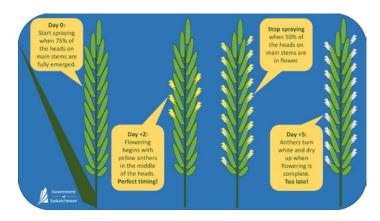
## By Dallas Carpenter

Thanks to the dry conditions across much of the province, the prospect of a fusarium head blight (FHB) outbreak may not be top-of-mind for many Saskatchewan wheat producers.

In spite of the current weather not seeming to favour the development of FHB, FHB cannot be ruled out and producers must be prepared to manage it in 2019. With many crops hitting the heading stage soon, it will be important for producers to have their management strategy in place to minimize FHB infection, with the frequent scouting of fields and consideration of applying fungicide during the optimal timeframe being key elements of an effective management strategy.

Mitchell Japp, Provincial Cereals Specialist with the Saskatchewan Ministry of Agriculture, believes it pays to be prepared for FHB as it is a consistent threat. "Although it was dry in 2017 and 2018, FHB symptoms were present in 26 percent of spring wheat and 53 percent of durum fields included in the 2018 disease survey," he says. "The severity was low in spring wheat but higher in durum wheat than in 2017. Dry conditions resulted in lower severity and incidence levels than experiences in 2016 or other wet years.

"However, since FHB symptoms were present, we know there will still be inoculum out there. If the conditions are right at the right time,





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leading up to and during heading/flowering, FHB could still be a problem in 2019."

FHB can strike quickly and can have a major impact on yield and grade while potentially leading to the development of the mycotoxin deoxynivalenol, or DON, which can impact the export prospects for Canadian wheat. Growing a variety of wheat with good FHB resistance is important to minimize the development of FHB and DON, and according to the Canadian Grain Commission, over 81 percent of Saskatchewan producers now grow CWRS varieties with an intermediate to moderately resistant rating to FHB.

Growing a wheat variety with good resistance and being prepared for the possible application of a fungicide provide the foundation of "a good FHB management strategy." FHB is a challenging disease to manage for because it is a mono-cyclic disease, which means you can't scout for the disease in advance," says Barb Ziesman, Provincial Plant Disease Specialist with the Saskatchewan Ministry of Agriculture. "You have to scout for the conditions that may lead to disease and weigh the risk of disease with the potential value of the crop."

Ziesman believes that scouting for conditions favourable to FHB development is worthwhile for producers, even if the weather has been dry. "In 2018, many producers observed that when they walked through their wheat fields, their pants were getting wet," she says. "That indicates high relative humidity and at least some of those growers opted to spray based on that assessment, even though there was no rain and atmospheric relative humidity was not high enough to trigger a warning from the risk maps.

"FHB thrives under wet conditions and high humidity may provide enough moisture to drive disease development if the pathogen is present, particularly is moisture is present within the canopy."

One of the key FHB management tools for producers will be the FHB risk maps, which will be live on the Sask Wheat website in June and July. This year, there will be one map to cover all crops. Adjustments were made to the model last season and the model will be evaluated and adjusted as needed this year, as well.

## **FHB Management Resources**

## Sask Wheat Fusarium Risk Map and Resources:

www.saskwheat.ca/producer-info/fusarium-risk-assessment-map

### Saskatchewan Ministry of Agriculture:

www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/agribusiness-farmers-and-ranchers/crops-and-irrigation/disease/fusarium-head-blight

Sprayers 101: sprayers101.com

### **CHAIR'S REPORT:**

# More producer input on value creation options needed



As seeding wraps up throughout the province, I would like to take a few moments of your time to address some timely topics the Board of Directors and staff of Sask Wheat have been working on behalf of Saskatchewan's wheat farmers.

The weather is providing a few challenges this year, as it always does. The dry conditions across the central part of the grain belt will make it tough for many crops to get a good start. Combined with the unseasonably cold weather and late snow in some areas and we could see several issues this growing season, from late maturity to pockets with elevated pest levels.

