

PulsePoint



January 2014

SPG-FUNDED RESEARCH IN GENOME SEQUENCING AIMS TO BREED SUPERSTAR PULSES P 19

New Pulse Varieties for 2014 P 12


What We Can Learn from 2013 Yields P 23

How Above Average Yields Affect Your Taxes P 35

Canadian publication Mail Agreement 40021625



SASKATCHEWAN
pulse
Growers



**With 8% more yield
than other inoculants, it
makes a welcome addition
to any operation.**

 **Nodulator[®] XL**
Inoculants

Chances are if you grow peas or lentils you're already using inoculants. What you may not realize is they're not all created equal. That's why you should insist on Nodulator[®] XL. With the most active strain of rhizobia, it improves nitrogen fixation for increased root biomass and top growth. It all adds up to higher yield potential. So when you choose Nodulator XL, we suggest you think ahead to harvest time—and think big. To find out more, visit agsolutions.ca or contact **AgSolutions[®]** Customer Care at 1-877-371-BASF (2273).

 **BASF**
The Chemical Company

Always read and follow label directions.

AgSolutions is a registered trade-mark of BASF Corporation; and NODULATOR is a registered trade-mark of BASF, all used with permission by BASF Canada Inc. © 2013 BASF Canada Inc.

Published for:

Saskatchewan Pulse Growers, 207 – 116
Research Drive, Saskatoon, SK, S7N 3R3,
phone 306.668.5556, fax 306.668.5557,
pulse@saskpulse.com, www.saskpulse.com

Published by:

Blairmore Media, 701 – 45th Street East,
Saskatoon, SK S7K 0W4,
phone 306.373.6730, fax 306.652.8061,
pulsepoint@blairmoremedia.com,
www.blairmoremedia.com

Publication Dates:

January, March, June, October

Publisher:

Blairmore Media

Editor:

Delaney Seiferling

Associate Editor:

Rachel Kehrig

Contributors:

Noelle Chorney, Tanya Der, Lyndsay Smith,
Bunjamin Ta'ran, Bert Vandenberg,
Tom Warkentin, Amy Wright

Art and Production:

Varina Warwaruk

Marketing/Advertising Sales:

Dennis Dowd, dennis@blairmoremedia.com

Saskatchewan Pulse Growers and Blairmore Media make no expressed or implied warranties of merchantability or fitness for a particular purpose or otherwise, concerning the use of any product, advice provided and marketing insights, and assumes no liability for any injury or damage, direct or consequential, which may be incurred from the use of such products or services therein. Federal, Provincial and Municipal laws and regulations supersede the information contained herein.

Canadian Mail Publications Sales Agreement
#40021625 Postmaster please return
undeliverable copies to Saskatchewan
Pulse Growers, 207 – 116 Research Drive,
Saskatoon, SK, S7N 3R3,
pulse@saskpulse.com

Issn 1701-9125
PRINTED IN CANADA

Cover Photo:

iStock

Moving In The Right Direction

by **Morgan Nunweiler**



In 2010, SPG set goals to market seven million tonnes and increase average yields of Saskatchewan pulses by

30% by 2025. These goals will help growers compete and will profit in a global pulse industry. In 2010, these goals seemed like a real stretch but after our last growing season, it doesn't seem that far off.

Of course, weather had much to do with 2013 yields, but it wasn't the only factor. Great genetics, weed and disease control, and top agronomic practices allowed us to capitalize on the great growing conditions. Pea yields were especially outstanding this year and lentil yields were at all-time highs. The great genetic potential found in recent varieties of pulses is a direct result of the breeding program at the Crop Development Centre (CDC), which has been a long-time priority of the SPG Board. The great yields of 2013 are proof that the investment in the breeding program with the CDC pays dividends for levy payers.

