

FIELD NOTES

FALL 2020 EDITION

ENDING ON A HIGH NOTE



This year has been tumultuous. For everyone.

But as we are looking towards the end of 2020, I am happy to report that, for barley at least, things are looking good.

Barley harvest in Saskatchewan

was virtually wrapped up by early October this year – a big difference from last year!

So far, production numbers and quality look really good. Analysis to date shows good yields, few issues with pre-harvest sprouting and disease, good protein content, high test weights and plump kernels.

Things were looking good for our export numbers as well throughout the summer and we officially finished the year strong, according to the year-end figures released from the Canada Grain Commission.

Furthermore, our check-off revenue was up again this year (see our annual report, which will be released in December, for a full financial report). This means we were able to invest more into the research and

development that drives our industry – and your success.

We also made a lot of progress this year in terms of achieving our goals. Again, you can see a full report of this in our annual report, which will be released in December.

Of course our fall and winter extension events are going to look a little different this year. We tried to maintain as much normalcy as possible but we face the same restrictions as everyone else. Visit our website for information on upcoming events – both virtual and in-person.

We hope to see you, or “see” you, over the winter months.

Jason Skotheim



More SaskBarley in Your Inbox

In light of all the major shift to digital communications this year, we launched an e-newsletter as an alternate way to stay in touch with Saskatchewan barley producers and provide relevant and timely information on an ongoing basis.

To sign up, visit the homepage of our website or email us: info@saskbarleycommission.com

NEWS

CBRC COMMITS \$2.7 MILLION TO USASK CDC BARLEY BREEDING ACTIVITIES

In September, the Canadian Barley Research Coalition (CBRC), a collaboration among the Saskatchewan Barley Development Commission (SaskBarley), Alberta Barley and Manitoba Crop Alliance, announced an investment of \$2.7 million over five years in the University of Saskatchewan's Crop Development Centre (CDC) through a core breeding agreement to develop barley varieties with improved agronomics, disease resistance and end-use quality.

The agreement will ensure that western Canadian barley farmers can expect new and improved barley varieties from a world-class, multi-million dollar breeding program over the next five years. The last round of producer funding provided to the CDC saw the registration of two new malting varieties, one feed variety and one hullless variety.

In the next five years we expect another three varieties to be released. This will have major benefits to our farmers.

Finalizing this agreement with the CDC was the first order of business for the

CBRC, officially formed earlier this year, and is in line with the organization's goal of facilitating long-term investments aimed at improving profitability and competitiveness for western Canadian barley farmers.

CBRC COMMITS OVER \$1.5 MILLION TO AAFC BARLEY BREEDING ACTIVITIES

In October, the Canadian Barley Research Coalition (CBRC) announced a commitment of more than \$1.5 million over five years to a core barley breeding agreement with Agriculture and Agri-Food Canada (AAFC).

The agreement ensures that western Canadian farmers will have continued access to premium barley varieties from AAFC for years to come.

This funding will support the development of new varieties that have the best sources of disease and insect resistance, are designed for western Canadian growing conditions and will deliver high quality traits for end users. It will also support the development of new two-row malting varieties that are adapted to Western Canada and have improved yields, stronger straw, and higher kernel plumpness, test weight and kernel weight, and more.

UPCOMING EVENTS

Malt Academy Saskatchewan 2020 – Virtual

Friday, November 13, 2020

Virtual event (via Zoom)

SaskBarley and the Canadian Malting Barley Technical Centre have teamed up to bring you another Saskatchewan-focused Malt Academy this fall! This half-day, virtual course will provide Saskatchewan barley producers with a complete overview of the malting industry, domestically and globally, helping them to make informed decisions around growing and marketing their crops.

Registration:

Email dseiferling@saskbarleycommission.com with your name, business name and contact information.

Missed this event? Don't worry – we will have another one in spring 2021. Watch for information in coming months.

Cropsphere 2020 Update

The difficult decision has been made to cancel the 2021 CropSphere Conference due to the uncertainties regarding COVID-19. The health of our attendees, sponsors, and speakers is our top priority and we want to do our part to ensure everyone remains safe.

