

WINTER CEREALS

CANADA 

Incorporating  and  News

GROWER

ISSUE NO. 52

SUMMER 2014

OFFICIAL NEWSLETTER OF WINTER CEREALS

NEWS FLASH! WINTER WHEAT GROUPS INVEST IN CIGI

Official News Release: Winter wheat growers to fund Cigi position focused on market development activities

Farmers in Manitoba, Saskatchewan and Alberta have joined forces to fund a new position at Cigi (Canadian International Grains Institute) focused on capturing additional marketing opportunities for winter wheat.

Winter Cereals Manitoba, Saskatchewan Winter Cereals Commission, and the Alberta Wheat Commission are investing \$225,000 over three years (\$75,000 each) which will enable Cigi to hire a technical specialist in winter wheat responsible for planning and conducting research and technical projects to increase customer familiarity and comfort with processing winter wheat.

Doug Martin, Chair of Winter Cereals Manitoba Inc. said "With the new era of grain marketing in Western Canada it is pertinent that producers invest in educating foreign and domestic buyers on the high quality of Western Canadian Winter Wheat. Producer funded involvement is critical to the expansion of international and domestic sales".

Dale Hicks, Chair of the Saskatchewan Winter Cereals Development Commission added "Saskatchewan and Manitoba winter wheat organization have concentrated on varietal and agronomic research projects in the past. Now is an ideal time to partner with Cigi and demonstrate the value of our crop to the world. We are certain that by utilizing Cigi as our partner in marketing winter wheat we can elevate our position in world grain markets".

Dr. Rex Newkirk, Cigi Vice-President, Research and Innovation said this investment from the winter wheat growers in all three Prairie Provinces is significant as it marks the first time Cigi will have a position that is focused solely on identifying the advantages and opportunities associated with winter wheat. The position is expected to be filled by mid-June.

&+ (*!% !(
-!" " ,!)&%
+*!, !(*&
(#) !! % (* +* (
!% * !! #&+(\$!## +(!% * '!) %* !&%
& +% !% &(* % - !! !%*(* !%!* !,

"We have certainly worked with winter wheat varieties in the past and last year Cigi led a mission to Japan and South Korea that promoted newer varieties of Canada Western Red Winter wheat to customers," said Rex. "What this funding will enable us to do is fully leverage the customer knowledge Cigi has with its technical expertise to provide technical marketing support and solutions to domestic and international customers regarding milling and end-product applications using winter wheat."

Research at Cigi has demonstrated the applicability of winter wheat in certain types of bread such as hearth bread and flat breads as well as Asian products. CWRW is particularly well suited for the production of noodles and steamed bread, a high value product widely consumed in Asia, due to its ability to produce very white flour with low ash content.

"We are extremely pleased that the winter wheat growers have seen value in the work that Cigi does on behalf of producers," said Rex. "We look forward to working with them in achieving their goals of enhancing financial returns to growers, increasing sales and promoting Western Canada's high quality winter wheat."

Winter Cereals Manitoba Inc. is the Manitoba provincially designated representative organization for winter wheat. Producer levy is used to fund the development of new varieties and fund research designed to improve agronomic practices.

The Saskatchewan Winter Cereals Development Commission is the Saskatchewan commission created to promote the production and marketing of winter wheat, fall rye and winter triticale in Saskatchewan. Producer levy is used to fund the development of new varieties and fund research designed to improve agronomic practices.

Cigi is an independent market development institute created in 1972. More than 39,000 people representing grain, oilseed, pulse and special crops industries from 115 countries have participated in Cigi programs and seminars. Cigi's mission is to create a global advantage for Canadian field crops through the delivery of technical expertise, support and customized training to the domestic industry and customers around the world. Cigi is funded by farmers, the Government of Canada (AAFC) and industry partners.