Having the best agronomic package is important for successful yields, and will ensure continued growth for pulse growers. SPG, Alberta Pulse Growers (APG), and Manitoba Pulse Growers (MPG) have made significant investments in improving the way we grow pulse crops. Pulse Science Cluster 1, now complete, has contributed a great deal to our agronomic understanding of pulse production. In 2013, Federal Minister of Agriculture, the Honorable Gerry Ritz, announced \$15 million in funding for Pulse

Science Cluster 2 as part of Growing Forward 2. Grower levy dollars are leveraged with federal funding in Pulse Science Cluster 2, which invests in priority pulse crop research projects. These priorities include agronomic research related to fertility and weed and disease control, but also go much beyond production. Research into market development is important in ensuring pulse demand continues to grow throughout the world. A portion of Pulse Science Cluster 2 is being directed at utilization-focused projects to help us find new markets to grow demand and increase pulse consumption. For example, new food products containing pulses have increased ten-fold since 2002. Health-conscious consumers are searching for ways to improve their diets and pulses are poised to meet this demand. Future health claims will help build this trend as well. At the same time the commercial food industry is showing more interest in including pulse flours and fractions in food products to improve nutritional benefits.

This year has showed us even more potential for pulses. We will grow more, with more ease, through genetic improvement, better weed and disease control options, and improved agronomy. Our industry will continue to thrive with increasing global pulse consumption. We are on the right track and it is due in part to SPG's strategic investments of your to levy dollars.

Thanks to you, the future is promising, and as for the seven million tonnes, we will soon be looking beyond even that goal!



In This Issue

1 Chair's Message

Moving In The Right Direction

4 People & Events

A visual look at some of SPG's activities from the past couple months

8 2013 In the Rearview Mirror

A look at SPG highlights from the past year

12 Variety is the Spice of Life!

A look at the newest pulse varieties for 2014 from the CDC

19 Breeding Superstar pulses

Newly funded SPG research will lead to variety improvement and direct benefits for growers

23 What a Great Year for Pulse Crops!

Reflections on the success of last growing season and what we can learn from it



26 Lunching with Canadian Lentils

A look at how we promote Canadian Lentils domestically and how we measure our impact



29 Come to Our Regional Meetings!

For sessions of market outlook, farm business management, agronomy, and more ...

33 Changing the way we look at pulse quality

Pulse Canada is working to identify the quality needs of suppliers and consumers of pulses and pulse food products



35 How Above Average Yields Affect Your Taxes

Pulse Canada is helping to maintain quality standards as pulses grow in popularity



38 OnPoint



Find us on Facebook
"Saskatchewan Pulse Growers"



Follow us on Twitter
@SaskPulse @CdnLentils

For more information please visit www.saskpulse.com

People & Events

FNCE

SPG staff hosted a Canadian Lentils booth at the Food and Nutrition Conference & Expo in Houston, Texas, in October 2013. This conference brings together more than 900 food and nutrition experts from across the United States (U.S.). Visitors to the booth learned about the health benefits of Canadian lentils, and sampled unique lentil food samples including lentil smoothies and lettuce wraps. SPG staff also collected contact information for show attendees, building an email contact list of approximately 800 people who will now receive new lentil recipes every three months.



Christine Farkas, of Pulse Canada, preps and serves lentil food samples to conference attendees.



Visitors to the Canadian Lentils booth took home lentil recipe books and educational material for their clients/patients/students.

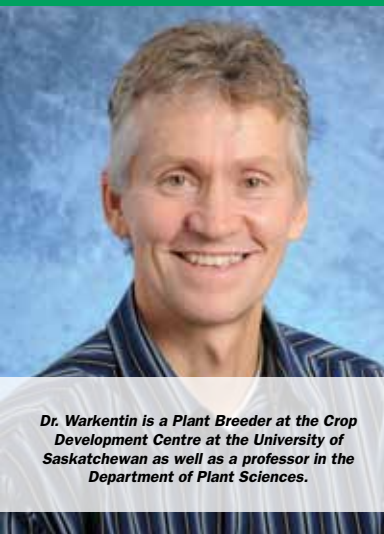
Pulse researchers win awards

In October, two researchers from the Crop Development Centre (CDC), University of Saskatchewan, were recognized at the 2013 North American Pulse Improvement Association (NAPIA) biennial meeting in Portland, Oregon, for their long-term achievements in pulse research.

Tom Warkentin received the 2013 NAPIA Outstanding Achievement award and Kirstin Bett received the 2013 Bean Improvement Cooperative (BIC) Achievement award. Both of these awards recognize achievements in the following areas:

- Research leadership – high number of publications in peer-reviewed journals;
- Crop development – developing and releasing pulse varieties that are benefiting farmers and the industry;
- Service to the organization – serving on the boards of both BIC and NAPIA for a number of years

Both Tom and Kirstin have led SPG-funded research projects, completed and ongoing, and have spoken at many SPG events and tours over the years. On behalf of SPG and the pulse industry congratulations to Tom and Kirstin!