Once again, we're aiming to provide you with useful tools to help you manage your crop this year. Specifically, Sask Wheat is once again hosting the FHB risk maps throughout June and July. At the Prairie Grain Development Committee meetings this winter in Saskatoon, fusarium researchers, representatives from the Saskatchewan Ministry of Agriculture, and representatives from the Prairie wheat commissions met to discuss FHB risk forecasting models and how we can improve the information we are providing to producers.

Sask Wheat has asked our forecast provider, Weather INnovations, to make some adjustments to the forecasting model and to provide one map for all wheat crops. We hope this will address some of the concerns raised by producers and agrologists last year, who reported high humidity in local areas when the forecast was for low risk. We will continue to work on this and, as you will see in this issue, Sask Wheat has made breeding fusarium resistance and providing the best fusarium management resources for producers a significant priority.

I would also like to address Sask Wheat's concerns with the proposed changes to the seed royalty collection system for wheat and other crops which is being discussed by Agriculture and Agri-Food Canada (AAFC) and the Canadian Food Inspection Agency (CFIA). Not only are we concerned with the changes being proposed, but we are also concerned about the quick timeframe and the lack of producer input into the process.

The two options, one an end-point royalty on all UPOV '91 wheat varieties sold and the other a trailing royalty applied to farm-saved seed of these varieties, have now been circulated and discussed at a few consultation sessions. AAFC and the CFIA have committed to conducting an online engagement process to gather producer opinions. So far, there have been no dates set for the online engagement, but Sask Wheat will keep producers informed about this on our website, via email, and on Twitter.

Sask Wheat is committed to being a part of a system that will maintain and grow funding for wheat research in Canada. This system needs to include a strong research effort by the public sector and continue to provide for public, private, producer partnerships. We need to recognize the investments made by producers in research and the achievements the producer check-offs have delivered. This cannot be ignored or minimized.

It is clear that better information and more consultation is needed to provide producers with an opportunity to voice their concerns and understand how the changed royalty mechanisms will impact their farming operations.

Sask Wheat encourages producers to participate in the upcoming online consultations and any further in-person consultations hosted by AAFC and the CFIA. It is our hope that this process will lead to greater producer involvement and an informed decision that complements the tremendous gains Canada has already made in cereal breeding and research.

continued on next page



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#### **CONTACT US:**

Saskatchewan Wheat Development Commission

310 - 111 Research Drive Saskatoon SK S7N 3R2 Phone: 306-653-7932 Fax: 306-653-7935 saskwheat.ca info@saskwheat.ca

### **GENERAL MANAGER'S REPORT:**

## Farmer input on research and breeding is critical



The 2018/19 crop year is on pace to set a high-water mark for Canadian wheat shipments. This is great news for producers looking for cash flow during a period of trade tensions for some of our major crops. Canadian wheat inventory estimates for year-end 2019 show low wheat inventory levels similar to the low levels of 2016. The only exception is for durum, which continues to be affected by non-tariff barriers in major markets such as Italy. Trade conditions continue

to evolve but the uncertainty around how trade tensions will be resolved continues to be an issue for traders and producers alike.

This is a difficult environment for producers in this spring planting season. Most analysts believe there will be ample wheat production globally in 2019, despite some weather-related concerns in key import and exporting countries. This, coupled with variable seeding conditions across Saskatchewan due to record April dryness and cold weather conditions, along with swings in relative crop prices due to market access issues in other major crops and crop rotation considerations, makes the outcome of seeding intentions very difficult to estimate. However, spring wheat acreage is expected to increase.

Despite the international trade uncertainties, Sask Wheat continues to push forward on funding wheat research. I have previously reported that the Alberta Wheat Commission, the Manitoba Wheat and Barley Growers Association, and Sask Wheat formed the Canadian Wheat Research Coalition (CWRC) in 2017 to lead efforts on regional and national wheat research. The CWRC brought together several funding organizations in the federally created National Wheat Research Cluster. The Wheat Cluster is a five-year funding commitment (2018-23) of nearly \$25 million that covers everything from wheat breeding to wheat agronomy and disease mitigation. Sask Wheat is the current host and administrator of the National Wheat Cluster, which has just completed its first year of operations.