In This Issue

What is the Saskatchewan Agri-Food Council?	2
New Winter Wheat Variety on the Way FOR 2017	2
2014 Board of Directors	2
Crop Forecasting Survey	3
SWCDC Regulations Change for Board Members Office Terms	3
Fall Rye Breeding	4
Fall Rye Agronomy Trial	4

Canada Post
Publication Mail Agreement
#40035270

Return Undeliverable copies to:
P.O. Box 689
Minnedosa, MB R0J 1E0

)" * - % !%((#) , #&' \$ % * &\$\$!)!&% !((+ # * /) * !&% & * !%(! / & (! + # * + ("%&- %) * (! && &+ % ! # ! % * ((#) (&- (! %, ! * (/ % + # * 0 & * &+ % ! # * & . # ! % * &+ % ! # 1) (&# ! % (+ # * ! % (! + # * + (&\$\$!)!&%) % & () ! %) " * - %

WHAT IS THE SASKATCHEWAN AGRI-FOOD COUNCIL?

Ryan Mulatz, Industry Development Specialist, Agri-Food Council, Policy Branch

Appointed by the Lieutenant Governor in Council, and accountable to the Minister of Agriculture, the Agri-Food Council is an independent board responsible for the supervision and monitoring of provincial agri-food agencies established under The Agri-Food Act, 2004 (Act). This includes the province's marketing boards, development boards and development commissions such as the Saskatchewan Winter Cereals Development Commission (SWCDC).

Council plays a regulatory, advisory and supervisory role in the agri-food industry.

As a supervisor, Council ensures that agencies are compliant with the terms and conditions of the Act, The Agri-Food Regulations, 2004, and each agency's individual regulations and orders. In doing so, the Council advises and reports to Saskatchewan's Minister of Agriculture on the operation and administration of the agencies operating under the Act.

As a regulator, Council reviews proposed marketing and development plans to establish new agri-food agencies, determines whether public meetings or hearings should be called with respect to proposed plans, conducts producer votes, and makes recommendations to the Minister on whether or not to establish, amend or terminate such plans. Council also approves all agency orders to ensure compliance with all applicable legislation and regulations, consults with agencies on issues related to federal-provincial agreements, performs regulatory updates, and reviews agency meeting minutes, policies, programs, activities, annual reports and strategic plans.

Council's role differs according to the agency mandates. Development commissions and development boards are mandated to perform research and development activities and are funded by mandatory levies which are refundable in the case of development commissions and non-refundable in the case of development boards. As long as these agencies comply with reporting standards and remain in compliance with their respective regulations, there is normally little requirement for additional supervision other than the review of agency orders and reporting requirements.

Marketing boards have a broader mandate which includes the regulation and control of their respective industries, a task which is producer-funded through mandatory, non-refundable levies. These boards have been delegated powers that only government can exercise under competition legislation, specifically the ability to establish prices and control production. Understandably, this requires that a higher level of scrutiny be applied to ensure effective economic and overall industry development and operation

Development agencies, such as SWCDC, are excellent examples of producers coming together and working towards a common goal. The research and development activities funded by these agencies, through levy dollars, support initiatives that benefit producers and help them further grow and develop their industry and improve competitiveness. The success of agriculture in Saskatchewan is evidence of the innovation and ingenuity of Saskatchewan's producers and what is possible when they are engaged and involved in decisions that directly affect their sector.

NEW WINTER WHEAT VARIETY ON THE WAY FOR 2017: W495 Recommended for Registration

At this year's meeting of the Prairie Recommending Committee for Wheat, Rye and Triticale, W495 from the Agriculture & Agri-Food Canada winter wheat breeding program at Lethbridge was supported for registration. W495 is a Canada Western Red Winter (Select) wheat variety that combines high grain yield with good winter hardiness, excellent straw strength, intermediate maturity, and an exceptional disease resistance package. It is a doubled haploid line that was developed from the cross Radiant//AC Bellatrix/Wesley 'sib'.

