption	2016	2017	\$67,907	\$123,032
CCARM – Zahradka	Cardiovascular Health Benefits of Soybean Crops	2016	2016	\$18,500	\$73,000
MSTVU – Luhovy	The Effect of Whole Cooked Beans & Peas on Satiating, Satiety and Food Intake in Children	2015	2016	\$15,800	\$15,800
U of M – Aluko	Extraction and Functional Characterization of Cholesterol-Binding Indigestible Proteins from Manitoba-Grown Pulses	2015	2017	\$91,300	\$91,300
FDC – Appah	Developing Pulse-Based Shelf Stable Chili Using Retort Processing	2015	2016	\$29,000	\$32,000
U of W – Holloway	Joining the Green Revolution: Value-Added Fermentations of Peas and Beans	2015	2017	\$32,860	\$99,360
2016 NEW FUNDING APPROVED				\$1,014,177	\$2,253,788
NEW (2016) + ON-GOING FUNDING COMMITMENTS				\$4,759,699	\$11,241,365
RESEARCH AGRONOMIST – TBA				\$210,000	
PROGRAM DELIVERY BUDGET				\$216,000	
EXTENSION & PRODUCTION BUDGET				\$110,500	
TOTAL RESEARCH & PRODUCTION BUDGET FOR 2016				\$1,550,677	

AAFC – Agriculture and Agri-Food Canada
 Antara – Antara Agronomic Services
 BU – Brandon University
 CCARM – Canadian Centre for Agri-Food Research in Health and Medicine

CDC – Saskatoon Crop Development Centre
 CFCRA – Canadian Field Crops Research Alliance
 CGC – Canadian Grain Commission
 Cigi – Canadian International Grains Institute

FDC – Food Development Centre
 Linnaeus – Linnaeus Plant Sciences
 MCVET – Manitoba Crop Variety Evaluation Trials
 MPSG – Manitoba Pulse & Soybean Growers

MSTVU – Mount Saint Vincent University
 OBG – Ontario Bean Growers
 TAC – Tone Ag Consulting
 U of G – University of Guelph

U of L – University of Laval
 U of M – University of Manitoba
 U of W – University of Winnipeg



DELARO[®]



THERE'S A NEW SHERIFF IN TOWN.

Delaro[®] fungicide doesn't take kindly to diseases like anthracnose, ascochyta and white mould threatening the yield potential of innocent pulse and soybean crops.

Powerful, long-lasting disease control with exceptional yield protection, Delaro is setting a new standard in pulse and soybean crops.

TELL 'EM DELARO'S COMING



cropscience.bayer.ca/Delaro 1 888-283-6847 @Bayer4CropsCA

Always read and follow label directions. Delaro[®] is a registered trademark of Bayer Global. Bayer CropScience Inc. is a member of CropLife Canada.

C-72-01/16-10486160-E

WORKING TO ADDRESS DRY BEAN PRODUCTION CONSTRAINTS

Kristen Podolsky, MSc, PAg
Production Specialist, MPSG

Are dry beans being under-fertilized in Manitoba? Will we see improved herbicide options for lambsquarters, pigweed and kochia? These questions are among the greatest production constraints that farmers would like to see addressed by MPSG, as identified through the *2015 Dry Bean Grower Survey* (full results on page 28). This article will address current and future MPSG plans to address some of these constraints.

POD SHATTER AND AVAILABILITY OF DIRECT HARVEST VARIETIES

A number of upright varieties have entered the marketplace over the past few years and about half the survey respondents indicated they harvest a portion of their acres using direct harvest. MPSG's current research interest is to compare the suitability of multiple navy and pinto bean varieties for traditional undercutting vs. direct harvest. In 2016, these field scale trials will be entering a third year in Carman. In addition to helping farmers assess variety performance for direct harvest, these trials will develop average harvest loss numbers that could potentially be incorporated into an economic decision model along

with yield, market price and fixed and variable costs of undercutting or direct harvest. In addition to field-scale harvest trials, 10% of the MPSG research budget is directed towards variety improvement. The primary focus is currently on yield, disease resistance and marketable quality. Past research efforts at Morden AAFC have focused on plant architecture and resulted in the availability of Portage navy bean, an early upright variety that has been among the top performers in the direct harvest trial at Carman. For the dry bean industry, breeding efforts need to be a balance of all these factors. As a farm gate to plate product, even though a variety may have superior agronomic qualities, it may not be the best for storage, colour, texture or taste. This may not be the ideal way for farmers, but is currently the environment we are operating in for many specialty crops.

WHITE MOULD AND FUNGICIDE OPTIONS

There have been two projects underway over the past number of years focusing on product efficacy and economic return. Dr. Chris Gillard from the University of Guelph has been testing products, rates and timing for five years. In addition to yield and disease suppression, what makes Chris' work unique is the in-depth economic analyses performed on the data. These

results are available on our website and are made available each year to farmers through *The Bean Report*. Although this work is Ontario-based, fungicide efficacy data is an example of information that can be applicable across regions. MPSG has also invested in local research. Since 2012, multiple products have been evaluated on pinto and navy beans in Carman (see page 34 for results). In those trials, a significant yield response to fungicide has occurred in two out of the past four years. It's not exactly the track record we are looking for when investing in crop inputs. What's next? Can we tip the odds in our favour by trying to identify factors that can predict when a fungicide application is needed? You may have seen the *Fungicide Decision Worksheet for Managing White Mould in Dry Beans* available on our website. This is a guide that was developed by bean specialists in Nebraska to outline the key risk factors for disease development and be a decision-support tool for farmers considering fungicide application. Beginning in 2016, plans are underway to ground-truth this worksheet. The MPSG On-Farm Network has expanded into dry beans and is working with five farmers to set up replicated fungicide strip trials. At each site, weather stations are being set up to monitor daily temperature, humidity and rainfall. At the end of the season, weather data will be analyzed, combined with field data and inputted into the worksheet. The score developed can then be compared to disease ratings and yield data from each site to determine the strength of the prediction. We will be able to develop various models to see what combination of field and weather factors (if any) can best be used to correlate to fungicide yield response. Fungicide coverage is also a limiting factor in efficacy. With new innovations in spray technology, we need to start focusing on how we deliver the product to the plant.

PRODUCTION CONSTRAINTS IDENTIFIED BY FARMERS

- 1 Pod shatter and availability of direct harvest varieties
- 2 Disease (i.e. white mould), fungicide performance data and cost of fungicides
- 3 Quality of edible bean variety data and increase in number of sites
- 4 Herbicide options
- 5 Nitrogen rates
- 6 Plant population and seeding rates
- 7 Market access, market information
- 8 Drainage, excess moisture tolerance

continued on page 27

Table 1. Recommended established plants/ac for dry edible beans

Market class	Average seeds per lb	Plants per acre
Pinto	1,200 – 1,500	70,000
Navy	2,200 – 2,800	90,000
Black	2,300 – 2,800	90,000
Kidney	800 – 1,000	70,000
Great Northern	1,200 – 1,600	70,000
Pink	1,600 – 2,000	90,000
Small Red	1,400 – 2,000	95,000

Source: NDSU

Fungicide applications rely on spraying the plant from the top down to the target (flower petals and stem), which is buried beneath foliage. There are components of existing technology that could be modified to direct fungicide sideways or from the ground up into the canopy. The next fungicide project could be more engineering-related to focus on product delivery and plant coverage.

