WINTER CEREALS CANADA GROWER

Incorporating SASKATCHEWAN Winter Cereals DEVELOPMENT COMMISSION and Winter Cereals MANITOBA INC. News

ISSUE NO. 53 FALL / WINTER 2014 OFFICIAL NEWSLETTER OF WINTER CEREALS

CIGI IN ACTION: NEW WINTER WHEAT PROJECTS UNDERWAY

Projects evaluating new CWRW varieties and ways to optimize downgraded wheat underway at Cigi

Lisa Nemeth, Technical Specialist, Winter Wheat, Cigi

(2 $, $3 (&(

The evolution of CWRW quality is a great story to tell customers. It's easy to be enthusiastic when the class has evolved so successfully both from an agronomic and quality view. Currently, I'm working with the Cigi team on several research projects so we can demonstrate why winter wheat quality will meet customer needs and how it has the potential to be a better choice for their end products.

To start, we'll be evaluating the quality of new varieties in the CWRW class. The quality profile of CWRW is changing this year as the variety Falcon, which made up over 50% of the CWRW class in 2013, is no longer eligible to be delivered as CWRW. There are several new varieties such as Flourish, Emerson, Gateway, and Moats that are going to increase in percentage of the class make-up which will improve the quality profile. Working with seed growers to bring in one tonne samples of each of these varieties, Cigi will test the samples in a commercial setting using its pilot flour mill to explain this quality improvement to current and prospective CWRW buyers. Cigi's pilot mill produces flour that has the characteristics of commercial flour and customers can relate to these quality results. The flour will then be used to make bread, steam buns and noodles at Cigi, the quality of each will be evaluated, and the results made available to interested customers.

Based on previous small scale testing, we expect these new varieties to perform very well and on the whole they will improve the quality of the CWRW class from previous years. Testing on a commercial scale is where Cigi's expertise shines – the team can work with the product under "real" conditions and provide analysis based on our knowledge of quality requirements around the world.

Another area of testing at Cigi that involves winter wheat is the optimization of the processing and utilization of wheat affected by downgrading factors. Winter wheat has been hit hard with fusarium damage in some parts of Western Canada this year which has provided ample material for testing the efficacy of grain sorting equipment to improve grade. Cigi is gathering CWRW samples containing various levels of fusarium damage. Using sorting equipment we will quantify the amount of fusarium-damaged kernels removed, assess the improvement in value of the sorted (improved grade) wheat, and finally test the quality. Sorting technology can improve the grade but we want to take it a step further by testing the quality of the sorted material. We'll compare it to a control sample of the same wheat variety, grade and protein level. We want to know if removing the visible signs of fusarium damage also improves the quality to the same degree or does some level of quality damage remain in the sorted wheat.

Samples for both projects are currently being procured and testing should commence in late October. Then the other side of Cigi's expertise kicks in, communicating the technical information to the value chain. Once we have all the data analyzed we will develop communication material for producers, the Canadian industry and milling customers of winter wheat and use Cigi programs and customer visits to promote CWRW as appropriate.

Cigi will continue to keep an eye out for other market development opportunities for winter wheat on its upcoming customer visits to communicate the quality of the 2014 western Canadian wheat crop.

Winter wheat quality is improving and we expect that the results of our 2014 Harvest Assessment will show that. There is customer interest for CWRW so we are being proactive and preparing the communication material now to promote the improved quality profile of CWRW.

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

*#(3 1<2 . 3$ ##(3. - +, 1*$3#$5$+/, $-3 6.1* 3 ## 5 +4$ 3 6(-3$1 6'$ 3(2 4-#$16 8 3 (&(- #(- -3$1- 3. - + 1(-2 -23343$ $"$-3%4-#(-&1$"$(5$#%1, 6(-3$1 6'$ 3&1 6$12 2$$ 4, , $1 (224$.% :1 6$1; $- !+6# 3$"1$ 3. - .% -$6 (&(/.2(3. - %1 :$"'-(" + /$"(+23 (-3$1 '$ 3; %(6$# 1$"$-38!8 (2 $, $3 $, $3 6'. ". , $2 3 (&(6(3 /1$5(. 42 3$"'-(" + -#, 1*$3#5+/, $-3$7/$1($-"$ 6(3 6'$ 3(2 $7"(3$# 3 6.1* 6(3 6(-3$1 6'$ 3&1 6$12 (-/1, .3-&3$5 +4$.%3 $(1 "1/ 1 4-#3$6.1# (2 6(+!$ 1$&4+1 ".-3(!43 13 3$ 1 6$1*