Dr. Warkentin is a Plant Breeder at the Crop Development Centre at the University of Saskatchewan as well as a professor in the Department of Plant Sciences.



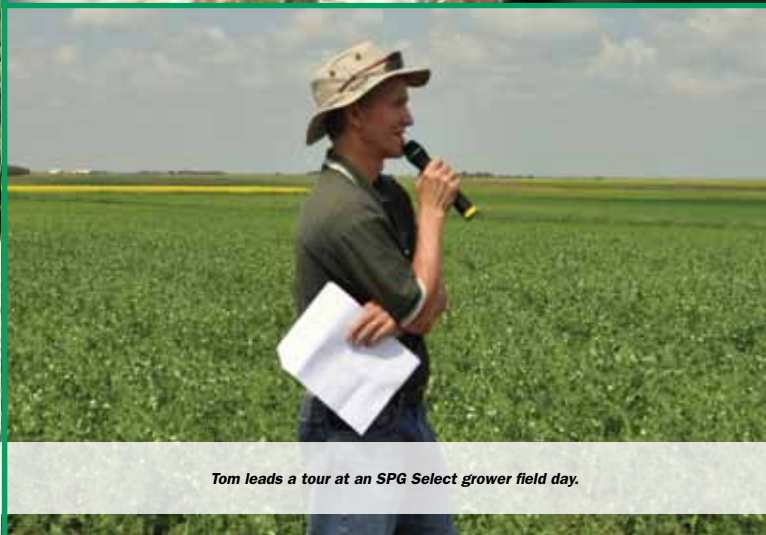
Dr. Kirstin Bett is an Associate Professor of Plant Breeding and Genetics in the Department of Plant Sciences, University of Saskatchewan.



Tom leads a tour at the Crop Development Centre.



Kirstin (right) attends an SPG Select grower field day.



Tom leads a tour at an SPG Select grower field day.

Pulse Promoter Award

In early January, SPG and BASF announced that the recipient of the 2013 BASF Pulse Promoter Award is Tom Warkentin, Plant Breeder at the Crop Development Centre at the University of Saskatchewan as well as a professor in the Department of Plant Sciences.

The annual award is given to one individual who has made an extraordinary contribution to the development of Canada's pulse industry, says Bill Greuel of BASF Canada.

"Tom's current research projects are attempting to address both agronomic and market traits that will help our country's pulse growers maintain their competitiveness around the world," Greuel says. "It's industry-leading work that has the potential to be a real game changer."

Tom is currently breeding field peas with an emphasis on agronomic traits, such as high yield and lodging and disease resistance, as well as market traits, such as visual, nutritional and end-use quality. He is also collaborating on a soybean breeding program for the short season areas of the prairies. Since 1997, approximately thirty pea varieties have been released from the CDC program, with Canadian pea production reaching a record of nearly four million tonnes in 2013. This work has helped to position Canada as the largest exporter of peas in the world.

"Tom is a world leader in pulse research and is leading the Canadian contributions on international genome sequencing efforts for pea. Tom also helps to develop the future of pulse research through his mentorship of the next generation of scientists and researchers," says Carl Potts, SPG's Executive Director. "Tom is a tireless ambassador for the pulse industry and SPG would like to congratulate him on this award."





The Chemical Company

Get the cleanest fields in the fastest way possible this spring. Tank-mix glyphosate with HEAT[®] herbicide and you'll get the most complete control from your pre-seed and chemfallow applications. Learn more by visiting agsolutions.ca/heat or calling AgSolutions[®] Customer Care at 1-877-371-BASF (2273).

Always read and follow label directions.
AgSolutions is a registered trade-mark of BASF Corporation; HEAT and KIXOR are registered trade-marks of BASF SE; all used with permission by BASF Canada Inc.
© 2013 BASF Canada Inc.

For the
**Ultimate
Burndown.**

Heat[®]

Powered by **Kixor[®]** Herbicide



2012/13 In the Rearview Mirror

A look back at SPG highlights from the past year



SPG's 2013 AGM saw a record number of attendees.