EDIBLE BEAN VARIETY TRIAL DATA

The feedback on variety trial data took MPSG by surprise, but we are certainly open for change and improvement. Each year, MPSG allocates approximately \$30,000 towards testing 70 varieties at 15 sites throughout the province. All variety trials are scientifically sound (replicated, randomized, statistically analyzed) and produced by an independent, third party. Some improvements have already been implemented for 2016, such as an increase in the number of narrow row trials in eastern Manitoba. Another area for improvement is in how the data is presented. Due to the number of market classes, it can be difficult to summarize the data as concisely as soybeans. However, this fall we will take a close look at how we can summarize the data more clearly. An example could be to move away from the detailed site-specific information and move towards a *variety description* table with disease and plant ratings averaged across sites. Yield and maturity data could consist of both individual and average values,

much like what is currently done for soybeans. Individual site data and multiple site-year averages each have their strengths. Summarizing averages would cut back on the amount of data and would increase the user-friendliness significantly. Another example would be to include previous years' yield data as a rolling average to increase the strength of the data. Whichever changes are implemented, we will be sure to keep accessibility and user-friendliness top of mind without sacrificing data quality.

PLANT POPULATION AND SEEDING RATES

Current guidelines for established plant populations date back just as far as fertility guidelines, but in this case I'm happy to say that we currently have a three-year project underway looking at a range of row spacing and seeding rates for both navy and pinto beans. The project is being led by Dr. Rob Gulden at the University of Manitoba and is currently entering the second year. The project goal is to identify the *optimum plant spatial arrangement* for both bushy and upright navy and pinto bean types. Once identified, this optimum arrangement, which consists of both row spacing and plant population, has been shown to increase crop yields by 10–30% as well as increased tolerance to crop pests, including weeds. We expect this same increase in performance for dry beans. Currently, we are using our knowledge from past research and experience, but we also have more current data from North Dakota (Table 1.)

HERBICIDE OPTIONS

Weed control is among the most consistent production constraint for edible beans. Authority herbicide has been submitted for registration, but this process could take up to two years. This group 14 product would alleviate issues for problem weeds and can be used in reduced tillage systems, however, it does come with its own risks. In North Dakota, for example, crop injury and yield loss has occurred in some cases despite strong company data showing good crop tolerance. Another thing to consider is that in other areas like Ontario, many pre-emerge products do very well because they have more rainfall. In a dry spring like we saw in many parts this year, the efficacy of these products will be reduced. In addition to company data, MPSG has considered initiating independent crop tolerance and efficacy studies prior to registration to ensure that we have data available once registration goes through. However, it is not an easy investment decision to make as it is not a guarantee if and when the registration will go through.

NITROGEN RATES

Current fertility guidelines in Manitoba date back 10–15 years and there is a significant range in the rates of nitrogen (N) used by farmers today. This combined with the survey feedback calls for investment towards updated fertility recommendations, and this has been on MPSG's radar for quite some time. Next year, we are optimistic that we will have the capacity to initiate a dry bean N study looking at multiple rates (30, 60, 90 and 120 lbs/ac total N) in both wide and narrow row production. And what about the notion that N fertilizer is required at all? After all, dry beans are a legume with the ability to biologically fix nitrogen. Beginning in 2016, Dr. Ivan Oresnik at the University of Manitoba will begin an investigation into the development of an effective inoculant for field beans. This could transform the dry bean industry! ■

2015 DRY BEAN GROWER SURVEY RESULTS

Collecting data regarding current dry bean production practices and issues through the dry bean grower survey, will serve to: 1) identify gaps that require investigation or research investment; and 2) target production recommendations to improve dry bean production and profitability. In addition, the survey is an opportunity for MPSG to invite input and feedback from farmer members regarding areas of concern in dry bean production that need to be addressed (see *The Bean Report* page 26).

In 2015, 43 farmers representing 30% of seeded acres returned completed surveys – double the number of respondents and reported acreage from 2014. Most respondents (86%) grew less than 1000 acres of dry beans and the majority of reported acreage was from the rural municipalities of Portage la Prairie and Rhineland, which is consistent with MASC reported acres (see map page 36).

As expected, navy and pinto beans were the two market classes with the highest proportion of reported acres (Figure 1). Average yield across all market classes surveyed was 2166 lbs/ac in 2015, which is significantly higher than the provincial average of 1829 lbs/ac and the five-year average of 1804 lbs/ac.

Similar to 2014, excess water was ranked the highest production issue in dry beans in 2015, followed by weeds, disease and hail damage. Worst weed problems reported were red root pigweed, lambsquarters and wild buckwheat. Basagran, cultivation and clethodim were the most commonly used weed management practices (Figure 3).

White mould and bacterial blight were also again reported as the worst disease issues; however, reported fungicide use was higher in 2015 (70% of acres) compared to 2014 (50% of acres), which is likely the result of more favourable conditions for disease development persisting throughout June and July in 2015. Lance and Allegro, both tested in the third year of MPSG's On-Farm pinto bean fungicide trial (found on page 34) had the largest

market share of reported acreage sprayed with fungicide (Figure 4).

Most dry beans were grown on wheat stubble (49%) in 2015 with a smaller proportion planted to corn stubble (19%). Interestingly, 24% of fields had dry beans planted in 2013, pointing to a shortened crop rotation. A four-year crop rotation for dry beans is recommended, and is important for breaking up disease cycles of root rots, white mould and anthracnose. Soybeans were a minor part of the rotation and not reported to be grown in the three years prior to dry beans. This is a good management practice as soybean is considered an allergen in the edible bean industry and can lead to marketing challenges.

Large seeded beans (kidney, cranberry, Great Northern) were mostly seeded at 60,000–110,000. There was a particularly large spread in seeding rates for pinto beans, ranging from <60,000

to >129,000 seeds/ac. The current recommendation for an established stand of pinto beans is 70,000 plants/ac, therefore seeding rates below this do not allow for mortality and are likely too low for yield optimization. Black and navy beans were seeded at rates >90,000 seeds/acre (Table 1). A variety of row spacing for dry bean production (7.5 to 36 inches) were reported, however, the majority used 30-inch spacing, followed by 22-inch spacing (Table 1). Preliminary results from pinto and navy bean plant density trials testing 7.5", 15", 22.5", and 30" row spacings and a range of seeding rates at Carman and Portage la Prairie are showing that narrow row spacing provided the highest yields. However, it also appears that the optimum plant arrangement for field beans may be location specific.

