WINTER CEREALS CANADA GROWER

Incorporating Saskatchewan Winter Cereals Development Commission and Winter Cereals Manitoba Inc. News

ISSUE NO. 61 FALL/WINTER 2017 OFFICIAL NEWSLETTER OF WINTER CEREALS

NEW LEVY IN PLACE FOR WINTER CEREALS IN MANITOBA AND SASKATCHEWAN

On August 1, 2017 the levy deduction on Winter Wheat in the Province of Manitoba and Winter Wheat, Fall Rye and Winter Triticale in the Province of Saskatchewan increased from $0.50 per tonne of regulated product to $0.98 per tonne. In both provinces, this was done after members voted to assume the responsibility to collect the Western Research Levy that was put in place 5 years ago by the federal government to continue funding of the Western Grains Research Foundation, Canadian International Gains Institute and the Canadian Malting Barley Technical centre. This change was approved by the governing institutions in both Manitoba and Saskatchewan well in advance of the August 1, 2017 date.

So, what does this mean for members of the Saskatchewan Winter Cereals Development Commission and Winter Cereals Manitoba Inc.? As far as total levy deduction there is essentially no change. In the past, the total levy was collected in 2 parts and now there will only be a single deduction. Your levy will now go directly to the representative winter cereals body in your province.

Under the old levy the federal levy money was collected and then proportioned out to the Western Grains Research Foundation, Canadian International Grains Institute and the Canadian Malting Barley Technical Centre. Under the adjusted system your provincial winter cereals organization receives 100% of the deduction and as a result the dollars collected will go 100% towards initiatives designated by your organization that are designed to support improvements in winter cereals agronomy, varietal development and marketing.

The increased levy income will be used to fund agronomy and varietal research as part of the Wheat Cluster project that is being developed for Growing Forward III. In addition, we will continue our funding of the genetic mapping and selection of winter hardy winter wheat varieties at the University of Saskatchewan under the direction of Dr. Ravi Chibbar. (See Dr. Chibbar's article on page 4). Both the SWCDC and WCMI have joined forces with Cereals Canada to develop a national and international marketing strategy and the new funds will support this iniative.

The SWCDC has responsibility for fall rye and has just signed an agreement with Agriculture and Agri Food Canada and Dr. Jamie Larsen to fund a multi year project on fusarium in rye in addition to ongoing SWCDC funded rye research.

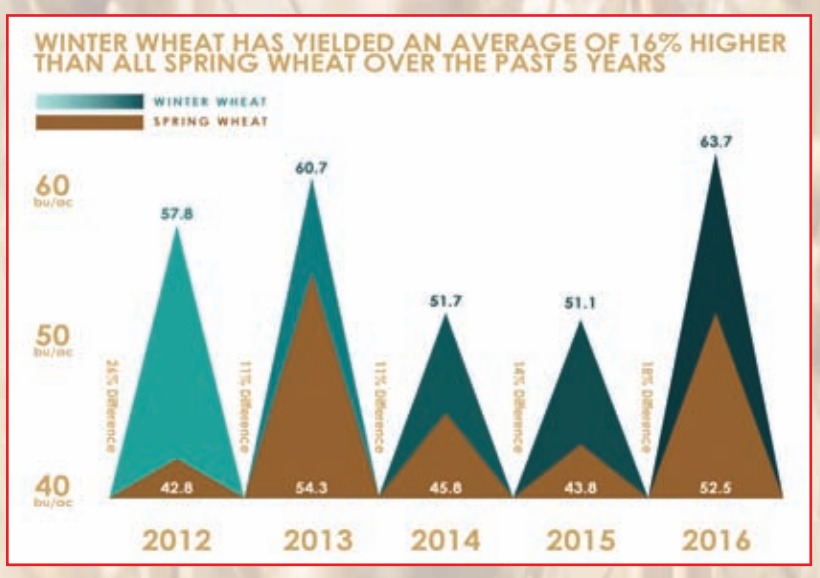
The net result of the change will be a more focused use of the levy money previously collected under the federal plan towards winter cereals specific agronomy, varietal development and marketing projects.