The **annual general meetings (AGMs)** for the CropSphere host organizations will be held virtually on January 12, 2021. The day will also include presentations from market analysts on the market outlook for each crop. The AGM schedule is below:

Tuesday, January 12, 2021

8:30 – 9:30 AM – Market outlook: canola, wheat, and barley
9:30 SaskCanola AGM
10:30 AM SaskBarley AGM
11:15 AM Sask Wheat AGM
12:15 PM Lunch Break
12:45 – 1:30 PM Market outlook: flax and oats
1:30 PM SaskFlax AGM
2:15 PM SaskOats AGM
3 - 4 PM Market outlook: pulses
4 PM Sask Pulse Growers AGM
5 PM Finish

Details on how to register, vote, and submit resolutions will be available in coming weeks. Check our website, or www.cropsphere.com for this information.

We appreciate your understanding and look forward to bringing the timely agronomy, research, and business information back to you when it is safe to do so. If you have any questions or concerns, please contact us at info@cropsphere.com.

PLEASE NOTE

Due to a virtual event for this year's AGM, we are asking any resolutions to be submitted by December 15th, 2020. Please submit your resolution to jmcdonald@saskbarleycommission.com



ANNUAL GENERAL MEETING

TUESDAY, JANUARY 12, 2021

AGENDA

1. Call to Order
2. Approval of Agenda
3. Review and Approve Minutes of the Last Annual General Meeting
4. Business Arising from the Minutes
5. Report from Organization
6. Auditor's Report
7. Appointment of Auditor for 2020/2021
8. Call for Resolutions
9. New Business
10. Adjournment

Motions to be Presented

1. That the Agenda for the 2021 AGM be approved as presented.
2. That the minutes of the 2020 Annual General Meeting be approved as presented.
3. That the report from the organization be approved as presented.
4. That the audited statements for the year ended July 31, 2020 be approved as presented.
5. That SaskBarley appoint an auditor for the year ending July 31, 2021.
6. To adjourn the 2021 AGM.

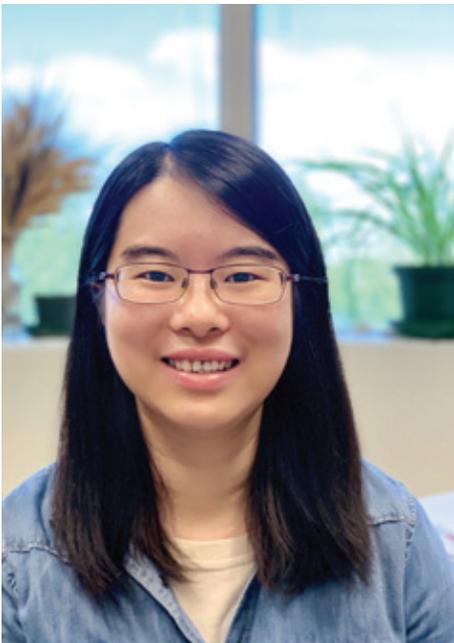
SaskBarley Awards Three 2020 Graduate Scholarships

Last year, SaskBarley launched a scholarship program to help invest in promising university students who are carrying out university-level research that can help us achieve our organizational goals.

Our goal was to offer two scholarships a year to students who met the criteria.

This year, we had such high-quality applicants that we decided to award a third scholarship!

In September, we officially awarded three, \$5000 scholarships to graduate students in Western Canada.



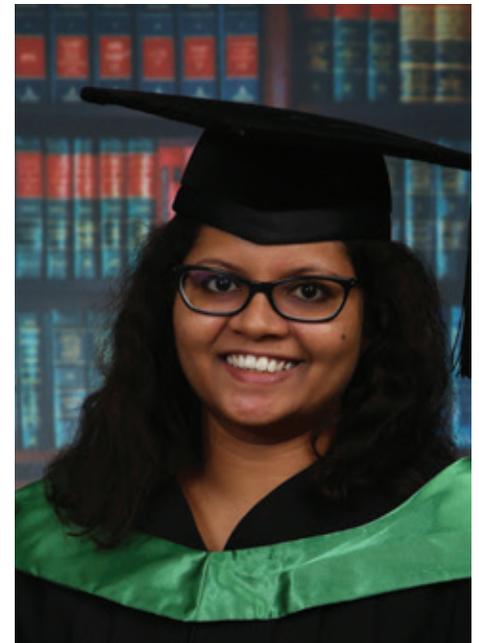
Fan Yang (second time recipient).