Fungicide seed treatment was used on the majority of reported acres (72%)

continued on page 29

Table 1. Number of respondents using specific row spacing and plant population by market class in 2015

	Navy	Pinto	Black	Kidney	Cranberry	Great Northern
Total no. of respondents	12	19	11	8	7	1
Row Spacing						
< 11 inches	1	–	2	–	–	–
15 inches	1	2	2	–	1	–
20 inches	1	–	–	–	–	–
22 inches	3	6	3	2	–	–
30 inches	5	11	4	6	5	–
36 inches	1	–	–	–	1	–
Seeding Rate²						
< 60,000	–	1	1	–	–	–
60–69,000	–	3	–	1	1	–
70–79,000	–	2	–	–	–	–
80–89,000	–	9	–	5	1	–
90–99,000	2	–	–	1	–	1
100–109,000	5	2	1	–	–	–
110–119,000	2	1	2	–	–	–
120–129,000	2	–	–	–	–	–
> 129,000	1	1	4	1	1	–
Not specified	–	–	1	–	–	–

² seeds per ac

Figure 1. Average yield across market classes²

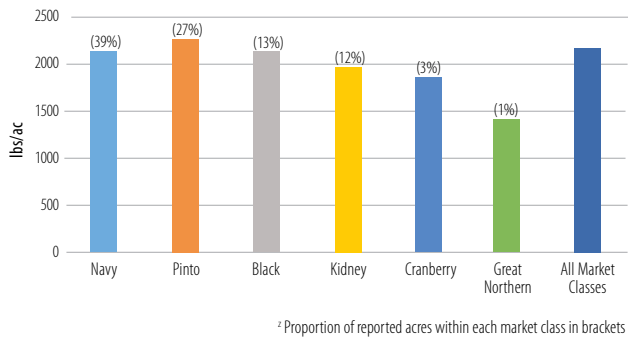


Figure 2. Frequency of each crop grown in last four years before dry beans in 2015

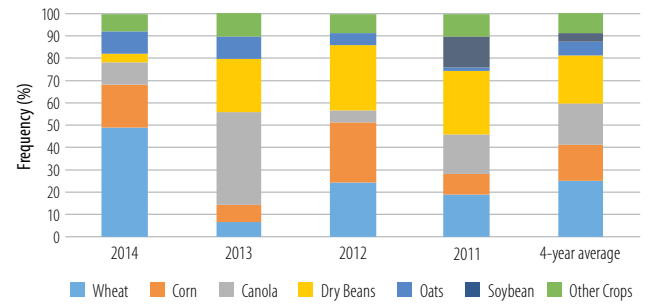


Figure 3. Weed control used on reported dry bean acres in 2015

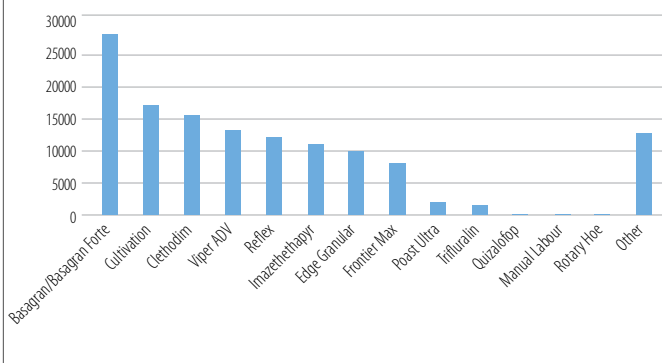
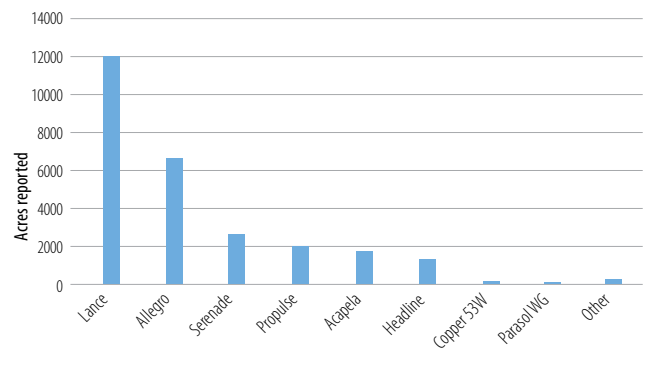


Figure 4. Foliar fungicide applied on reported dry bean acres in 2015



while insecticide seed treatment was used more infrequently (22%).

Half of respondents reported an average yield above 2000 lbs/ac and half reported yield below 2000 lbs/ac. Comparing relevant surveyed production practices between *high*

and *low* yielding respondents, there were few distinctions. One exception, however, was the reported nitrogen (N) fertilizer rate. Both groups had the same proportion of farmers using N fertilizer (95%), however, *high yielders* used an average N rate of 71 lbs N/ac while *low*

yielders used only 57 lbs N/ac. Nitrogen rates should be adjusted for residual soil N levels as well as row spacing, as narrow row beans are more responsive to N fertilizer than beans grown in wide rows due to mineralization following inter-row cultivation (MAFRD *Soil Fertility Guide 2007*). Nearly all reported acres received phosphorus fertilizer and most received potash, zinc and sulphur fertilizers as well (Table 2).

MPSG will be using these survey results to guide research investments and target production recommendations with the aim of improving production and profitability for dry bean farmers in Manitoba. Thank you to all farmers who participated in the dry bean grower survey. The survey will be repeated in 2016 and will be mailed out in January 2017. MPSG also thanks *Growing Forward 2 Growing Actions* program for project funding and Inshtrix for administering the survey on behalf of MPSG. ■

Table 2. Use of various soil fertility management practices

Management practice	Details	Percentage of respondents (%)	Average rate (lbs nutrient/ac)
Fertilizer used	Nitrogen	98	63
	Phosphate	98	35
	Potash	64	17
	Zinc	73	2
	Sulfur	76	9
Inoculant	Used	7	—
	Not Used	93	—
Soil testing	Used	88	—
	Not Used	12	—
Site-specific management	Used	18	—
	Not Used	82	—



SOUND AGRONOMY TO BE

FIRST *in the* FIELD



A SEED PARTNER WITH PROVEN RESULTS

MCVET Trials | Third Party Testing Trials |
Crop Insurance Yield Data | Agronomy Field Checks

LOCK IN HIGH YIELDS FOR 2016.

QUARRY SEED 888-274-9243

www.thunderseed.ca

Field Pea Production Tips

FIELD SELECTION

Soil Moisture

Peas thrive in relatively dry soil conditions and are susceptible to seedling/root rots in wet soils. Choose fields that are well-drained or have coarse textured soils (not prone to water-logging).



Soil Temperature

Unlike soybeans, peas are very tolerant to cool soil temperatures. Cooler soil caused by residue in no-till systems will not be detrimental, but trapped excess moisture could hinder pea growth.

Crop Rotation

Peas generally yield highest when grown after winter/spring wheat or barley (MASC). A one-in-four-year rotation for peas is ideal. Fields diagnosed with *Aphanomyces euteiches* root rot should be cropped to peas only once every 7–8 years.

Weeds

Ensure you can control the expected weed spectrum. Avoid fields with known infestations of perennial, biennial and/or Group 2 resistant weeds (cleavers, kochia, wild mustard, pigweed, smartweed)

Re-cropping Restrictions

Select residual herbicides may restrict field selection for field pea (Table 1).

TABLE 1. HERBICIDES WITH RE-CROPPING RESTRICTIONS FOR FIELD PEA*

ACTIVE INGREDIENT	TRADE NAME
Atrazine	Atrex Liquid, Primextra II Magnum
Clopyralid	Curtail M, Eclipse III, Lontrel 360, Momentum, Prestige XC, Salute, Tensile
Flucarbazone	Everest 2.0, Sierra 2.0, Inferno Duo
Imazamethabenz	Assert, Avert
Ethametsulfuron	Muster Toss-N-Go

*MAFRD Guide to Field Crop Protection 2016

SEEDING

Seeding Date

Seed late April/early May as peas are more tolerant to early spring frosts than other crops. Peas' cotyledons remain underground (unlike soybeans), therefore, if frost injury occurs, a new shoot will emerge from the growing point under the soil surface. Delaying seeding to the third week in May can reduce yields by 20% compared to the first week in May (MASC).