Based on 35 site-years of data collected over three years in the Western Canada Winter Wheat Cooperative registration trials, W495 was higher yielding than all of the CWRW checks: CDC Osprey (+9%), AC Bellatrix (+14%), Radiant (+3%), CDC Buteo (+9%). Based on 24 site-years of data collected over two years (2012 & 2013), W495 was also higher yielding than Flourish (+4%) and Moats (+6%). W495 yielded best in Alberta and Saskatchewan; Flourish and Moats were higher yielding than W495 in Manitoba.

W495 is a winter-hardy line, with survival similar to Radiant and CDC Buteo. W495 was equal in maturity to the CWRW check mean – it was a day earlier than Radiant and similar to or later than the other checks. W495 had shorter straw than all of the CWRW checks except Flourish;

on average, W495 was 7 cm and 8 cm shorter than Radiant and CDC Buteo, respectively. Lodging resistance was similar to Radiant and Flourish and better than the remaining checks. W495 exhibited test weight within the range of checks. Seed weight was 3.2 mg higher than Radiant (2011-2013) and 2.6 mg higher than Flourish (2012-2013), the heaviest checks. Grain protein concentration was within the range of the checks and similar to CDC Osprey and CDC Buteo.

W495 exhibited the most comprehensive disease resistance package ever developed in a western Canadian winter wheat variety. The Disease Evaluation Team rated W495 was moderately resistant to stem rust (Good) and bunt (Good), and intermediate in resistance to leaf rust (Fair), stripe rust (Fair) and Fusarium head blight (Fair). It is also resistant to the wheat curl mite, the vector for Wheat Streak Mosaic Virus. The leaf spot ratings for W495 were within the range of the checks and somewhat better than those for Radiant and CDC Buteo.

The marketing rights for W495 have been awarded to SeCan. Breeder Seed will be available this fall, with the expectation that Certified seed will become available for a commercial launch in 2017. It is expected that W495 will be registered in late 2014/early 2015. A name is in the works. For more information, contact Dr. Rob Graf at Robert.Graf@AGR.GC.CA

The Saskatchewan Winter Cereals Development Commission website is your home for winter cereals news in Saskatchewan. Visit www.swcdc.info. For immediate information call: 1-866-472-4611

Saskatchewan Winter Cereals Development Commission
2014 BOARD OF DIRECTORS

Mr. Dale Hicks (Chair)
Outlook, Saskatchewan
306-229-9517

Mr. D. Kirk Elliott
Saskatoon, Saskatchewan
306-831-7468

Mr. John A. Burns
Wynyard, Saskatchewan
306-534-2940

Mr. Mark Akins
Hearne, Saskatchewan
306-570-9732

Mr. Graham Deroose
Saskatoon, Saskatchewan
306-652-5326

Winter Cereals Manitoba Inc.
2014 BOARD OF DIRECTORS

Mr. Doug Martin (Chair)
East Selkirk, Manitoba
204-482-4889

Mr. Brent Schram
Brandon, Manitoba
204-726-3952

Mr. Garth Butcher
Birtle, Manitoba
204-842-3713

Bob McNabb
Minnedosa, Manitoba
204-867-7733

Mr. Curtis Sims
MacGregor, Manitoba
204-685-2237

Advertise in the Winter Cereals Grower

Winter Cereals Canada invites interested individuals and companies to advertise in the *Winter Cereals Grower*.
8 ½ x 11 \$550.00 (2 Colour)
6 ¼ x 8 ¼ \$385.00 (2 Colour)
4 ¼ x 5 ½ \$300.00 (2 Colour)
2 ½ x 2 ¾ \$150.00 (2 Colour)
(Full colour available for an additional cost.)
Multiple insertion (3) discount 10% if booked together. Copy can change. GST will not be added to these prices. All advertising must be camera ready or suitable for scanning. Advertorial content is accepted at the standard rates. Advertising and copy deadlines are March 10th, June 1st and September 20th.
Material should be submitted to:
Winter Cereals Canada Inc.
P.O. Box 689, Minnedosa, MB R0J 1E0
1-204-874-2330 1-866-472-4611
jake@wintercerealscanada.org

Business Office for General Enquiries, Refunds etc:
c/o Winter Cereals Canada Inc,
P.O. Box 689, Minnedosa, Manitoba R0J 1E0 • 1-866-GRAIN-11 • (1-866-472-4611)

For information concerning levy payments and refunds for both the SWCDC and WCMI contact the Winter Cereals Canada office: jake@wintercerealscanada.org or phone 1-866-472-4611

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.