CHANGE IN EMAILCONTACT INFORMATION

It is an unfortunate fact of life in our current world that there are many persons who like nothing more than to make other peoples lives difficult. So is the case with the email addresses that have been used by the Saskatchewan Winter Cereals Development Commission, Winter Cereals Manitoba Inc. and Winter Cereals Canada Inc. for the last 10 years.

In August, these three email addresses began to receive literally thousands of spam email messages every day. The volume of spam messages exceeded our mail server's ability to filter out the garbage and as a result both mail intended for our organizations and spam was being deleted by the automated system. If you sent us an email and we did not reply we apologize for this inconvenience. We are always available via our toll-free telephone number 866-472-4611.

As a result, all three old email addresses have been discontinued permanently. For general winter wheat enquiries please now use the email address jake.davidson (at) wintercerealscanada.org. For matters pertaining to business in Saskatchewan please use the email address jake.davidson (at) swcdc.info and for business matters related to Manitoba please use the email address jake.davidson (at) wcmi.info .



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In This Issue

Myths of Winter Wheat are Falling Fast

By John Dietz

***Winter wheat is a low-input, low-yield crop.* True or False?**
***There's no market for winter wheat.* True or False?**
***No varieties of winter wheat are suitable here.* True or False?**

False, to all of them, answers Ken Gross, agronomist at Brandon, Manitoba, for the Western Winter Wheat Initiative (WWWI) and Ducks Unlimited Canada. Those are just three of many myths associated with the fall-seeded, high-potential wheat. Gross runs into myths frequently among growers and at meetings – and likes to bust them with facts.

"The biggest myth is the 'low input, low yield' idea. That's just not the case," Gross says. "When they treat their winter wheat the same way they treat canola – putting on the fertilizer for a high yield – they tend to get pretty good results."

The past growing season has been dry to very dry on the southern Prairies. It provided a great test for winter wheat potential. Ninety-day precipitation is mostly 20 to 60 percent of normal, according to WeatherFarm.com.

"A lot of areas only got an inch or two of rain, yet I'm seeing winter wheat yields at anywhere from 60 to 95 bushels per acre from different producers, on dryland. Those are pretty good results in a dry year. We never dreamed of yields like that in the 1980s (when it also was dry), but we're getting them now. That shows the potential of the crop," he says.

Gross suspects the "low input, low yield" myth relates to the practice of fertilizing winter wheat with a nutrient package similar to spring wheat. That's not a good idea, and it leads to the next myth, low protein in winter wheat.

"Winter wheat yields 20 to 40 per cent more than spring wheat, across the Prairies, but you have to fertilize for that. Fertilized at the same rate as spring wheat, it will go into yield and will leave you a little shy on protein. If you put down the proper amount of nitrogen, your protein level will be much closer to 11 per cent or more," the agronomist myth-buster says.

Two Myths Busted

Back in the 1980s, the only winter wheat seed available was for a tall, lodging-prone line known as Northstar. Plant breeders in Lethbridge, Saskatoon and Winnipeg have delivered many options for winter wheat in the past 20 years, he says. "The supply of varieties is no longer a concern, despite the myth," Gross says.

Depending on where you are, there are seven to nine Canada western red varieties and five to eight Canada western general-purpose varieties for choice – with more coming. Selections can be made for disease resistance or milling quality as well as yield.

Most varieties are public, supplied through Secan or Canterra, but not all. FP Genetics, Seed Depot, and Western Ag also have winter wheat seed to sell.

Broken Myths

Winter kills. Survival on the Prairies is similar to the rate in Kansas, the largest winter wheat growing state in the U.S. Newest varieties are even better.

Low quality. Our winter wheat is highly valued for the white flour colour and high flour yield. New varieties have improved protein. Millers like winter wheat quality.