Seeding Rate

Target 80–90 established plants/m². Seeding at 100 seeds/m² and factoring in seedling survival (generally 85%), multiply your seed weight (TKW, g/1000 seeds) by 1.05 to calculate seeding rate in lbs/ac. Pea seed weight varies considerably among varieties and seed lots.



Low plant population on left (40 plant/m²) vs. adequate plant population on right (90 plants/m²)

Seeding Depth

Seed peas at 1.5–2 inch depth, ensuring they are in moisture.

Inoculant

Use pea-specific inoculant even on fields with history of peas to ensure adequate populations of effective strains. Consider double-inoculating on fields with no history of peas or using granular inoculant when spring/seeding conditions are unfavourable. Pea nodules are slightly smaller and more oval-shaped compared to soybean nodules.

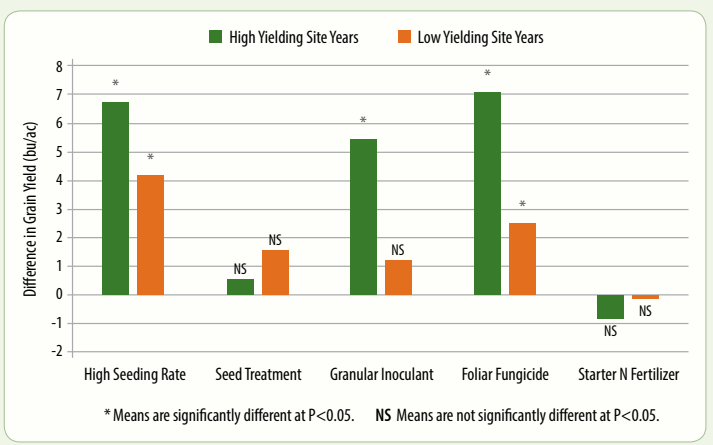
Fertilizer

Nitrogen (N) is generally not required, but starter N (~15 lbs N/ac) may improve early growth before nodules begin fixing N, particularly in cold soils with <20 lbs soil N/ac. Phosphorus (P) fertilizer can be applied in the seed row at a maximum safe rate of 20 lbs P₂O₅/ac with seed bed utilization (SBU) of >15%. P fertilizer should be placed away from the seed-row with lower SBUs. Potassium and sulphur fertilizers should be applied away from the seed row as they can cause more seedling damage than P fertilizers.

continued ➤

Figure 1. Overall yield response to additional inputs in field pea from six high-yielding site years (>45bu/ac) and six low-yielding site years (<45 bu/ac) in Saskatchewan and Manitoba.

- High Seeding Rate = 120 vs. 60 seeds/m²
- Seed Treatment = with fungicide vs. without
- Granular Inoculant = in-furrow granular vs. seed-applied liquid inoculant
- Foliar Fungicide = with two applications vs. without
- Starter N Fertilizer = 30 lbs N/ac side-banded vs. without



CROP PROTECTION

Seed Treatment

Consider a fungicide seed treatment when seeding into less than ideal situations (wet/cool/compacted/heavy clay soils or shortened rotations) for protection against various seed and root rots and blights for up to three weeks after seeding. Neither seed treatment, nor foliar fungicide will control *Aphanomyces euteiches* damage mid-season. Consider an insecticide seed treatment to control pea leaf weevil for fields in close proximity to perennial legumes (where adults fly in from) and wireworms in fields with history of wireworms.

Herbicides

Pre-emergent herbicide (PEH) is recommended because peas are relatively poor competitors, especially early in the growing season. PEH options can also provide excellent control of Group 2 resistant broadleaves, which have limited control options in-crop (Table 2). Most broadleaf in-crop products perform best at the two to five above-ground node stage (see Figure 2). Late applications can result in crop injury.

Fungicide

Mycosphaerella blight (*Ascochyta pinodes*) is the most important foliar disease in Manitoba field peas. Begin scouting during vegetative stages. Systemic fungicides will not reverse damage, but can maintain yield potential. Before spraying, evaluate three factors: 1) level of infection already present; 2) forecasted weather conditions; and 3) crop value. Apply first foliar fungicide application at early flower and invest in a second application 10–14 days later, if necessary.

HARVEST

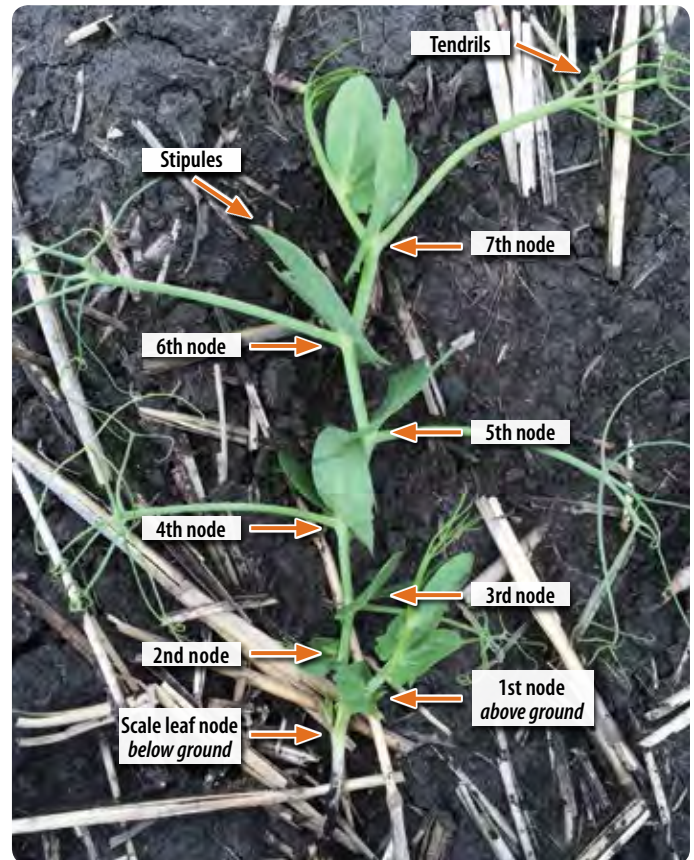
Harvest peas when the lower third of pods rattle and the top third of pods have yellow seeds. Use a flex header to straight-cut if field is even or rolled. Swath or desiccate (when lower third of pods are dry, seeds yellow, middle third seeds yellow and upper third seeds are turning yellow) if crop is weedy to improve harvestability. Store grain at <16% moisture.