The joint efforts of the CWRC are now concentrating on the successor programs to the current core wheat breeding agreements

with Agriculture and Agri-Food Canada (AAFC) and the University of Saskatchewan, University of Manitoba and University of Alberta. As producers, you should be aware that the Western Grains Research Foundation (WGRF), have provided approximately \$26 million in producer funding through the core wheat breeding agreements to maintain plant breeders, technicians, and specialists who are working to develop and finish wheat varieties for the benefit of producers. Now that the three Prairie wheat commissions have assumed the commitments previously funded through the Western Canadian Deduction, we will carry on the investments of the core breeding agreements through the CWRC on behalf of producers.

Funding from WGRF and the three Prairie wheat commissions shows the major commitment producers have made to research in new wheat varieties. Producers have provided \$27.9 million to core wheat breeding agreements and \$11 million to the Wheat Cluster (which is worth \$25 million overall), while Sask Wheat alone has committed nearly \$16.5 million to other research since 2013. This critical effort needs to be continued to maintain public research capacity and ongoing varietal development efforts for wheat producers.

Producers have significant money on the table because they have a unique interest in the direction of new variety development. Producers have told us they want a voice in how the public wheat breeding institutions develop and release varieties in the future. The value creation/capture consultation by AAFC and the Canadian Food Inspection Agency (CFIA) will continue over 2019 and needs producer input. Please take note of the consultations, and provide your feedback to AAFC/CFIA and to Sask Wheat.

Please also take note that Sask Wheat will be conducting elections for the board of directors in 2019. Three (3) director positions are open for election this fall and the nomination form is included in this newsletter. If you are interested in exploring the opportunity to serve as a Sask Wheat director, please talk to the current directors and/or phone the office for background information. Nominations will open on June 13th and will close on September 13th.

Harvey Brooks, General Manager

## CHAIR'S REPORT continued from page 2

As you will see on page four, Sask Wheat is holding an election for three director positions this year. If you are interested in running for a director position, I encourage you to submit the nomination form, which is also available on the Sask Wheat website (saskwheat.ca).

Finally, please plan to attend the Sask Wheat Semi-Annual meeting, which will be on Wednesday, June 19 at the Queensbury Convention Centre during the Western Canadian Farm Progress Show in Regina. Registration is free and includes lunch and a complimentary pass

to the Farm Progress Show for the day. We are bringing in well-known agrologist Phil Needham to speak about intensive wheat management strategies. Please register soon on saskwheat.ca or by calling the Sask Wheat office at 306-653-7932.

I look forward to seeing you there.

Laura Reiter, Chair

## Sask Wheat accepting director nominations

The Saskatchewan Wheat Development Commission (Sask Wheat) is currently seeking nominations for **three (3) positions** on the Board of Directors. The producer-elected-and-directed Board ensures producers have the resources, leadership and provincial, national and international representation to strengthen Saskatchewan's competitive advantage and makes certain that producers' interests are protected.

To be eligible to sit on the Board, you must be a registered wheat producer. A registered producer means any producer who has had a Sask Wheat check-off deducted since August 1, 2017 and has not requested or received a refund of check-off in the last fiscal year (August 1, 2018 - July 31, 2019).

Director responsibilities include:

- Supervising the business of Sask Wheat including oversight of management, providing strategic direction, and ensuring effective governance of the organization.
- Attending meetings approximately 8-10 times per year and attending conference calls as required.
- Representing Sask Wheat at other meetings and events throughout the year.

Nomination forms can be found on the Commission's website **saskwheat.ca** and on the following page, or you can request one by calling 306-653-7932. Nomination forms must be signed by two (2) or more registered wheat growers. If the registered grower is a corporation, partnership or other legal entity, it can designate

a representative to hold office. A proper form of designation (available online or from the Returning Officer) must accompany the nomination form for every director nominee or director nominator of a corporation, partnership or other legal entity.

Completed forms including candidate bios and photos should be mailed, faxed, emailed or delivered to:

Returning Officer – Levy Central 2335 Schuyler Street Fax: 306-975-6850 Email: smitha@levycentral.ca

Saskatoon, SK S7M 5V1

All nominations must be <u>received no later than 4:00pm CST on</u> September 13, 2019.