A PhD student in the University of Saskatchewan's Department of Plant Sciences, Fan is currently researching *Ruhq*, a gene that is resistant to covered smut, with the overall goal of helping breeders incorporate effective covered smut resistance into future varieties by developing tightly linked molecular markers to the *Ruhq* gene.



Michael Taylor

A graduate student at the University of Saskatchewan, studying under barley breeder Dr. Aaron Beattie, Michael's study focuses on developing high throughput imaging systems to evaluate root system architecture in barley and correlate these measurements to lodging resistance. The overall goal is to develop tools for breeders to easily assess breeding lines for lodging resistance, to prevent yield and quality losses resulting from lodging.



Dilini Deshanee Adihetty

A graduate student at the University of Alberta, Dilini is aiming to characterize the *Cochliobolus sativus* pathogen, which causes spot blotch, in relation to its genetic structure, virulence, host resistance, and fungicide sensitivity. This information will allow plant pathologists and breeders to more effectively target the disease and breed new varieties with the most effective sources of resistance.

For more information on our scholarship program, please visit:
saskbarleycommission.com

SaskBarley welcomes new Research & Extension Manager Mitchell Japp

Get to know our new staff member and his vision for the new role

What is your vision for the new role at SaskBarley?

My focus in this role will be on connecting growers with research in barley. I'm looking forward to connecting with barley growers across Saskatchewan to talk with them about challenges and potential solutions. This will lead to development of new research and demonstration projects that can address some of those challenges and test the solutions. Working on these projects, and communications about these projects, along with research from others is what I'm most looking forward to.

What are the greatest opportunities you see for barley in the short and longer term and how can these be exploited/addressed through research and agronomy?

I think we are at or are very close to a significant transition in the barley industry. Varieties like AC Metcalfe and CDC Copeland have been dominant for nearly 20 years. There are several newer varieties that are superior agronomically, in terms of yield, disease resistance, lodging resistance and malt profiles. Transitions like these have been rare in malt barley production on the prairies.

Right now there is an opportunity to capitalize on the transition to these newer, higher yielding varieties. These varieties have the potential to drive yields further with higher fertility and more intensive management than past varieties that may have lodged or resulted in too high of protein for malt. Compounding the potential of new varieties and advanced agronomics, there is a lot to look forward to in barley.

What are the greatest threats you see for barley in the short and longer term and how can we prepare for these through research and agronomy?

The long-term cycling of varieties has been a significant threat to barley profitability. We saw it with Harrington and are seeing the tail end of it (hopefully) with AC Metcalfe and CDC Copeland. It's not that these weren't great varieties. They were, but innovation is critical in agriculture. Growers need to be able to continually improve production,



Mitchell Japp with his wife, Leah and their three kids.

because input costs increase and grain prices stay similar. Getting new and improved varieties in the hands of growers is a part of that solution.

Another threat facing barley is fusarium head blight (FHB). Although less susceptible than wheat or durum, there is very low tolerance for the mycotoxin deoxynivalenol (DON) in malt barley. Varietal resistance is part of the management, but there is room to improve agronomic management for FHB in barley. There are some research gaps in prevention as well as fungicide application and timing.

Continued on back page

Down to the core

An in-depth look at what core funding really mean for farmers and breeders

Earlier this fall, we announced that we had signed another core breeding agreement (CBA), on behalf of the Canadian Barley Research Coalition, to invest \$2.7 million over five years in the University of Saskatchewan’s Crop Development Centre (CDC).

We decided it might be helpful to provide some background information about CBAs, including what they are, why we use them, and what they mean for farmers.

So we talked to Dr. Aaron Beattie, head barley breeder at the CDC, for more information.

How long have CBAs been a part of the agricultural research world?

Core funding programs started in the 1990s, after the inception of the Western Grains Research Federation (in 1981). The WGRF has since been facilitating CBAs for more than 25 years, including with us at the CDC.

In your world, what does CBA mean?

For us it’s core support on which we can run the basic aspects of our breeding program. CBAs are also a way to attract funders who may not have as much money to contribute, but realize when they do contribute, they will get a lot of bang for their buck.