TABLE 2. HERBICIDE OPTIONS FOR FIELD PEA*

HERBICIDE GROUP	ACTIVE INGREDIENT	TRADE NAME
Pre-emergent herbicide options		
2	Tribenuron	Express SG, Spike, Nuance, MPower X, Inferno WDG
3	Ethalfuralin	Edge
	Trifluralin	Treflan, Rival or Bonanza
8	Triallate	Avadex
9	Glyphosate	–
	Carfentrazone	Aim, CleanStart, Authority Charge
	Sulfentrazone	Authority, Authority Charge
	Saflufenacil	Heat
14	Flumioxazin	Valtera
In-crop herbicide options		
1	Clethodim	Select, Centurion, Arrow, Shadow RTM
	Sethoxydim	Poast Ultra, Odyssey Ultra
	Quizalofop	Assure II, Yuma GL
2	Imazethapyr	Pursuit, MPower Kamikaze, Phantom, Gladiator, MultiStar, Odyssey, Odyssey Ultra
	Imazamox	Odyssey, Odyssey Ultra, Viper ADV
4	MCPA	–
	MCPB/MCPA	Clovitox Plus, Tropolox Plus, Topside
5	Metribuzin	Sencor Solupak 75 DF, Sencor 75 DF, TriCor 75 DF
6	Bentazon	Basagran, Basagran Forté, Viper ADV

*MAFRD Guide to Field Crop Protection 2016

Figure 2. Field pea staging. This semi-leafless pea cultivar (tendrils largely replace leaves compared to leafy varieties) is at the 7th (above) ground node stage. In-crop herbicide application at this advanced stage would likely cause crop injury. Stipules are modified leaves at the base of each node along the main stem.

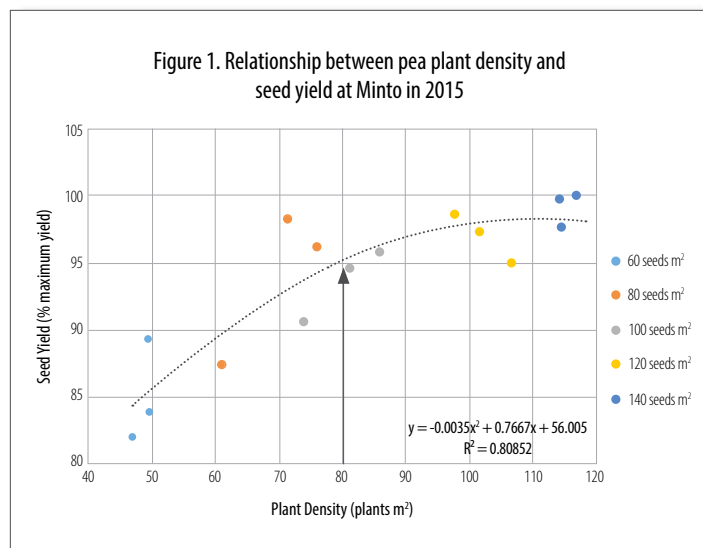


SEEDING RATES AND FOLIAR FUNGICIDES FOR FIELD PEAS

Yield responses to individual inputs, such as foliar fungicide, are often evaluated in small plot research or on-farm trials; however, it is less well understood how the combination of multiple inputs interact and affect yield. When it comes down to your bottom line, which combination of inputs is most likely to result in the highest yield and provide the most economic return?

A recent multi-input research trial conducted in Manitoba and Saskatchewan assessed the impact of five inputs, applied alone and in various combinations on field pea production: using a higher seeding rate (60 versus 120 seeds/m²), foliar fungicide (two applications), seed treatment (fungicide), granular inoculant (instead of liquid) or starter N fertilizer (30 lbs N/ac). Under relatively good growing conditions, such as those encountered at Scott, Melfort, SK and Minto, MB between 2012 and 2014 when peas yielded, on average, >45 bu/ac, higher seeding rates, foliar fungicide and granular inoculant increased seed yields (see trial yield results in Field Pea Production Tips, page 31). The combination of these three inputs also maximized economic return and resulted in more consistent yields than all other input combinations.

Unfortunately, this multi-input study lacked evaluation of seeding rates between the two extremes tested. Similarly, the study did not assess the effect of a single fungicide application compared to two applications. To further investigate the interaction between these two important inputs, MSPG initiated small-plot trials to test a range of seeding rates in combination with none, one, or two foliar fungicide applications to determine the most economical combination of these two inputs. In 2015, a single field site at Minto, MB was seeded to CDC Meadow pea at 60, 80, 100, 120 and 140 seeds/m² in combination with none, one (Headline EC at 10% flower) or two applications of foliar fungicide (Headline EC at 10% flower + Priaxor 12 days later). Average pea yield at this site was exceptionally high, averaging 95 bu/ac across the entire trial.



YEAR 1 RESULTS

As expected, seeding rate increased plant density and rates of 100, 120 and 140 seeds/m² resulted in densities above the recommended target range (80–90 plants/m²). At a plant density of ≥80 plants/m², 95% of maximum yield was achieved (Figure 1); therefore, with an average seedling survival rate (83% in this trial), seeding at 100 seeds/m² is recommended. Although pea yield at 80 seeds/m² was not statistically different than peas at 100 seeds/m² in 2015, establishing a lower than optimum plant density risks poor weed suppression and careful attention to weed control will be required to maximize yield. In addition, seeding above 100 seeds/m² may result in higher yields but the high cost of investment in additional seed may not pay every year.

Fungicide also had a significant effect on yield: one and two fungicide applications yielded 4.2 and 5.6 bu/ac more than the no-fungicide treatment, respectively; however, the difference in yield between one and two fungicide applications did not significantly differ (data not shown). Yield increases due to fungicide were reflected in a reduction in *Mycosphaerella* blight disease ratings taken 20 days after the second fungicide application (data not shown). Interestingly, the three highest seeding rates also had significantly higher disease rating than the lower two seeding rates, likely caused by

the denser crop canopy; however, the effect of higher disease levels at higher seeding rates was negligible compared to the yield potential of the crop with additional plants.

These preliminary results from the first year of the study appear to confirm current recommendations to establish a live plant stand of 80–90 plants/m² in field peas.

To further strengthen our understanding and refine recommendations for seeding rates and fungicide use in field pea in Manitoba, this trial will be repeated in 2016 at Hamiota and Minto, MB. An economic analysis of treatments will be conducted in the final report. There is potential to develop more specific recommendations based on economics of seed cost and market price, as is currently done with soybeans. ■

Mycosphaerella blight (*Ascochyta pinodes*) symptoms on peas



2015 ON-FARM EDIBLE BEAN FUNGICIDE TRIAL



on-farm network

From the recent dry bean survey conducted by MPSG (page 28), white mould in dry beans was identified as the number one concern for dry bean farmers in Manitoba. MPSG's On-Farm Network collaborator, Brent VanKoughnet of Agri-Skills Inc., conducted On-Farm fungicide trials from 2013 to 2015 to assess the seed yield response of pinto beans to various fungicide products in central Manitoba.

2015 UPDATE

Windbreaker certified pinto beans were planted on 30-inch rows, at 75,000 seeds per acre on May 21st at Carman, Manitoba. A base fertilizer application of 60 lbs N, 40 lbs P, and 1 lb Zinc per acre was applied to all treatments and weeds were controlled using Viper, Centurion, and Basagran Forte. All fungicide treatments were applied July 11th, at reproductive growth stage R-2 (early pin bean) just prior to a large rainfall event on July 12th (43mm). Growing season precipitation and growing degree days (base 5°C) were near normal for the area (Table 1). In general, there was concern for disease pressure in edible beans in 2015, which resulted in fungicide being applied to the majority of acres, according to the 2015 disease survey.