2014 VARIETY MARKET SHARE REPORT NOW AVAILABLE!

Manitoba producers can review the popularity of the varieties they grow thanks to records compiled from crop insurance records. Data is available for download from the MMPP Web site: http://www.mmpp.com/mmpp.nsf/mmpp_index.html and is under the Regional Analysis Tools.

Canada Post
Publication Mail Agreement
#40035270

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

In This Issue

A NEW POTENTIAL MARKET FOR WESTERN CANADIAN WINTER WHEAT PRODUCERS

Is Potential Money in Your Fields Going Up in Smoke?

By Jared Lillis, founder of the North American Straw Paper Project

Burning excess wheat straw is common practice in many areas, but Winnipeg-based Prairie Paper Ventures Inc. would like to change that. Co-owned by actor Woody Harrelson, Prairie Paper currently sells wheat-straw copy paper through Staples, Lyreco, and Basics, along with straw commercial printing paper through a handful of North-American printers. They've received support from the Manitoba and federal governments, a grant from Sustainable Development Technology Canada, and have investors such as multibillionaire Ron Burkle, and Dave Richardson, of James Richardson & Sons, among their board members (corporateknights.com/prairie). Prairie Paper currently sources their paper from India since there are no commercial straw mills operating in North America, but they're planning to build a state-of-the-art, 300,000 tonne per year, straw pulp and paper mill in Manitoba as soon as their sales rise to a level that will support its operation. If the first mill is successful, more will follow. Building a mill in Canada will allow them to buy wheat waste from local farmers and sell their paper at prices competitive with tree-based paper. It will also further reduce their paper's environmental impact, which has already been determined to be one of the lowest of all paper types available in North America (stepforwardpaper.com).

Canopy, Canada's leading proponent of wheat-straw paper, has identified enough potential demand from over 350 companies including book, magazine, and newspaper publishers, to keep at least four of these mills running full time in North America (canopyplanet.org). But it's those willing to get involved now that will get the first mill built. Bayer CropScience has already contributed by printing their 2014 Crop Production Guide on Prairie's Step Forward Paper. Walmart and Farm Credit Canada also use this paper. The North American Straw Paper Project (NASPP) hopes to further increase demand by offering wheat growers and farm-related youth organizations free wheat-straw products via corporate ag sponsors who wish to strengthen relationships with farmers and future farmers. Winter wheat growers will be of particular value to the success of these mills, since the spring/summer harvest will provide them with a staggered straw supply each year, reducing storage and spoilage concerns. NASPP would like to hear your thoughts on the subject. Making your opinions known may help determine the locations of future straw mills. Feel free to take the "Straw Poll" found at strawpaperproject.com/contact.html. The results will be tallied and provided to your grower organization and Prairie Paper.

The Winter Cereals Manitoba website is your home for winter wheat news in Manitoba. www.wcmi.info

NOTICE OF ANNUAL GENERAL MEETING SASKATCHEWAN WINTER CEREALS DEVELOPMENT COMMISSION

JANUARY 12, 2015

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

LOOK FOR US IN OUR NEW LOCATION

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, 2012 and not requested a refund are eligible to vote.

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

WINTER CEREALS MANITOBA INC NOTICE OF ELECTION OF DIRECTORS AND ANNUAL GENERAL MEETING

The Annual General Meeting of Winter Cereals Manitoba Inc. will be held in Brandon, Manitoba on March 18, 2015 at the Riverbank Discovery Center. During the meeting elections will be held for several positions on the Winter Cereals Manitoba Inc. board of directors.