2

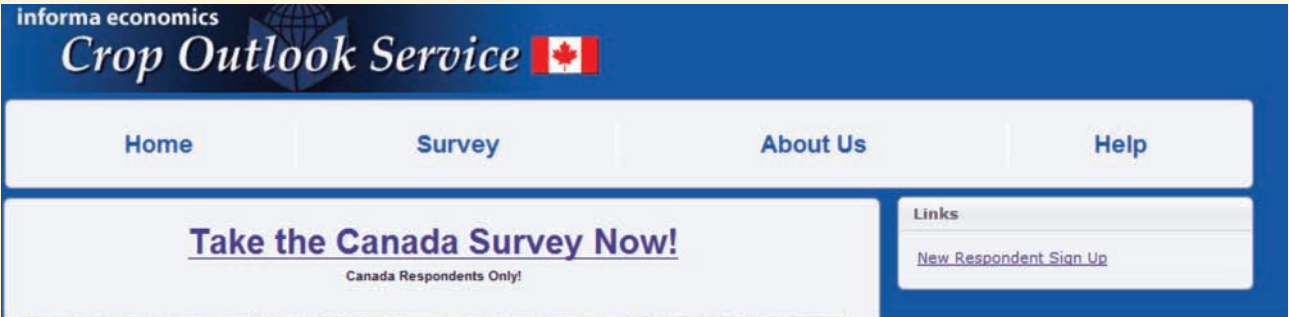
CROP FORECASTING SURVEY – Your Chance to Participate and See the Results!

Informa Economics Canadian Crop Forecasting was launched in Canada in 2013. It is modelled on our USA survey, something we have been conducting for around forty years. During important points of the production season, we survey agri-business people across the country concerning local crops. The main crops that we are interested in are: Canola, Corn, Soybeans, Wheat, Barley and Oats.

How the survey works: No more than once a month during the production season, you will receive an email with a link to the crop survey:

The surveys will be conducted at the same time as Statistics Canada, with results issued about one week ahead of their release. We will survey in the interim months as well. Why should you as an individual participate? Because information is power and information on your crops gives you the power to make decisions.

Receive an easy to read summary of the results for Canada before Stats Canada release. Information helps you make informed decisions sooner. You can sign-up here if you wish to participate:
<http://www.cropsresearch.com/canada/signupcanada.aspx>.



<http://www.cropsresearch.com/canada/DefaultCanada.aspx>

SWCDC Regulations Change for Board Members Office Terms

In the fall of 2013 the SWCDC held discussions with the Agri-Food Council concerning adjusting the length of the term that members may sit on the SWCDC board of directors.

Since inception board members have been elected or appointed to two year terms in office with a maximum of 3 terms. The SWCDC learned that other boards and commissions have been moving to 3 year terms. This will improve board continuity and also long term decision making processes.

The SWCDC board passed a motion requesting that our regulations be changed and this request has worked its way through the various regulatory processes required to change our Winter Cereals regulations. On May 22, 2014 cabinet approved the changes and they became law.

As a result of this regulatory change the SWCDC will not be holding an election in the fall of 2014. The terms of all current board members will be extended by one year. The next election and call for nominations will be held in the fall of 2015.

This change in regulations will result in cash savings for the SWCDC. We will conduct elections less frequently and save the cost of returning officers and the required advertising and potential mailing and counting of ballots.

SeCan
Canada's Seed Partner

Cool Genes

Winter wheat. A highly productive option for the Canadian Prairies.