Hard to sell. Partially true, but look beyond the local elevator to millers, ethanol markets, and feed markets. Before buying the seed, identify who wants to buy that type of winter wheat.

Too dry to seed. Seed shallow and wait. Less than a half-inch of rain will germinate the crop.

No time to seed. Partially true. Doing both seeding and harvesting in August or September is a juggling act. But, that's just the first time. In the long run it opens a window to less pressure in both spring and fall, while providing a window to cash flow right off the hop at harvest.

SWCDC CALL FOR NOMINATIONS

The SWCDC has openings on the producer elected Board of Directors. 2 Directors will be elected for a 3-year term ending at the annual General Meeting in January of 2021. SWCDC Directors participate in approximately 4 board meetings a year and contribute time to the SWCDC. Directors are called on to represent the SWCDC at conferences that impact the winter cereals industry. Expenses are reimbursed to Directors and a daily per diem remuneration is paid.

Registered winter cereals growers interested in joining the Board can contact the SWCDC business office at 1-866-472-4611or email jake.davidson@swcdc.info for nomination forms. Nomination forms must be returned to the Returning Officer no later than 12:00 p.m. (noon) October 20, 2017.

Note: Only registered growers may vote, nominate or hold office.

A registered grower means any grower who has had a Saskatchewan Winter Cereals Development Commission check-off deducted since August 1, 2015. A registered grower is not eligible to be nominated as a director or vote if he or she has requested or received a refund of the check-off since August 1, 2015.

An election (if required) will be held by mail ballot with election results announced at the Annual General Meeting in Saskatoon, Sk. on January 8, 2018.

October 20, 2017, Nominations Close at 12:00 (Noon) November 17, 2017 Ballots mailed if necessary.

December 15, 2017, Last day for ballots to be received. - January 8, 2018, Results announced at SWCDC Annual General Meeting

WINTER CEREALS MANITOBA INC NOTICE OF ANNUAL GENERAL MEETING

The Annual General Meeting of Winter Cereals Manitoba Inc. will be held in Brandon, Manitoba on March 15, 2018 at the Agriculture Canada Research Station in the main floor meeting room.

If you are a Manitoba producer of Winter Wheat or are considering adding Winter Wheat to your rotation you are invited to attend. If you have had a Winter Cereals Manitoba levy deducted in the past three years and have not requested a refund you are eligible to vote and hold office.

Note: Only registered growers may vote, nominate or hold office.

There will be presentations on current winter wheat funded research and many other aspects of growing Winter Wheat. Lunch will be served. To ensure adequate food and refreshments pre-registration is appreciated.

FOR MORE INFORMATION OR TO REGISTER IN ADVANCE CONTACT: J. DAVIDSON, EXECUTIVE DIRECTOR 1-866-GRAIN-11 or jake.davidson@wcmi.info

Have an idea for an article in the Grower?

E-Mail jake.davidson@wintercerealscanada.org And we will try and get the information you want in our next issue.

WINTER CEREALS CANADA INC NOTICE OF ELECTION AND ANNUAL GENERAL MEETING

The Annual General Meeting of Winter Cereals Canada Inc. will be held in Brandon, Manitoba on March 15, 2018 at the Agriculture Canada Research Station. During the meeting elections may be held for several positions on the Winter Cereals Canada Inc. board of directors.

Winter Cereals Canada Inc. provides management services and co-ordinates the common interests of producer members of Winter Cereals Manitoba Inc. and the Saskatchewan Winter Cereals Development Commission. If you are interested in becoming involved with promotion and research pertaining to Winter Wheat in the provinces of Manitoba and Saskatchewan and fall rye and triticale in Saskatchewan through participation on the Board of Directors please contact the Winter Cereals Canada Inc. office to learn more about this rewarding possibility. Directors participate in approximately 4 board meetings a year and contribute time to WCCI.

Potential Directors should be current members of either Winter Cereals Manitoba Inc. or the Saskatchewan Winter Cereals Development Commission. Directors are called on to represent WCCI at conferences and meetings that impact the winter wheat industry in Western Canada. Expenses are reimbursed to Directors.