If you are interested in becoming involved with promotion and research pertaining to Winter Wheat in the Province of Manitoba through participation on the Board of Directors please contact the Winter Cereals Manitoba Inc. office to learn more about this rewarding possibility. Directors participate in approximately 5 board meetings a year and contribute time to WCMI. Directors are called on to represent the WCMI at conferences and meetings that impact the winter wheat industry in Manitoba. Expenses are reimbursed to Directors.

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

WINTER CEREALS CANADA INC NOTICE OF ELECTION AND ANNUAL GENERAL MEETING

The Annual General Meeting of Winter Cereals Canada Inc. will be held on March 18, 2015 at the Riverbank Discovery Center in Brandon , Manitoba. 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 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 5 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@wintercerealscanada.org

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.

2014 FUSARIUM HEAD BLIGHT IN-FIELD SURVEY OF WINTER WHEAT IN MANITOBA

Submitted by: Pam de Rocquigny, Provincial Cereal Crops Specialist, MAFRD

Since 1998, winter wheat crops in Manitoba have been surveyed during the growing season to assess severity of fusarium head blight (FHB). Disease surveys are an important component of integrated disease management plans. The surveys can give an indication of potential problems if disease levels are high, supply information that can be used in the future for monitoring and control measures, and provide historical information on the occurrence and severity of disease in Manitoba and on the assessment of losses from disease.

How survey was conducted

The prevalence of FHB in winter wheat was assessed by surveying 39 fields when crops were at the early milk to soft dough stage of growth. Fusarium head blight was assessed by examining 100 plants in each field to determine the percentage of infected spikes (disease incidence) and the mean spike proportion infected (SPI). The overall severity was expressed as the FHB Index = (% incidence x % SPI / 100). Samples of infected heads were also collected and sent to AAFC Morden for further analysis of Fusarium species responsible for infection; results will be available in the coming months.

Winter wheat acres, varieties and fungicide use

According to the 2014 Manitoba Agricultural Services Corporation's Variety Market Share report, winter wheat was grown on 389,041 acres. In addition, there was 19,755 acres of pedigreed winter wheat production. Keep in mind these numbers represent what was planted in the fall of 2013 and does not reflect the final number of winter wheat acres remaining after termination of fields in spring 2014.

For the first time since 2002, CDC Falcon was not the most common variety grown in Manitoba – it was Flourish occupying 55% of the total acres. Flourish was also the variety in 23 of the 39 fields surveyed. CDC Falcon was the second most common variety grown in Manitoba occupying 31% of the acreage; it was the variety grown in 11 of the surveyed fields. The remaining fields surveyed included the varieties Emerson, CDC Buteo and Sunrise.

Fungicide application for FHB suppression was common as 36 of the 39 fields were sprayed with either tebuconazole-, metconazole-, prothioconazole- or prothioconazole + tebuconazole-based products.

Survey results

Symptoms of FHB were observed in all 39 winter wheat fields. The average disease incidence was 32.9% (range 1.0 – 92.0%), mean SPI was 33.8% (range 9.1 – 93.1%) and the resulting average FHB Index was 11.6% (range 0.1 – 47.6%). Table 1 further illustrates the average FHB Index in the three regions of Central, Eastern/Interlake and Southwest.

The 2014 FHB Index of 11.6% was higher than the 10-year (2004-2013) average of 3.4% (see Table 2), and the third highest level in the same time period. Favourable conditions for inoculum development and subsequent infection of the crop, variable crop staging resulting in difficulty timing a fungicide application, and the large number of acres grown to varieties rated moderately susceptible or susceptible to FHB (91% of total winter wheat acres) were all contributing factors to the higher levels of FHB. Based on information in previous years of high infection and reported yields in 2014, it is estimated FHB resulted in an average yield loss of 5%. However, the greater impact was downgrading due to fusarium damaged kernels (FDK) in harvested samples.

*/ $"(+ ' -*2 3 3 $ 3 %%6 ' . ". -#4"3$# 3 $ 2415$82 -&1(# 1(23) -2. - $- -(2 -&$ 1+ 1&$- 1* ' . , . *. 52*($)$ - (" 1# , (1 1 . 0 (. -$+ 2*(6 + $1 2*(6 3 $ 5 1(. 42 1 #4"$12 6 ' . + 6 $# 3 $(1%(6 #2 3 ! $ 2415$8$# -# 1$- 3 " +4, 9 . 1#$- %1 ' (2 24/ / . 13*

$%&1$- "$2 Manitoba Agricultural Services Corporation (MASC). 2014. Variety Market Share Report. August 18, 2014

Table 1. 2014 FHB Index by Agricultural Region.