Winter Wheat Works

AC® Flourish

Canada Western Red Winter Wheat

- ✓ milling quality
- ✓ replacement for CDC Falcon
- ✓ 104% of CDC Falcon in eastern Prairies
- ✓ short, strong straw
- ✓ early maturity (similar to CDC Falcon)

Developed by Agriculture & Agri-Food Canada, Lethbridge

Moats*

Canada Western Red Winter Wheat

- ✓ milling quality
- ✓ replacement for CDC Buteo
- ✓ 103% of CDC Buteo
- ✓ early maturity (1 day earlier than CDC Buteo)

Developed by University of Saskatchewan
*Plant Breeders' Rights applied for

Contact your SeCan seed retailer today.

Genes that fit your farm.®

800-665-7333

www.secan.com

Certified Seed
YOU'RE PLANTING SUCCESS

'AC' is an official mark used under license from Agriculture & Agri-Food Canada. Genes that fit your farm® is a registered trademark of SeCan.

Fall Rye Breeding: An update from Dr. Jamie Larsen, AAFC, Lethbridge, Ab.

We've been steadily working away here in Lethbridge to develop new fall rye varieties for producers. This includes a block of crosses between Canadian fall rye varieties and European high falling number varieties and a further set of crosses between these lines and shorter dwarf type rye plants. This should hopefully provide the genetic building blocks to move these newly developed populations towards a high quality crop that is more agronomically pleasing for grain producers. We've had to engineer a few solutions to problems along the way including making our own pollination control bags (rye is open pollinated like canola or corn) so that we can advance germplasm indoors more quickly. We've also used some of the funding provided by SWCDC to purchase a dual falling number machine which significantly increases our capacity to measure sprouting and grain quality in rye. This should accelerate the development of new varieties significantly. Ergot is definitely a hot topic in cereals right now and with the help of Dr. Kelly Turkington and his cereal pathology team at AAFC-Lacombe, we've set up an ergot nursery to examine genetic resistance in rye. To induce infection, his team spread ergot sclerotia at a rate of 80 lbs/ac on the field! We're hopeful the nursery will yield useful results and we expect to find ergot resistance to use in the breeding program. Sorting ergot bodies from grain is a labour intensive task and to help with this research objective we purchased a small colour sorter. Our sample processing time went from 30+ minutes per 500g sample to 5.5 minutes! I can't tell you how important this time savings is considering the turnaround time between harvest and planting in breeding winter cereals.

REGISTRATION OF FALL RYE HYBRIDS: In February, KWS Lochow GMBH moved two hybrid rye varieties 'Brasetto' and 'Guttino' forward for interim registration at the Prairie Grain Development Committee meetings in Winnipeg. Using the new streamlined variety evaluation tool, the hybrids were approved without issue. Based on two years of data (19 site years), these hybrids were found to be better than OP varieties in most key attributes including, grain yield (37% better than checks), plant height (8 cm shorter than checks) and falling number (71 seconds higher than checks), while winter survival and susceptibility to ergot were similar to the checks

Brasetto has been licenced to FP Genetics and seed will be available to producers for planting this fall.

FALL RYE AGRONOMY TRIAL

With financial support from the SWCDC and KWS Lochow GMBH, we applied to the Agriculture Funding Consortium in Alberta to fund a small fall rye agronomy trial for Western Canada. Western Grains Research Foundation evaluated the proposal and found it worthy for two years of funding. In short, the trial which will be seeded this fall, is set up to compare open-pollinated and hybrid rye varieties under conventional and intensive management strategies at six locations. It mirrors a similar project underway with Ducks Unlimited which should provide some useful information to producers thinking about growing fall rye. Where possible, we paired up with grower-based organizations to make sure these trials are accessible on field days. We thank Farming Smarter (Medicine Hat), NARF (Melfort) and IHARF (Indian Head) for being willing to be a part of this project. We will also have the trial at AAFC sites in Brandon, MB, Lethbridge, AB and Vauxhall, AB.