Average seed yield across all treatments was 2915 lbs/ac in 2015, 799 lbs higher than the provincial average for pinto beans (2116 lbs/ac).

The untreated beans had the lowest yield (2740 lbs/ac), while Lance applied with Serenade and Lance applied alone produced the highest yields at 3074 lbs/ac and 3024 lbs/ac, respectively (Table 2). In previous pinto bean fungicide research with the MPSG On-Farm Network, similar results were found in 2013 with Lance producing the highest grain yield. There was no statistical yield response to fungicide treatments in 2012 (navy beans) or 2014 (pinto beans).

COMBINED RESULTS

A significant yield response to fungicide in edible beans has occurred in two out of the past four years at Carman. Where there was a statistical yield difference among treatments (2013, 2015), an economic analysis was performed using the suggested retail price (SRPs) for each fungicide, an application cost

of \$7/acre, and pinto bean price of \$0.30/lb. The yield increase needed to break even (red bar) ranged from 83 lbs/ac for Acapela to 175 lbs/ac for Propulse (Figure 1). Generally, when foliar fungicide significantly increased seed yield compared to the untreated control, the application was economical (all except Propulse in 2015 – Figure 1). The pinto bean fungicide trial will be repeated in 2016. ■

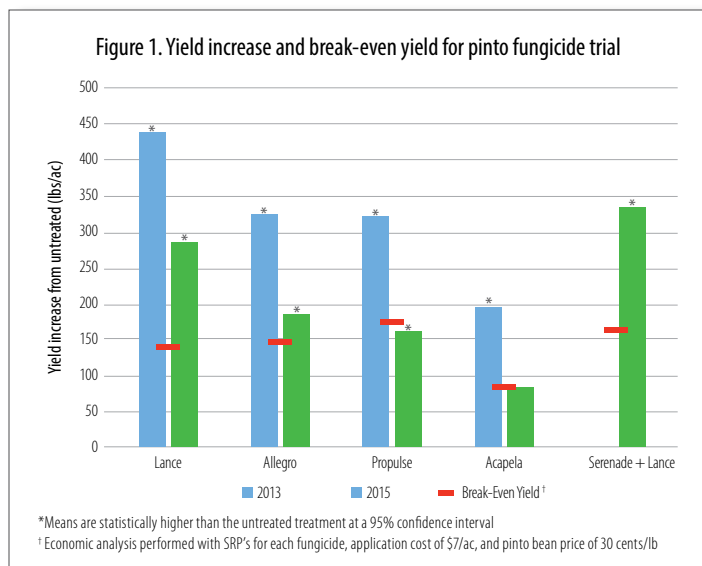


Table 1. 2015 growing season weather summary – Carman, MB

Month	Heat [†] (GDD)	Normal [†] (GDD)	Rainfall [†] (mm)	Normal [†] (mm)
May	183	183	99	76
June	374	338	75	87
July	461	442	109	90
August	413	427	47	51
Total	1431	1390	331	304

[†] Manitoba Ag Weather Program

[†] Farmzone

CDC JET

- High yield
- Excellent standability
- Early black colour
- Wide row or narrow
- Root rot resistance

CDC SUPER JET

Bacterial blight tolerance with CDC Jet excellence!

CDC PINTIUM (Pinto)

- Earliest variety on test
- Good pod clearance

Coming soon!
CDC Blackstrap

Contact Ben – 204 534-8370

Martens Charolais & Seed

or participating dealers

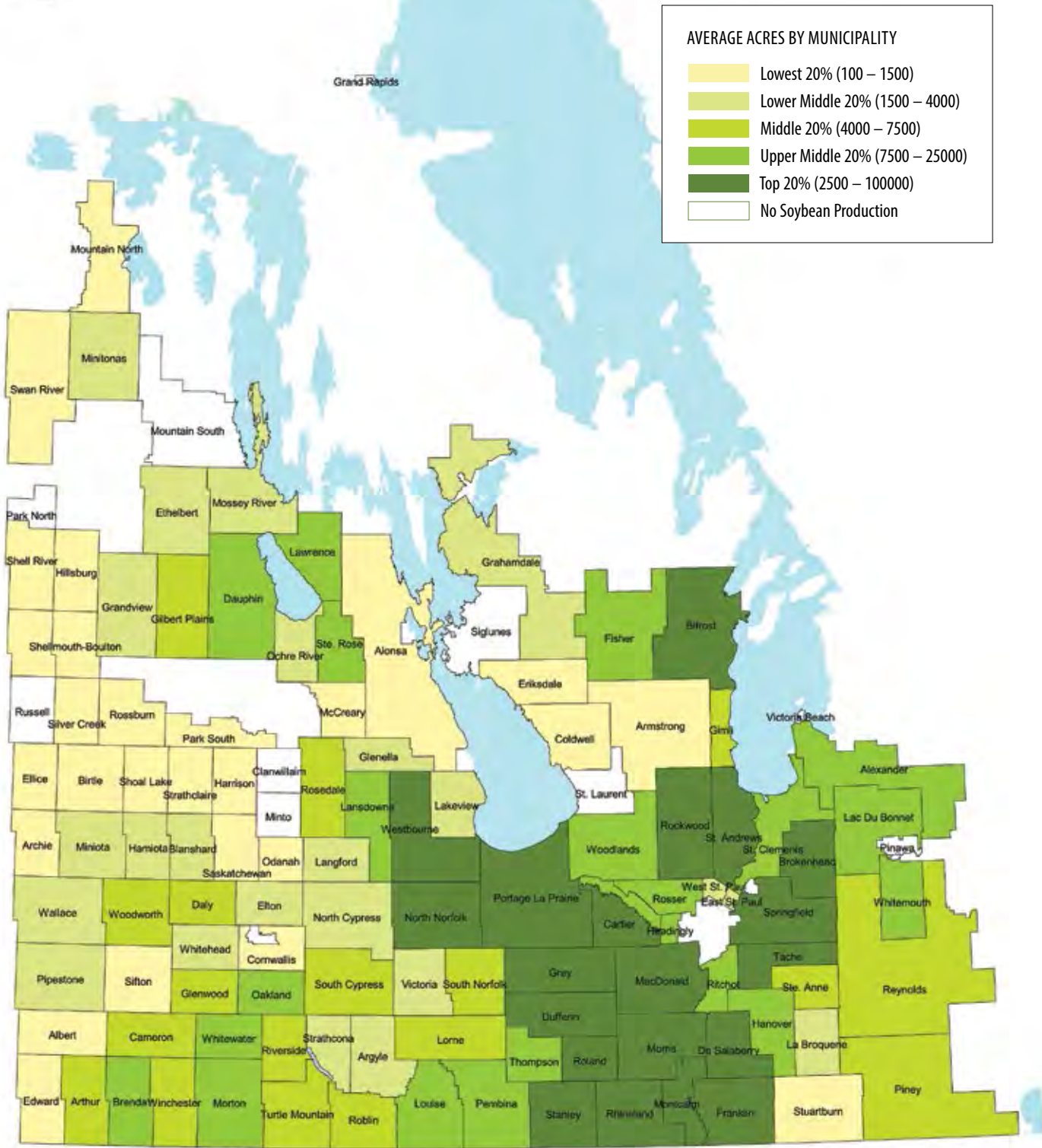
Scouler – 204 829-2326

Enns Quality Seed – 204 325-4658

Global Grain Canada – 204 829-3641

Saskcan Pulse Trading/Parent Division – 204 737-3003

2014 SOYBEAN ACREAGE



20 0 20 Kilometers

1:2550000



Data Source: MASC Crop Insurance

2016-01-09

FARMER PROFILE – Calvin Penner

It's about research. Independent research. Research not tied to a company trying to sell you a bill of goods that may or may not be the best option for your farm.