2013 Annual General Meeting

The 2013 SPG annual general meeting (AGM) held on January 7, 2013, saw a record number of attendees. The AGM opened with greetings from the Saskatchewan Minister of Agriculture, the Hon. Lyle Stewart. In addition to the business portion of the meeting, there were also presentations from Gordon Bacon, CEO of Pulse Canada, on the year in review for Pulse Canada, and from Elwin Hermanson with the Canadian Grain Commission on the importance of the Harvest Sample program.



Variety Release Program

In 2013 SPG released three new lentil varieties, one new chickpea variety, and one new bean variety developed by the CDC. The new



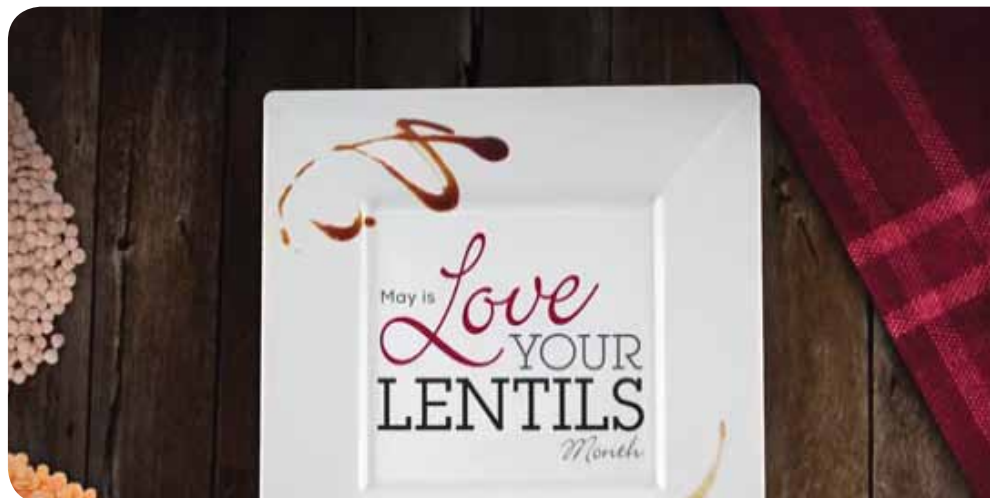
lentil varieties showed an increased yield while the chickpea variety showed an increase in ascochyta resistance. The new bean variety was the first regular darkening pinto bean released since 1999.

CropSphere 2014

SPG announced it would be hosting a new agricultural conference in January 2014, as part of Crop Production Week (CPW), in partnership with SaskCanola, SaskFlax, SaskBarley, SaskWheat, and the Saskatchewan Oat Development Commission. This new event, CropSphere 2014, will take the place of previous separate meetings hosted by these groups during CPW, and will feature general sessions on market outlook, research, and agronomy, along with sessions specific to each crop. For more information on this new event, visit www.cropsphere.com.

SR&ED Tax Credit

Pulse growers who contributed pulse check-off/levy dollars to SPG were eligible to earn a federal investment tax credit through the Scientific Research and Experimental Development (SR&ED) program. The tax credit is based on the



amount of check-off funds invested in research and development that meet specific criteria as set out by Canada Revenue Agency. For the 2012 tax year, 53% of the Saskatchewan pulse check-off qualified for the federal SR&ED tax credit.

Love Your Lentils Month

For the second year, SPG promoted the month of May as Love Your Lentils Month. The month kicked off with an appearance by Canadian Lentils brand ambassador celebrity Chef Michael Smith on Breakfast Television Toronto to promote a contest which invited home chefs

and bloggers to submit unique lentil recipes online. People then voted for their favourites, as well as for a chance to spend a day with Chef Michael Smith. More than 100 recipes were entered into the contest, with more than 30,000 votes cast in just one month.

Growing Forward 2 Science Cluster Funding

In July 2013, the Canadian pulse industry was awarded \$15 million in funding for the Growing Forward 2 Science Cluster. The program, administered by SPG, will fund research projects from 2013-2018 that aim to advance science in the areas of genetic improvement, sustainable crop production, and

crop utilization. The program will yield improved crop varieties, better agronomic practices, new uses for pulse crops, and scientific data to support health and nutrition claims.

Cluster One Completion

The federal government's Growing Forward 1 Science Cluster funding program came to a conclusion in 2012/13 on the heels of the announcement of the Growing Forward 2 program.

For more information on projects funded under the Growing Forward program visit saskpulse.com.