FOR MORE INFORMATION CONTACT
J. DAVIDSON, EXECUTIVE DIRECTOR 1-866-GRAIN-11
jake.davidson@wintercerealscanada.org

NOTICE OF ANNUAL GENERAL MEETING SASKATCHEWAN WINTER CEREALS DEVELOPMENT COMMISSION

JANUARY 8, 2018

Saskatoon Inn Hotel & Conference Centre
2002 Airport Drive
Saskatoon, SK, Canada, S7L 6M4

REGISTRATION 8:30 AM

BUSINESS MEETING 9:00AM TO 10:00 AM

INDUSTRY INFORMATION SESSIONS 10:00 AM TO 12:30 PM

Hear about research being funded by the SWCDC to enhance the production of winter cereals and much, much more!

All producers are invited. Only producers who have paid the Winter Cereals levy since August 1, 2015 and not requested a refund are eligible to vote.

FOR MORE INFORMATION CONTACT
J. DAVIDSON, EXECUTIVE DIRECTOR
1-866-GRAIN-11
jake.davidson@swcdc.info

If you no longer wish to receive the Winter Cereal Grower newsletter, please send us either an e-mail with your name and address or send us a note with your mailing label requesting that your name be removed from the mailing list.

Manitoba Winter Wheat MCVET Data for 2017

MCVET (Manitoba Crop Variety Evaluation Team) publishes winter cereal data collected from their trials shortly after harvest to assist with variety decisions. In 2017, yield data was collected from eight winter wheat varieties from ten locations across Manitoba. Agronomic and disease resistance information for the winter wheat varieties tested by MCVET in 2016/17 is provided in the Variety Description tables.

The yield comparison tables allow producers to make comparisons between varieties at each site, using the statistical information provided in the grey shaded area located at the bottom of the table. When assessing varieties the first step is to look at the "Sig diff" value for each site – a "yes" or "no" indicates if a real difference exists between varieties. If varieties at a site are significantly different from one another the next step is to look at the Least Significant Difference (LSD) value. LSD shows the number of bushels per acre that varieties must differ by to be considered significantly different.

The variety description table shows the long-term yield data, data that is collected over many years and locations. While it is tempting to only look at data from the site that is closest to your area, individual site data and even data accumulated over several sites in a single year must be viewed with caution. When choosing a variety it is best to look at past Seed Manitoba guides, available at www.seedmb.ca, to see how consistent a variety performs across years and locations.

While yield is generally the first information farmers look at, characteristics such as maturity, height, standability, and disease resistance are critical to maximizing yield potential and quality. The variety description tables provide information on winter wheat varieties tested by MCVET in 2016/17. Note that long term yield, protein, and site years tested does not include the 2017 data (shaded blue area in the tables). This data will be available in Seed Manitoba 2018, published in December.

By: Anne Kirk, Provincial Cereal Crops Specialist, Manitoba Agriculture

The early release of MCVET winter cereal yield data would not have been possible without Chami Amarasinghe, Craig Linde, Anita Brule-Babel, Anastasia Kubinec, and Patti Rothenburger for coordinating data collection, statistical analysis, and reviewing of data. Thank you to the MCVET winter cereal site contactors and MCVET sponsors, including Winter Cereals Manitoba Inc., who provides funding for post-registration winter wheat variety testing.