	FHB Index %	# of Fields
Provincial Average	11.6	39
Central	17.2	16
Eastern/Interlake	8.0	11

Table 2. Average FHB Index in Manitoba Winter Wheat (2004 – 2013).

Year	FHB Index %	Comments	FHB Index Range
2013	1.0%	Minimal yield loss	0 - 4.2%
2012	0.2%	No yield loss	0 - 1.0%
2011	0.9%	Minimal yield loss	0 - 5.5%
2010	11.8%	Estimated 5% yield loss	0.1 - 45%
2009	0.3%	No yield loss	0 - 1.2%
2008	0.3%	No yield loss	0 - 1.4%
2007	3.3%	Light yield loss	0.2 - 14.2%
2006	0.3%	Minimal yield loss	0 - 4.2%
2005	14.7%	Average yield loss of 10%	3.4 - 47.1%
2004	1.3%	Average yield loss of <1.0%	0 - 7.0%
10-YEAR AVERAGE	**3.4%**		

. 41"$ - #(- +-3 (2$ 2$ 4115$82 3

informa economics 2014 Fall Production Estimate

Informa's forecasts are based on its survey conducted September 9 through September 17, 2014. Statistics Canada will issue its next survey-based production forecast for the 2014 harvest on October 3, 2014. Informa will re-survey yields in October and will issue the findings later in October. Implied production for: canola is 15 MMT (up from 14.7 MMT last month); other spring wheat 20.5 MMT (up from 19.4 MMT); durum wheat (5.73 MMT (down slightly from 5.78 MMT); corn 11.9 MMT (down slightly from 12 MMT); soybeans 5.73 MMT (down slightly from 6 MMT); and barley 7.58 MMT (up slightly from 7.45 MMT).

Informa Survey Results - Bushels per Acre

	Canola	Spring Wheat	Durum	Corn	Soybeans	Barley
Ontario	43.8	50.1		167.4	43.2	63.0
Manitoba	32.0	56.6		105.8	32.1	65.5
Saskatchewan	31.9	45.0	44.8		25.3	60.7
Alberta	39.8	40.8	46.7	123.8		70.4
Canada	34.5	44.7	45.0	153.2	39.8	66.3
Canada Production 1/	15,000	20,500	5,725	11,900	5,901	7,575

1/000 Metric Tonnes

Winter Wheat for Gravity Irrigated Fields in Southwest Saskatchewan

Gary Kruger, P.Ag., CCA., Irrigation Agrologist, Crops and Irrigation Branch, Saskatchewan Agriculture, Outlook, SK

Southwest Saskatchewan has over 20,000 acres of gravity irrigated cropland. The majority of these acres are in forage production, but an opportunity exists to utilize winter wheat in this rotation. Annual cereal production occurs as a break crop in irrigated perennial forage rotations. The grower rotates to annual cereals grown as greenfeed for two to three years. This practice corrects depleted soil fertility, improves soil tilth for shallow forage seed placement and controls dandelions. Barley, oats, and triticale are commonly grown for two or three years before reseeding the land back to perennial forage. Data suggests winter wheat could be a viable alternative.

The project was established with funding from ADOPT, the Irrigation Crop Diversification Corporation (ICDC), and The Saskatchewan Winter Cereals Development Commission. Sites at Ponteix (durum stubble), Eastend (chemfallow), and Consul (chemfallow) were sown in fall, 2013. The Ponteix site had excellent stubble protection as the site was harvested with a stripper header. The Eastend site had fair snow catch potential while the Consul site had very little stubble left following a summer of chemfallow. The fourth site, added in 2014 at Maple Creek, was sown into harvested green feed stubble.