SPG Board member Lee Moats talks about what the federal government's \$15 million investment will mean for the pulse industry and growers.

Lentils on the Amazing Race Canada

SPG was involved in the inaugural season of the Amazing Race Canada in 2013. Partnering with Saskcan/Alliance Grain Traders, race contestants were challenged to a twist on the classic "needle in a haystack," only this time they had to find a stuffed animal moose in a truck trailer filled with lentils. Trucks featuring the Canadian Lentils logo appeared throughout the challenge.

Food Day Canada event

In August, SPG and Food Day Canada hosted a reception in Saskatoon to honour Dr. Alfred Slinkard, presenting him with the

Pulse Legacy Award. Thirty-five years ago, Dr. Slinkard developed the Laird lentil. He then went on to play a leading role in developing the pulse industry in Saskatchewan, working as a breeder in pulse research at the Crop Development Centre (CDC), as a professor at the University of Saskatchewan, and as an educator and mentor to growers, processors and exporters, and agricultural students. Onhand to help us celebrate were SPG staff and Board members, Anita Stewart, Founder of Food Day Canada, representatives from the Crop Development Centre, exporters, and many more.



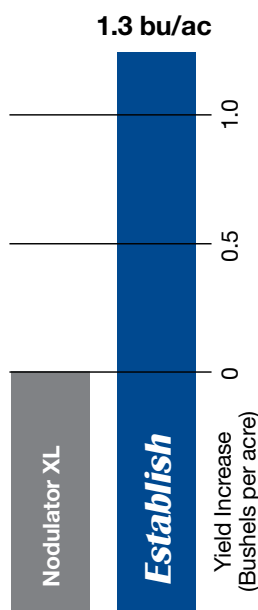
Dr. Al. Slinkard is honoured at an SPG dinner held in his honour in August 2013. Dr. Slinkard was awarded the Pulse Legacy Award for his contributions to the pulse industry in Saskatchewan.

Who's got the **BIG NODULES** now? *Establish*TM

LONGER nodulation period.
MAXIMUM nitrogen fixation.
REALLY BIG yield potential.

EstablishTM is the new standard for inoculants. Why settle for a single-action inoculant when you can have more? Establish combines an elite nitrogen inoculant along with either groundbreaking LCO Promoter Technology[®] in the granular formulation or a Plant Signalling Technology in the liquid formulation. These unique molecules drive communication between the plant and the inoculant regardless of soil conditions. It delivers an earlier, longer-lasting nodulation period, increased nitrogen fixation, and enhanced root and shoot development. You'll get bigger nodules and more of them, resulting in better yields than Nodulator[®] XL¹, and put more money in your pocket.

Establish Your Crops Today.



¹ Based on 14 independent trials conducted on peas in western Canada in 2012, Establish increased yields by an average of 1.3 bu/ac versus Nodulator[®] XL. Always read and follow label directions. TM Establish is a trademark of Loveland Products Inc. and [®] LCO Promoter Technology is a registered trademark of Novozymes A/S. All others are trademarks of their respective companies. 12037 11.12

1-800-328-4678


Loveland
PRODUCTS



Variety is the Spice of Life!

A look at new pulse varieties that will be available in 2014

by **Dr. Bunyamin Tar'an, Dr. Bert Vandenberg, and Dr. Tom Warkentin**

New Lentil Varieties for 2014

Market Class: LARGE GREEN

In the Market

The Saskatchewan Crop Insurance Corporation (SCIC) insures about 80% of the lentil crop – in 2013 this represented about 500,000 acres of insured large green lentils. Of the reported variety acres, CDC Greenland, CDC Impower, and CDC Improve were the most widely grown. Based on SCIC data, about 30% of all lentil varieties including the large greens are listed as “unreported” or “unknown.”

New Varieties

Seed of CDC Greenstar has entered the rapid multiplication stage. A large quantity of Breeder seed was released in 2013 to Select growers. CDC Greenstar consistently outyields all other large green lentil varieties and many of the red varieties, similar to CDC Maxim. It has very good ascochyta resistance and better anthracnose resistance ratings than

all other large greens. The seed of CDC Greenstar is larger than most of the other green varieties, slightly smaller than CDC Improve (CL).

Looking Ahead

We expect to see steady improvement in large green lentil varieties in terms of agronomic and marketing characteristics.