Winter Wheat Yield Comparisons Table

Class/Variety	2017 Average Yield (bu/acre)	2017 Yield (bu/acre) Arborg	Boissevain	Carberry	Carman	Hamiota	Melita	Rosebank	Stonewall	Winnipeg
Canada Western Red Winter										
AAC Elevate ~	77	76	44	85	84	76	69	86	77	96
AAC Gateway ~	76	79	51	79	84	72	62	91	73	95
AAC Goldrush ~	77	76	44	85	86	70	67	77	80	108
AAC Wildfire ~	89	86	52	96	97	85	73	104	91	115
CDC Chase	84	83	65	91	96	79	73	96	77	100
Canada Western Special Purpose										
CDC Falcon	75	85	30	85	92	69	54		89	92
Canada Western Experimental										
AAC Icefield ~	84	90	67	100	89	78	71	104	77	84
Varieties supported for registration, with class to be determined by Canadian Grain Commission										
W520	92	94	69	102	107	84	77	100	94	104
SITE GRAND MEAN (bu/acre)		83	54	90	92	77	69	94	83	99
CV%		6.9	9.7	7.7	11.5	5.4	11.4	6.6	7.8	9.3
LSD (bu/acre)		10	9	12	16	7	14	15	11	14
Sig Diff		No	Yes	Yes	No	Yes	No	No	Yes	Yes

~ Indicates a variety that is protected by Plant Breeder's Rights or a variety w here protection has been applied for but not yet granted at time of printing.

Fall Rye, Winter triticale and winter durum update.

Dr. Jamie Larsen, AAFC Lethbridge, Alberta

As I look out my window here in Lethbridge, it is October 2nd and the snow is flying sideways. Seems bizarre that I am very happy about this, but when we haven't had meaningful precipitation since early June; we'll take it! With this dose of slow release moisture, it is much more certain that our two-month campaign to get our plots harvested, grain evaluated and seed planted will lead to good plant stands going into the winter.

I did my 2nd annual western Canada rye and triticale plot inspection tour this year, stopping at 13 locations across three provinces. The plots looked good, but there were some winter survival issues in the trials at Scott, Saskatoon and Melfort. The trials are all planted on fallow which maximizes winter survival pressure. We do this partly out of necessity as our tiny plot equipment can't go through residue very well, but also to separate the good from the bad. This multi-site testing is critical to ensure that only the best lines make it to registration and commercialization.

Fall Rye: We were very happy to get support from the Saskatchewan Winter Cereals Development Commission, Western Grains Research Foundation, Western Winter Wheat Initiative, Agriculture Development Fund and industry partners FP Genetics, KWS Lochow and Bayer CropScience for a project looking at Fusarium Head Blight (FHB) in rye. A majority of this work is being completed by Dr. Anita Brule-Babel's group at the University of Manitoba. Anita's group is doing pioneering work on FHB in rye as we know virtually nothing about this disease in rye from a Canadian perspective. Her graduate student is developing FHB ratings for over 70 historical and recent cultivars, including open pollinated varieties like Hazlet and Prima and hybrid varieties like Bono, Brasetto and Guttino. As a part of this project, we will make those rating available to producers so informed variety selection decisions can be made. My role in this project is to take this knowledge and selecting resistant parental lines to use in crossing and make sure Canadian adapted open pollinated fall ryes varieties are developed for farmers. We are also working on fungicide application timings for fall rye, so producers will have a game plan on when to spray for maximum effectiveness to control this disease.

Altogether, there are some tangible benefits for producers that will be realized as a result of this effort (and your check-off dollars!)

Winter Triticale: We continue to work away on winter triticale at Lethbridge. I wrote about the yield potential of this material previously, in fact, I bragged on twitter that we'd hit 200 bu/ac with some of these lines. Unfortunately, that wasn't the case as the grain yield was only in the 150 bu/ac range. Looks like I've got some work to do on my early season crop yield estimation skills but, my solace lies in the fact that several winter triticale lines yielded 60% more grain than Hazlet and 40% more grain than Pintail winter wheat. There is some good germplasm getting close to release for producers and I think the work we continue to do will pay off in on-farm productivity. For those of you who have livestock, winter triticale is a great biomass crop from a tonnage and quality perspective as we regularly see dry biomass yields in the 20-22t/ha range. From a breeding perspective we've got completely awnless material in the pipeline that should reduce incidence of lump jaw in cattle and some double cropping work we are doing means that we're developing and testing material to fit into a system where you can harvest two crops in one year (winter cereal for biomass + spring grain crop). It might be a bit of a stretch for dryland agriculture, but under irrigation I'm convinced it will boost productivity immensely.