This demonstration was designed to show that shallow seed placement and adequate seeding rate will improve winter wheat yields. Increasing N fertilization rates on winter wheat was a second objective of the demonstration. The demonstration had two seeding depths, 1 cm and 2-3 cm and two seeding rates, 2 and 3 bu/ac. These two target seeding rates support emergence of 30 and 45 plants per square foot respectively. An application of 100 lb actual N/ac as ESN was applied during the seeding operation at Ponteix, Eastend, and Consul. The Maple Creek site tested very low in available phosphorus. Fertilizer P at 20 lb P205/ac. and K at 20 lb K20/ac. was included in the blend at this site which reduced the quantity of ESN that could be applied with the drill during seeding.

The border dykes at Ponteix were sown September 10, 2013 with an 1895 JD single disk air drill. The fertilizer was banded down the midrow. The Eastend site was sown September 12, 2013 with a Flexicoil 5000 airseeder fitted with knife openers. At Consul, the winter wheat was sown September 28 with a John Deere 1890 airdrill with single disk openers. The 2014 site was sown September 20 with an International 100 double disk press drill. Only the 2014 site was sprayed with glyphosate just prior to seeding but all had no significant second growth.

Table 1: Soil analysis of sites selected for winter wheat demonstration

Site	pH[2]	EC[2]	OM[2]	N[1]	P[2]	K[2]	S[1]	Cu[2]	Fe[2]	Mn[2]	Zn[2]	B[2]
		mS/cm	%	lb/ac	lb/ac	lb/ac	lb/ac	lb/ac	lb/ac	lb/ac	lb/ac	lb/ac
Ponteix	7.9	0.5	3.3	25	10	572	63	2.1	46	12.7	2.0	4.8
Eastend	8.1	1.3	3.5	50	38	432	86+	2.8	35	5.6	1.6	3.5
Consul	7.7	0.5	3.5	62	12	600+	43	1.3	25	9.9	1.7	3.3
Maple Creek	8.4	0.6	2.5	20	8	600+	82	3.8	46	7.0	1.0	2.6

[1]0-12” sampling depth
[2]0-6” sampling depth

The Consul site was lost because of winter injury. Plant tissue samples were collected at the flagleaf stage at Ponteix and Eastend. The analysis indicates the winter wheat was able to obtain adequate nutrients from the soils even though nitrogen as ESN was the only fertilizer supplied to the crop (Table 2). Both fields had been routinely sown to annual crops for several years prior to planting the winter wheat in fall of 2013.

Table 2: Plant tissue analysis of winter wheat samples collected from ADOPT sites at flagleaf stage of development (June, 2014)

Treatment (Fertilizer/ac)	N (%)	P (%)	K (%)	S (%)	Ca (%)	Mg (%)	Cu ug/g	Fe ug/g	Mn ug/g	Zn ug/g	B ug/g
Ponteix	4.0	0.27	2.59	0.27	0.33	0.22	9	83	56	54	14
Eastend	4.7	0.31	2.46	0.27	0.28	0.24	10	209	35	32	4
Threshold	**2.0**	**0.25**	**1.50**	**0.15**	**0.20**	**0.15**	**4.5**	**20**	**15**	**15 5**	

At Ponteix, the crop was harvested September 30. Hail reduced the grain yield to 25 bu/ac. The chemfallow site at Eastend site received around 13 inches of rain over the growing season. It was harvested October 4 yielding just under 80 bu/ac. Winter wheat is a profitable cropping option for Southwest irrigated producers.

Cooperators: • Andre Perrault, Grower, Ponteix, SK , Randy Wig, Grower, Eastend, SK , Russ Swihart, Grower, Consul, SK, Harvey Bauer, Grower, Maple Creek, SK

(&41$. 2 6(-3$16'$ 323-# 3 23$-# 1(& 3(.- (231("3(- +3$ 4+8 '.3 "1$#(3

(&41$ $$#+-&2.% . 2 6(-3$16'$ 33 3 2415(5$# 3 $ 6(-3$1.% '.3 "1$#(3 -#8 (&

(&41$ 7"$+$-3'$ # #5+/, $-3.% . 2 6(-3$1 6'$ 3 3 23$-# (- '.3 "1$#(3

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