This is what farmers want, says new MPSG board member and farmer, Calvin Penner. And this is what the Manitoba Pulse & Soybean Growers does well.

"I've seen MPSG's research," said Calvin. "I think it's saved me the money I put in."

Calvin, who farms with his wife, Gloria, and two sons near Elm Creek, MB joined the MPSG board to investigate how the dollars he contributes to the association were being spent.

"I was curious about where all my check-off money was going," said Calvin. "It seemed like a pretty big chunk. I was already to the point where every other year I was going to ask for it back. Now, I wouldn't do that. I see the research that is going on. I see what's being done here."

The Penner family farm is about 3,100 acres this year, a sizeable increase from the 400 acres that started it in 1959, when Calvin's parents left the family farm near Domain and trekked to the Elm Creek area to put down roots of their own.

"My dad farmed both places for a year," said Calvin, grinning. "He drove that old '44 Massey up and down the road, past Sperling, up to Rosenort, down the 205. He picked up more land as it came available, growing traditional stuff like wheat, barley, and flax."

MPSG caught up with Calvin and Gloria in what looked to be a relatively new home built near the main house where their oldest son and his family lives.

Calvin didn't build it. But he could have. He's a carpenter. "Gloria said she wanted it done sometime soon, so we decided to hire it out," Calvin said, laughing (Gloria was laughing, too).

Carpentry was Calvin's first summer job after high school, one he snagged after taking his motorcycle around the community asking anyone and everyone if they needed a hand.



Calvin and Gloria Penner

It's an interest that stuck. He went through the Red River College apprenticeship program, and continues to "dabble in carpentry." He did the flooring in their house.

"I'd phone home to the farm from my construction job, 'Hey, Dad. Do you need any help?' He'd say, 'No, no, you can help when you get home.' But I never wanted him to say that. I didn't want to pound nails that day. I wanted to combine."

Calvin began farming in 1976, working off the farm for the first little while. He bought his first piece of land from his father in 1978, and took over the entire operation in 1998.

The farm was about 2,000 acres by then. And Calvin remembers, with the fondness of an overcome hurdle, seeding those acres with an old discer, having to jump out and fill those things up a seemingly infinite amount of times.

Now, Calvin and Gloria's family farm is larger than that. Their farm is growing. Their family is growing.

"We're pretty traditional," he said. "We grow winter wheat, wheat, oats, canola, soybeans. We've dabbled a bit here and there. We've talked about growing corn."

Calvin was asked to join MPSG's board, and after sitting in on his first meeting in March of this year, he's happy he said yes.

"It's nice to have input on where some of this research is going," he said. "You sit around the table with the other growers on the board, and you learn a lot."

"I'd like to see some research conducted on a good, conventional, not Roundup Ready soybean variety. I'd like to see more research on that. Another thing I'd like to see change: once these Roundup Ready varieties go off-patent, I want to be able to keep some of that – grow my own seed."

That is Calvin looking ahead, forecasting what may be down the pipeline for pulses and soys.

But what is happening now for pulses and soys is most exciting. And Calvin agrees.

"They have a great future. They're moving west. They're moving north. And more and more people are turning to pulses for health reasons," said Calvin. "We went on a Cigi (Canadian International Grains Institute) tour and saw some of what they are doing with pulses. There is a lot of room for us to eat pulses in ways other than as whole beans." ■

Soybean Specialists

DTN live market for soybeans
at www.seed-ex.com

Sign on for daily text
pricing or try the new
Seed-Ex mobile app.

Now Contracting
16/17 Crop

- Best Option • Best Pricing
- Best Service
- Farm Pickup
- Target Pricing
- Payment Option
US\$ or CDN\$

SEED-EX Inc.

204 737-2000
Fax 204 737-2102

P.O. Box 238
Letellier, MB R0G 1C0

LIFE IS GOOD!

MANITOBA PULSE & SOYBEAN BUYER LIST – MAY 2016

COMPANY	EDIBLE BEANS	FABA BEANS	LENTILS	PEAS	SOYBEANS	PHONE	LOCATION	CGC REGISTERED
Agassiz Global Trading	✓				✓	204-745-6655	Homewood, MB	
AgriTel Grain Ltd.				✓	✓	204-268-1415	Beausejour, MB	
AGT Foods	✓		✓	✓	✓	306-525-4490	Regina, SK	✓
• SaskCan Pulse Trading – Parent Division	✓		✓	✓	✓	204-737-2625	St. Joseph, MB	✓
All Commodities			✓	✓		204-339-8001	Winnipeg, MB	✓
B.P. & Sons Grain and Storage Inc.					✓	204-822-4815	Morden, MB	✓
Belle Pulses Ltd.				✓		306-423-5202	Bellevue, SK	✓
Best Cooking Pulses Inc.			✓	✓		204-857-4451	Portage la Prairie, MB	✓
Brett-Young Seeds				✓	✓	204-261-7932	Winnipeg, MB	
BroadGrain Commodities Inc.	✓	✓	✓	✓	✓	416-504-0070	Toronto, ON	✓
CB Constantini				✓		604-669-1212	Vancouver, BC	✓
Canadian Grain Inc.	✓	✓	✓	✓	✓	905-257-6200	Oakville, ON	✓
Cargill Ltd.				✓	✓	204-947-6219	Winnipeg, MB	✓
Delmar Commodities				✓	✓	204-331-3696	Winkler, MB	✓
Farmer Direct Co-operative Ltd.	✓	✓	✓	✓		306-352-2444	Regina, SK	
G3 Canada Limited				✓		204-983-0239	Winnipeg, MB	✓
Gavilon Grain LLC					✓	816-584-2210	Omaha, NB	✓
Global Grain Canada	✓					204-829-3641	Plum Coulee, MB	✓
Hensall District Co-op	✓					204-295-3938	Winnipeg, MB	✓
ILTA Grain Inc.	✓	✓	✓	✓	✓	604-597-5060	Surrey, BC	✓
JK Milling Canada Ltd.				✓		306-586-6111	Regina, SK	✓
Kalshea Commodities Inc.				✓		204-272-3773	Winnipeg, MB	✓
Lansing Olam Canada Commodities ULC					✓	877-747-7599	Chatam, ON	✓
Linear Grain	✓			✓	✓	204-745-6747	Carman, MB	✓
Masterfeeds				✓		403-327-2555	Lethbridge, AB	
Maviga NA., Inc.		✓	✓	✓		306-721-8900	Regina, SK	✓
Monsanto					✓	–	Winnipeg, MB	
Natural Proteins					✓	204-355-5040	Blumenort, MB	✓
North American Food Ingredients					✓	204-272-5510	Winnipeg, MB	✓
Nutri-Pea Ltd.				✓		204-239-5995	Portage la Prairie, MB	
Nu-Vision Commodities	✓					204-758-3401	St. Jean Baptiste, MB	