What are the benefits of a core funding program?

Stability is a big one. As most people know, breeding is a long-term process. We think in long time frames and

having funding for those periods of time allows us to plan and be quite confident we can get to wherever we need to be over the next five years.

It also helps us focus on our intended job – breeding! – and not spend our time chasing one-to-two-year funding agreements (even signing off on one of those can take a fair bit of time.)

CBAs allow us to hire staff. People are often on short term contracts in the research world, which doesn’t work well for breeding programs. The amount of training we put into getting staff up to speed is wasted effort if they leave after two to three years.



Barley breeder Aaron Beattie leads a tour through the University of Saskatchewan Crop Development Centre.



Core funding also tends to be more flexible. We let the funders know a general idea of how we intend to use the money but in a year like this one, when unexpected events throw a lot of our plans out the window, we're able to use core funding to pay for unexpected expense, such as finding alternative testing sites for our breeding lines. Other funding arrangements are pretty strict – they wouldn't have given us the ability to do that.

Finally, CBAs really allow us to be flexible in terms of our research and adapt to evolving market demands. Lots of research doesn't get interesting until the second or third year, when you've done initial work and you want to explore what you've discovered. For example, the glycosidic-nitrile (GN) trait, which is relevant to the distilling industry [high levels of GN in malt is problematic for distillers] is something we hadn't initially planned on working on, but we felt it had value so we brought it into the program. The craft brewing industry is growing in importance and CBA funding allows us to adapt our focus in the program to accommodate what we're hearing from that industry.

What are some of the most notable things to come out of core funding agreements for barley with the CDC?

New varieties is really the number one thing our program is about. We are always aiming to develop varieties that yield better and stand really well. We've made some progress recently in that area but there's still room for improvement.

On the disease side we are still focusing pretty hard on fusarium head blight, trying to push varieties into the moderately resistant category.

We're also still trying to develop for various malt categories, such as a lower enzyme package for the craft industry, the low-lox trait and of course the low GN trait, which is of interest to distillers and the companies that sell to them. We are really trying to bring all these things together into one variety that would have really widespread usage and appeal.

Finally, we also have money devoted to feed barley, which is pretty straightforward – we are looking for big yields, good lodging resistance and shorter straw.

Did you know

Barley varieties CDC Bow and CDC Fraser and CDC Copeland (amongst many others) were all developed from core funding programs?



**GRAINS
INNOVATION
LABORATORY**

THE SASKATCHEWAN BARLEY DEVELOPMENT COMMISSION:

The Saskatchewan Barley Development Commission was established in 2013 under the Agri-Food Act, 2004

SASKATCHEWAN BARLEY DEVELOPMENT COMMISSION (SASKBARLEY)

Jill McDonald, Executive Director
Direct Tel: 306-370-7237
jmcdonald@saskbarleycommission.com

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Monday to Friday
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What are your favourite barley products?

I am a big fan of craft beer. I've been intrigued by a broader range of flavours in beer ever since my wife Leah and I lived in England. Up until then, I was unaware of the range of malt character you could find in beer, as well as hops. I tend more towards hazy IPAs, sours and radlers in summer and stouts, porters, browns and more traditional IPAs in winter. I'm very much enjoying the craft beer industry here in Saskatchewan.

What do you like to do outside of work?

Leah and I have 3 kids, ages 11, 7 and 3. They've been active in our local 4-H club and this year have started in biathlon in the local Qu'Appelle Valley Nordic Centre. We also have a small flock of sheep we have been building the past few years. I also enjoy running, especially when I can get out on some trails.

Why did you choose a career in Saskatchewan's agriculture industry?

I grew up on a grain farm near Eston, SK. My family still farms there. Once I got going at the College of Agriculture (that's what it was called then) at the University of Saskatchewan, I knew I was in the right place.

I enjoy learning about different practices and considering the potential interactions that small changes can have on other aspects of farming operations. Although there are lots of aspects of agriculture itself that are rewarding, the people in agriculture are very down to earth and relatable.

*Mitchell Japp can be contacted at:
mjapp@saskbarleycommission.com.*

Return undeliverable Canadian addresses to the below address

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