I encourage you to follow me on twitter as I try to tweet about what I am up to in the field, as well as useful information about fall rye. I'm always accessible and it allows an open conversation about rye and plant breeding in general.

Follow me:
@Jamie_Larsen or contact me by e-mail:
Jamie.larsen@agr.gc.ca



&' *& ##
/ (&))!%
&&\$
&##!% *!&%
&%*(&#)!%
(% &+)
&*&\$ *&
(&*%+() (/ *
&\$ &#&+(
)&(* (*&)&(*
(&*) #(&!
&!) (&\$ (/
(!%

High yielding winter wheat needs phosphate

Achieving high winter wheat yields depends on two critical factors: winter hardiness and rapid spring growth. Both factors are directly influenced by the phosphate status in the plant. Adequate phosphate nutrition helps promote rapid emergence and establishment in the fall, allowing the crop to achieve optimal root and shoot growth prior to dormancy. This promotes winter hardiness and a greater probability of the crop withstanding adverse environmental conditions.

For the best winter survival, fall-seeded cereals must germinate uniformly in the fall and develop three to four leaves and a few tillers before freeze up. Then in the spring, the winter cereal plant develops from the crown tissue.

In spring, plants with adequate nutrition exhibit enhanced vigour resulting in strong crop growth. Phosphate plays an essential role in promoting tiller initiation, an important component of achieving high yields. University research reveals that plants with sufficient phosphate produce 29% more grain heads and, consequently, 29% higher yields than plants with limited phosphate. Proper phosphate nutrition also promotes early and even maturity.¹

Phosphate in the soil

Understanding the nature of phosphate (P) in the soil is key to understanding where and how to enhance P fertilizer use efficiency in winter cereals.

1. Fertilizer P is easily and quickly tied up (or bound) in the soil by calcium, magnesium, iron, and aluminium. Once the fertilizer P is bound, it is unavailable to the crop.
2. As a result the crop uses only 10-30% of the P fertilizer applied in a given year – the poorest of all major nutrients.²

3. Phosphate is very immobile in the soil; it moves less than 1 mm from where it is placed. As a result, a crop's root system must grow toward the small amount of P that remains available.

For years the common practice to ensure that a crop was not deficient in P was to simply apply more phosphate fertilizer. But now JumpStart[®], a seed inoculant, offers winter cereal producers the opportunity to maximize efficiency of P fertilizer applied in the current year, as well as in previous years.

JumpStart is a wettable powder that is applied to the seed. The active ingredient in JumpStart is the patented, naturally occurring soil fungus *Penicillium bilaii*. The fungus colonizes (grows along) the root, releasing organic compounds that in turn release the “bound” mineral forms of less available soil and fertilizer phosphate, making it immediately available to the crop.

JumpStart ensures the phosphate in the proximity of the root system is made available, providing the crop access to a large pool of P in the soil that is typically not available – much of this from bound fertilizer P from previous years' fertilizer applications. Furthermore, JumpStart acts as a P fertilizer efficiency tool, making the current year's applied P more available.

JumpStart promotes greater phosphate use efficiency and delivers root and shoot development for improved vigour, emergence, and stand establishment. Better stand establishment increases stress tolerance, which improves winter survival and increases tillering, ultimately leading to higher yields.³

¹ Source: Dr. B Fowler, University of Saskatchewan, Winter Cereal Production.
² Source: Better Crops Vol. 86 (2002, No. 4), International Plant Nutrition Institute (formerly Potash & Phosphate Institute).
³ Source: Summary of 19 independent large-plot research trials in Canada since 2002 demonstrate that JumpStart increases winter wheat yields by an average 7%.



Survive and Thrive

JumpStart[®]

novozymes
Rethink Tomorrow

Use JumpStart for best winter survival. In spring, plants will exhibit enhanced vigour resulting in strong crop growth.

For more information please contact Novozymes BioAg at 1-888-744-5662 or visit www.useJumpStart.ca