Please direct any questions related to elections to Returning Officer **Ann Smith at 306-975-6853**.

Questions related to the Commission, the Regulations governing formation of the same, or the collection of the check-off, should be directed to Harvey Brooks, Sask Wheat General Manager at (306) 653-7932.

### **Voting Process and Results**

If a vote is required, ballots will be mailed out to all Saskatchewan wheat producers in late October. An electronic voting option will also be available. Election results will be announced in December and officially presented at the Sask Wheat AGM in January 2020.



## Designated Representative Appointment Form

Pursuant to Section 27 of the Wheat Development Plan Regulations: (2) If a registered producer is a corporation, partnership or other organization, it must appoint an individual who is a director, partner, shareholder, member, officer or employee as its representative. (3) Appointment of a representative pursuant to subsection (2) must be filed with the commission in a form and manner acceptable to the commission. (4) A corporation, partnership or other organization is entitled to hold office only through a representative appointed pursuant to subsections (2) and (3).

## This form is required to be submitted for both director nominees or director nominators.

As	(Title, e.g. President, Secretary, etc.)			
of	lame of corporation, partnership or other organization)			
,,,	tario or corporation, particionip or cultor organization)			
(Address of Corporation, Partnership or other organization)				
I hereby appoint to be the designated	(Print name of Designated Representative)	to be the designated		
representative for the above corporation, partnershic Commission.	p, or other organization as registered with the Sas	skatchewan Wheat Development		
(Print Your Name)	(Signature)	(Date)		



## **Director Nomination Form**

Please print, except where signature indicated:	
Saskatchewan Wheat Development Commission (Sask Wheat). I am a	will allow my name to stand for election to the Board of Directors of the producer registered with Sask Wheat. A registered producer means any tally 2017 and has not requested or received a refund of check-off in the
Nominated Candidate's Signature:	
Printed Candidate's Name:	
Name Wheat was sold under:	
Address:	
	E-mail:
My nomination is supported by the following 2 or more registered	wheat producers (please print, except where signature indicated):
Registered Wheat Producer #1	Registered Wheat Producer #2
Signature	Signature
Personal Name/Farm Name	Personal Name/Farm Name
Address (PO Box or Street)	
City, Postal Code	City, Postal Code
Phone:	_ Phone:
Registered Wheat Producer #3	Registered Wheat Producer #4
Signature	_ Signature
Personal Name/Farm Name	Personal Name/Farm Name
Address (PO Box or Street)	
City, Postal Code	City, Postal Code
Phone:	

It is advisable to get more than two producers to fill out the form supporting your nomination in case one of them is not currently a registered producer.

Pursuant to Section 27 of the Wheat Development Plan Regulations: (2) If a registered producer is a corporation, partnership or other organization, it must appoint an individual who is a director, partner, shareholder, member, officer or employee as its representative. (3) Appointment of a representative pursuant to subsection (2) must be filed with the commission in a form and manner acceptable to the commission. (4) A corporation, partnership or other organization is entitled to hold office only through a representative appointed pursuant to subsections (2) and (3).

A proper form of designation (available online or from the Returning Officer) must accompany the nomination form for every <u>director nominee or director nominator</u> affected by this regulation.

### A Candidate Biography MUST accompany this nomination form.

Candidate biographies must:

- be a MAXIMUM of 350 words in length
- include a colour head & shoulders photo (.jpg format, at least 100Kb) submitted along with the candidate bio.
- follow the format shown below:
  - First name, Last name
  - Farm operation information
  - Related experience
  - Outline opportunities and challenges for wheat growers
  - Other comments

## Nomination form & accompanying material must be received at the address below no later than 4:00pm, September 13, 2019.

Earlier submission is recommended to allow time for verification and, if required, additional information to complete the nomination form.