continued on page 39



COMPANY	EDIBLE BEANS	FABA BEANS	LENTILS	PEAS	SOYBEANS	PHONE	LOCATION	CGC REGISTERED
Parrish & Heimbecker Ltd.					✓	204-987-4320	Winnipeg, MB	✓
Paterson Grain				✓	✓	204-956-2090	Winnipeg, MB	✓
• FeedMax Corp.				✓		204-523-0682	Killarney, MB	✓
Quarry Grain Commodities					✓	204-467-8877	Stonewall, MB	
Remillard Seed Farm					✓	204-737-2376	St. Joseph, MB	
Richardson International				✓		204-934-5627	Winnipeg, MB	✓
• Richardson Pioneer Ltd.				✓	✓	204-934-5627	Winnipeg, MB	✓
• Tri Lake Agri				✓		204-523-5380	Killarney, MB	✓
S.S. Johnson Seeds	✓			✓		204-376-5228	Arborg, MB	✓
Seed-Ex Inc.					✓	204-737-2000	Letellier, MB	✓
Scoular Canada Ltd.	✓	✓	✓	✓	✓	403-720-9050	Calgary, AB	✓
Shafer Commodities					✓	204-822-6275	Morden, MB	✓
Southland Pulse				✓		306-634-8008	Estevan, SK	✓
Sunrich LLC					✓	507-446-5642	Hope, MN	
Thompsons Limited	✓		✓	✓		519-676-5411	Blenheim, ON	✓
Vanderveen Commodity Services					✓	204-745-6444	Carman, MB	✓
Viterra Inc.	✓	✓	✓	✓	✓	Contact your local Viterra sales representative		✓
Walhalla Bean Co. (Canada Ltd.)	✓					701-549-3721	Walhalla, ND	✓
• Winkler Receiving	✓					204-325-0767	Winkler, MB	✓
Wilbur Ellis	✓		✓	✓		204-867-8163	Minnedosa, MB	✓
Zeghers Seeds Inc.			✓	✓		204-526-2145	Holland, MB	✓

To be included on our Manitoba Buyers List, companies should contact the MSPG office at 204-745-6488 to register.

NOTE – These companies are authorized to deduct and remit levy to MSPG. This list is provided by MSPG as a convenience to our members. MSPG accepts no responsibility or liability for the accuracy or the completeness of the information provided. It is your personal responsibility to satisfy yourself that any company you deal with is financially sound. Questions regarding licensing and security should be directed to the Canadian Grain Commission at 1-800-853-6705 or 1-204-983-2770.

Soybean Scout ANSWERS



A – Group 4 herbicide injury (growth regulators). Group 4 herbicides consist of growth regulators such as dicamba, clopyralid and 2,4-D. In this particular case, the affected soybean plants occurred in a circular-like pattern about 100 feet from an adjacent flax field. The affected soybean

plants had multiple symptoms: severe leaf cupping, shortened internodes and leaf strapping. After looking back at field history, the possibility of being carry-over in the soil was eliminated. It turns out that the adjacent flax field had been sprayed early on with Lontrel. In the end, it seemed that some type of vapour or inversion drift had occurred. Environmental conditions in 2015 led to several cases of unusual herbicide drift.



B – Group 10 herbicide injury (glutamine synthetase inhibitors).

Liberty herbicide used on Liberty Link canola can be a big problem for Roundup Ready soybeans if drift occurs. This fast acting, contact herbicide will show symptoms

on soybean plants within days. Chlorosis and wilting followed by necrosis are key symptoms. Bright, sunny days improve effectiveness of the herbicide and will intensify injury symptoms on soybean. Although Liberty tolerant soybeans are widely used in the US in addition to Roundup Ready, there are none currently in Manitoba.

Recipe Corner



White Bean and Sage Crostini

Makes 24 slices

- | | |
|---|--|
| 1 tbsp (15 mL) canola oil | 1/4 cup (50 mL) water |
| 3 green onions, chopped | 1 tsp (5 mL) chicken flavoured bouillon granules |
| 2 cloves garlic, minced | 1/4 cup (50 mL) grated Parmesan cheese |
| 1 tbsp (15 mL) chopped fresh sage | 24 slices French baguette – 1/2-inch thick |
| 1 1/4 cup (300 mL) cooked navy beans or white kidney beans OR 1–14 fl oz (398 mL) can, drained and rinsed | |



HEAT 1 tbsp oil in a skillet.

ADD green onion, garlic and sage and cook for about 2 minutes. Add beans, water and chicken bouillon and continue to cook until liquid is slightly reduced, about 5 minutes, then add the cheese. Cool to room temperature.

PROCESS bean mixture in a blender or food processor until smooth. If desired, thin bean mixture by adding additional water, 1 tbsp at a time.

PLACE sliced bread on a baking sheet and broil for about 1 minute or until golden on one side and turn for another minute. Spread about 1 tbsp of bean mixture on each slice.

Chickpea Pasta Salad

Makes 13 servings (1-cup servings)

- | | |
|---|--|
| 4 cups (1 L) cooked corkscrew pasta, drained and cooled | 2 sweet red peppers, chopped |
| 1–19 fl oz (540 mL) can chickpeas , rinsed and drained | 4 green onions, finely chopped |
| 1 1/2 cups (375 mL) chopped celery | 1/4 cup (50 mL) crumbled feta cheese |
| 1 1/2 cups (375 mL) shredded carrots | 1/3 cup (75 mL) light Greek salad dressing |

IN a large bowl, combine pasta, chickpeas, celery, carrot, red pepper, onion and feta cheese. Toss lightly to mix well.

ADD dressing to pasta mixture and toss to coat well. Serve. Pasta mixture can be made a day in advance. Keep in fridge overnight and toss salad with dressing before serving.



Across Canada... **the Legend is Growing.**



As a second generation Seedsman,
Legend Seeds Grower, Processor and Dealer
Tim Bergen knows what it means to
have a Legendary harvest!

Bergen Seeds 2015 harvest: 50 bushels per
acre average across 5 Legend varieties
over 1,000 acres at Sanford Manitoba.

LS Northwester : 44.5 bushels / acre

LS 005R22 : 48 bushels / acre

LS PRO 2525R : 51 bushels / acre

LS Maidan : 54 bushels / acre

LS Eclipse : 54 bushels / acre



**Legend
Seeds**

Canada

www.legendseeds.ca

1-888-974-7246

Nature. **It's Powerful Technology.**



Biological solutions with proven results.

Monsanto BioAg brings effective biological solutions to the market that are extensively researched, tested and developed, helping farmers meet the challenge of producing more with less.

Our products are designed to benefit agriculture, consumers and society as a whole. We continue our commitment to introducing innovative solutions that boost productivity and further support the management of natural resources on the farm.

JumpStart® TagTeam® TagTeam LCO Optimize® ST Cell-Tech™

ALWAYS READ AND FOLLOW LABEL DIRECTIONS. Cell-Tech™, JumpStart®, Monsanto BioAg and Design™, Optimize® and TagTeam® are trademarks of Monsanto Technology LLC, Monsanto Canada, Inc. licensee. ©2016 Monsanto Canada Inc.

MONSANTO 
BioAg™