Winter Durum: I have had to temper excitement over the potential of winter durum as the reality of this crop is a fair distance away. However, the potential for winter durum is significant as there are all the benefits of winter wheat tied to the potential avoidance of FHB which is causing issues in spring durum wheat. To get where we need to go, Rob Graf and I are working closely to incorporate diverse winter wheat parents into the crossing program to bring in cold tolerance and disease resistance from winter wheat. In speaking with colleagues in the US, they've made good progress, to the point that cold tolerance is no longer an issue and they are focusing on grain quality. This is really encouraging for us and we hope to see the same results up here soon. We are using a site in Saskatoon for winter survival selections as we want to ramp up the selection pressure in later generations.

Genomic strategies to improve field survival of winter cereals and stabilize yield.

Submitted by Monica Båga and Ravindra Chibbar

A collaborative research project between, University of Saskatchewan and Lethbridge Research Centre, Agriculture and Agri-food Canada.
Funded by Saskatchewan Winter Cereals Development Commission, Winter Cereals Manitoba Inc.,
Natural Sciences Engineering Research Council, Western Grains Research Foundation and Alberta Wheat Commission

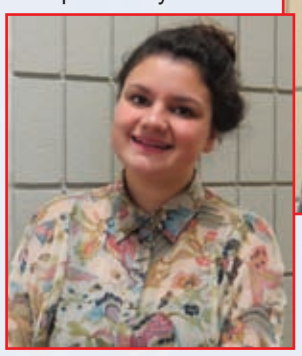
The research project in the third year (2016-17) field tested 809 recombinant inbred lines (RILs) identified by genomic selection, along with current 17 winter wheat varieties in a three replicate trial at the University of Saskatchewan. The winter conditions were harsh compared to the previous year (2015-16) and the winter survival rate varied from 0 to 45%. The most interesting result was that at least five RIL (from the same genotypic lineage) indicated winter survival higher than Norstar. Several other members of the same genotypic lineage showed winter survival similar to Norstar. Sixty RIL suggested to have high winter survival in previous years were also planted in small plots to collect yield data and for grain quality analysis. Detailed analysis will be presented at the annual SWDC and WCMI meetings in January and March 2018, respectively. In addition to wheat, 96 winter rye genotypes were also field tested and have been characterized by genotyping to identify genomic regions associated with winter field survival in rye.

Ms. Marissa Guzzi, a recent B.Sc. graduate from the Lethbridge University has joined the project as an Agriculture and Agri-Food Canada, Career Focus program intern. AAFC career focus program contributes $20,000 to the project to pay 50% of the salary of Marissa.

Mr. Hirbod Bahrani, a Ph.D. student in the project was awarded the Department of Plant Sciences, U of S devolved scholarship valued at $18,000 per year for the next three years.

Total additional funds received for the project in the current year is $38,000.

Mr. Hirbod Bahrani has been awarded a 3 year scholarship to study winter wheat genetics under Dr. Ravi Chibbar at U of S



Ms. Marissa Guzzi

LARSON REPORT PHOTOS

Figure 1. Fall rye FHB nursery at Carman, MB.

Figure 2. Seeding our row nursery on fallow at Lethbridge.

Figure 3. Winter triticale plots at Lacombe, AB.

Figure 4. Winter survival issues in Melfort, SK.

Winter Wheat Photo Contest

Unfortunately, no suitable entries were received for the 2107 Winter Wheat photo contest. As a result, there will be no prize-winning photos displayed or prizes awarded in 2017.

VISIT WWW.WCMI.INFO AND WWW.SWCDC.INFO FOR ALL YOUR MANITOBA AND SASKATCHEWAN WINTER CEREALS NEWS

Winter Cereals Manitoba Inc. is proud to provide funding for the MCVET trials on behalf of Manitoba winter wheat producers and our members.