Ann M. Smith, Returning Officer Agricultural Council of Saskatchewan, Inc. 2335 Schuyler Street Saskatoon, SK S7M 5V1

smitha@levycentral.ca (by e-mail)

(306) 975-6850 (fax)

## Sask Wheat advocacy and policy update

By Kelsey Tollefson

## Value creation/capture consultation

Sask Wheat continues to be engaged in the ongoing value creation/capture consultation led by Agriculture and Agri-Food Canada (AAFC) and the Canadian Food Inspection Agency (CFIA). Sask Wheat Chair, Laura Reiter, is participating on a producer panel that is providing feedback on the next steps of the consultation. For next steps, AAFC and the CFIA are planning an online survey for producers to provide feedback. Sask Wheat encourages all producers to participate in the online survey.

The Sask Wheat Board of Directors does not support either of the options as presented by the federal government and believes development of additional options is needed in the consultation. There are other models available to producers to support varietal development efforts, and these need to be explored through further consultations with producers. Sask Wheat will continue to work to keep producers informed on this consultation and opportunities for producers to provide input.

## **CGC: DON and falling number consultation**

In March 2019, the Canadian Grain Commission (CGC), launched a formal discussion on the use of falling number (FN) and deoxynivalenol (DON) as official grading factors. Sask Wheat is encouraged to see the CGC moving forward with some of the initiatives outlined in the Grain Grading Modernization project. Producers have identified DON and FN as important factors when marketing their grain; however, producers have no way of validating or challenging the results from tests at primary elevators.

Sask Wheat supports, in principle, making FN and DON official grading factors by setting a reasonably low value for FN and a reasonably high value for DON on a class basis. This would ensure that the values would not be an issue for meeting class standards, but would give producers access to the "subject to CGC inspectors' grade and dockage" clause of the *Canada Grain Act*. This would be similar to the approach taken when protein was added as an official grading factor. Furthermore, adding FN and DON as official grading factors would allow for the standardization of sampling and testing procedures.

Sask Wheat will continue to be engaged in this discussion moving forward.

## **Code of Practice for grain production**

The Grains Roundtable recently endorsed exploring the development of a Code of Practice for the production of grains in Canada through the Canadian Roundtable for Sustainable Crops (CRSC). The idea behind the development of a code is to assist in efforts in gaining and maintaining public trust in Canadian agriculture, both domestically and internationally.

The proposed code would be voluntary and initial policy discussions are just beginning. Sask Wheat is a member of the CRSC and will be participating in these initial discussions. Sask Wheat believes that it is crucial for Saskatchewan farmers to be represented and involved in the development of any potential code of practice.

Sask Wheat will work to keep producers informed as we gain more information on the code of practice. Continue to watch our website, newsletter, and Twitter feed for updates going forward.

## **Transport Canada: Freight rail data consultation**

Bill C-49, the *Transportation Modernization Act*, became law on May 23, 2018 and introduced new requirements for Class 1 railways to submit weekly service and performance metrics and detailed waybill data to Transport Canada. The metrics put in place with the passing of Bill C-49 were transitional, and Transport Canada has now launched a regulatory process to move these requirements into the *Transportation Information Regulations*. Sask Wheat is hopeful that this reporting will improve transparency and help to keep railways accountable for their service.

In 2018, Sask Wheat joined the Ag Transport Coalition (ATC). The ATC is an important group to monitor railway performance and report performance metrics back to the industry. Having this information collected and disseminated to the industry is critical for identifying emerging issues within the grain handling and transportation system and improving future performance. The data and experience ATC has in monitoring railway performance will be extremely valuable in this consultation.

Sask Wheat will continue to work with the ATC and our producer coalition partners (APAS and SaskBarley) on developing a common response from the grain industry to the freight rail data consultation.



# U of S researcher working on an innovative way to control fusarium head blight

By Delaney Sieferling

Since the devastating outbreak of fusarium head blight (FHB) in Saskatchewan crops in 2012, the agricultural research community has been trying to come up with options to control this devastating disease.

But with only moderately resistant varieties available today, and fungicides working as a short-term and partial fix, so far there are no outstanding solutions.

One University of Saskatchewan (U of S) researcher, however, is taking an innovative approach to changing that.

Dr. Vladimir Vujanovic, an Associate Professor who specializes in microbiology, launched a research project last March looking at the potential to use biological control agents (BCAs) to help control FHB in Saskatchewan.