Market class: OTHER GREENS AND SPECIALTY LENTILS

In the Market

In 2013 the SCIC insured almost 265,000 acres of small and medium green lentils plus specialty types, but most of these were small greens. For the insured small green acres where variety is reported, about 55% were CDC Invincible (CL) and about 35% were CDC Viceroy. All other small green varieties and all other market classes make up the rest, each variety at less than 4% of the group total. The total reported for French green varieties was a little over 20,000 acres and about 40% of those acres were CDC Peridot (CL) and 20% CDC LeMay.

New Varieties

CDC Asterix is an up and coming extra small green variety with seeds that are about 20% smaller compared to CDC Viceroy. It is a conventional type with some possibility for specialized marketing in specific regions.

Looking Ahead

We plan to release Breeder seed of the conventional French green variety CDC Marble (yield is 119% of Maxim) and possibly 3592-13, a conventional small green (110% of Maxim). CDC Marble outyields all other lentil lines regardless of market class and we are using it to establish a new higher-yielding genetic base for all market classes. All varieties are on track for conversion to imidazolinone (IMI) tolerance.

Market Class: RED LENTILS

In the Market

We estimate that 65% of the 830,000 red lentil acres reported on a variety basis by the SCIC in 2013 were CDC Maxim (CL). The real



3592-13



CDC GREENSTAR



CDC INVINCIBLE



CDC ASTERIX



CDC IMAX



CDC LEMAY



CDC DAZIL



CDC IMPOWER



CDC MARBLE

figure could be higher if all the acres were reported by variety. The extra small red varieties, CDC Rosetown, CDC Imperial (CL), CDC Impala (CL), are now less than 2%, in total, of the area. CDC Dazil (CL) and CDC Imax (CL) appear to be gaining acres.

Conventional varieties like CDC Redcoat, CDC Redcliff, CDC Redbow, and CDC Rosebud are grown on a very limited scale right now because they were released after CDC Maxim (CL). As growers try them out, local performance will determine which of these become more widely grown.

Looking Ahead

Several promising new varieties of red lentil are in the multiplication stage. The main focus is on improving yield performance so that we can remain competitive in the red lentil business.





CDC GREENLAND



CDC IMPROVE



CDC MAXIM



CDC PERIDOT



CDC REDBOW



CDC REDCLIFF



CDC ROSEBUD



CDC VICEROY



CDC REDCOAT

New Pea Varieties for 2014

Market Class: YELLOW PEAS

In the Market

CDC Meadow has been the most widely grown field pea cultivar in Saskatchewan since 2012 with CDC Golden in second place, according to data from the SCIC. CDC Meadow has also been one of the top varieties in Alberta, Manitoba, and the northern United States (U.S.). It has been popular with growers due to its consistently high yield, lodging resistance, competitiveness with weeds, and nice seed type. The next most widely grown yellow pea varieties in Saskatchewan in 2013 were CDC Bronco, CDC Treasure, Delta, and Agassiz.

New Varieties

Certified seed of CDC Saffron should become available in 2014; it has good yield (107% of CDC

Golden in the south and 113% of CDC Golden in the northern region) and medium-large smooth, round seeds. Certified seed of CDC Hornet became available in 2013; it has good yield (100% of CDC Golden in the south and 105% in the north) with good lodging resistance and medium maturity. Certified seed of CDC Treasure was available for the first time in 2013; it has good yield (97% of CDC Golden in the south and 109% in the north) with good lodging resistance and early maturity. Certified seed of CDC Centennial (large seed size) and CDC Prosper (small seed size) is also available in 2014.

Looking Ahead

Breeder seed of CDC Amarillo (2462-30) was released for the first time in 2012. CDC Amarillo has had strong yield performance in Saskatchewan regional trials over the past three years with a mean yield of 111% of CDC Golden in the

south and 125% of CDC Golden in the north. CDC Amarillo is relatively tall with one of the best lodging resistance ratings among pea varieties in Western Canada. Two new high yielding yellow pea varieties under consideration are CDC 2847-21 and CDC 2950-19.