Specifically, he is testing the efficacy of the microparasite *Sphaerodes mycoparasitica* in controlling FHB in commonly grown varieties of wheat and durum in the province.

BCAs are different than other disease control options in some very significant ways, he says.

First, this specific microparasite, *S. mycoparasitica*, is native to Saskatchewan; it was discovered by Dr. Vujanovic and his team in 2009 and isolated from its fusarium hosts on kernels associated with FHB symptoms. They have since described it as a new fungal species.

Second, BCAs are considered a more environmentally sustainable and friendly disease control method, because they are natural, native and do not rely on agrochemicals.

Finally, this specific biocontrol agent would offer a more targeted and therefore effective approach to fighting FHB than other more general solutions, Dr. Vujanovic says.

"It's similar to how we try to avoid using general-spectrum antibiotics in the medical field because of their potential secondary effects," he says.

"Here I am looking to develop a pathogen-specific microparasite or pathogen control agent so that we can specifically target the FHB pathogens, thus protecting the other beneficial microorganisms or plant microbiome."

The *S. mycoparasitica* microparasite has the ability to directly attack more than one of the pathogenic species that cause FHB and their respective mycotoxins, Dr. Vujanovic says.

Because of this, it can help prevent yield loss as well as the accumulation of mycotoxins in the plant – the same mycotoxins that are heavily regulated by Canada's food safety standards and can cause the crop to be downgraded significantly, sometimes below food grade, leaving farmers with no marketing options.

So far, Dr. Vujanovic is just into the three-year project but he has already gained valuable data from year one. Results from 2018 showed higher yields and lower FHB levels on test plots that had received an application of the BCA alone, or a combination of the BCA and other commercial products, during the seeding and flowering stages.

Testing the BCA in combination with other products is important, Dr. Vujanovic says, as the overall goal will be to use it as a vital chain loop within an integrated crop management approach.

"What is important is that we create the best combination of the BCA products with elite cultivars, chemical pesticides and standard agricultural practices" he says.

To this end, he has been working closely with breeders at the U of S Crop Development Centre and Agriculture and Agri-Food Canada, as well as researchers at the Saskatchewan Research Council, to scale up the product and optimize its formulation.

The end goal is that, once the research is complete, the agriculture industry in Saskatchewan will be a lot closer to having one more commercial product available to help control FHB throughout the prairies, he says.



A research technician applies the BCA and chemical pesticide spray to test plots as part of Dr. Vujanovic's research.

"We are interested in helping farmers maximize their returns because that is good for the economy. We are also interested in protecting the sustainability of the agriculture industry through eco-friendly disease control options."

Dr. Vujanovic's research is funded by the Saskatchewan Wheat Development Commission, the Natural Sciences and Engineering Research Council of Canada and the Government of Saskatchewan's Agriculture Development Fund.

# Cereal farmers needed for FHB study

Do you struggle with fusarium head blight (FHB)? The Saskatchewan Ministry of Agriculture is collaborating the University of Manitoba in the "Developing a Risk Model to Mitigate Fusarium Head Blight in Western Canadian Cereal Production" project. The major goal of this project is to develop standardized, weather-based risk assessment models that reliably predicts FHB and mycotoxin (DON) accumulation to help producers make informed FHB fungicide application decisions in Saskatchewan, Alberta and Manitoba. The models will be validated in commercial spring wheat, winter wheat, barley and durum crops with a range of FHB resistance ratings across all three provinces.

If you are growing winter wheat, spring wheat, barley or durum and would like to participate in the project or learn more about the project, please contact: Barb Ziesman (Saskatchewan Ministry of Agriculture) at barbara.ziesman@gov.sk.ca or 306-529-4403



# Attend the Sask Wheat Semi-Annual Meeting!

Featuring Kentucky-based agrologist
Phil Needham, who will discuss
intensive wheat management strategies



Regina

Wednesday, June 19, 11:00 a.m.
Western Canadian Farm Progress Show

Online registration deadline: June 10

Register at

saskwheat.ca

or call 306-653-7932



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