Market Class: GREEN PEAS

In the Market

For the seventh year in a row, CDC Striker was the most widely grown green pea variety in Saskatchewan. It has been popular with growers due to its consistently high yield, lodging resistance, and smooth round durable seeds, which have excellent bleaching resistance and are preferred in the market. CDC Patrick was the second most widely grown green pea variety in Saskatchewan in 2013. On average, it is higher yielding than CDC Striker and CDC Sage, while maintaining good seed quality. CDC



CDC MEADOW Widely grown



CDC SAFFRON Up and coming, now at "registered" seed status



CDC AMARILLO Up and coming, now at "foundation" seed status



CDC 2847-21 Potential 2015 release



CDC 2950-19 Potential 2015 release



CDC STRIKER Widely grown



CDC RAEZER Up and coming, now at "registered" seed status



CDC LIMERICK Up and coming, now at "foundation" seed status



CDC 2472-2 2014 release

Patrick generally performs better in somewhat drier seasons compared to wetter seasons. CDC Sage was the third most widely grown green pea variety in Saskatchewan; it has a smaller seed size than CDC Striker, but with nice quality as well. Cooper and SW Sergeant were the next most widely grown green pea varieties in Saskatchewan in 2013.

CDC Tetris is an "Espace type" variety with blocky seed shape which has specific demand in China for snack food markets. Certified seed of CDC Tetris first became available in 2013. CDC Pluto is a green pea variety with small round seeds, good bleaching resistance, and intense green colour which should fit well into rehydration and canning markets. Certified seed of CDC Pluto should become available in 2014.

New Varieties

Certified seed of CDC Raezer should become available in 2014 or 2015; it has good yield in the northern



CDC MOSAIC Certified seed stage



CDC 3012-1LT Potential 2015 release

regions, with powdery mildew resistance and nice seed type similar to CDC Striker. Breeder seed of CDC Limerick was released for the first time in 2012. CDC Limerick has had strong yield performance in Saskatchewan regional trials over the past three years with a mean yield of 105% for CDC Golden in the south and 110% in the north. CDC Limerick has nice seed traits, but with a greater protein concentration than other green or yellow pea varieties. This may provide an advantage in fractionation markets.

Looking Ahead

CDC Greenwater (CDC 2472-4) is likely the highest yielding green pea variety in Western Canada at present. It is relatively tall with good lodging resistance and somewhat late maturity, similar to Cooper and CDC Limerick. Seed size is slightly smaller than CDC Striker. Breeder seed of CDC 2472-4 will be released for the first time in 2014.

GET AHEAD AND STAY AHEAD

PEKKO R2

MAKE YOUR MOVE EARLY WITH PEKKO R2 SOYBEANS

Blast out of the ground fast with Elite's Pekko R2 soybeans from BrettYoung, and stay ahead of the pack with industry leading performance. BrettYoung and Elite® brand soybeans bring a dynamic edge to Western Canadian soybean growers with varieties tailored to the specific needs of farmers.

Pekko R2 is one of the earliest maturing Genuity® Roundup Ready 2 Yield® soybean varieties on the market. It takes off early, displays high pod set and finishes strong. Choose Pekko R2 for impressive, reliable yields.

In the end, it all comes down to performance and BrettYoung brings a new standard of excellence to the field.



brettyoung.ca • 800-665-5015



**CHEERING FOR
JON IN 2014**

JON MONTGOMERY

2010 Olympic Gold Medalist – Skeleton

2008 World Championship Silver Medalist



BrettYoung™

BrettYoung™ is a trademark of BrettYoung Seeds Limited. Elite® is a registered trademark of La Coop fédérée. Always follow grain marketing and all other stewardship practices and pesticide label directions. Details of these requirements can be found in the Trait Stewardship Responsibilities Notice to Farmers printed in this publication. Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup® brand agricultural herbicides will kill crops that are not glyphosate tolerant. Genuity®, Genuity and Design®, Genuity Icons, Roundup®, Roundup Ready®, and Roundup Ready 2 Yield® are trademarks of Monsanto Technology LLC used under license. 13028 10.13

Specialty Market Classes: DUN, MAPLE, & FORAGE PEA

In The Market

CDC Rocket and CDC Acer are the dominant maple pea varieties in Saskatchewan. CDC Rocket fits better in the northern part of the province due to its earlier maturity than CDC Acer, which fits better in the south.

CDC Tucker, CDC Leroy, and CDC Horizon are forage pea varieties with high biomass yield, powdery mildew resistance, good lodging resistance and semileafless leaf type. These varieties produce on average 4-5 tonnes per acre of forage dry matter, similar to that of forage barley, but with greater protein concentration.

New Varieties

CDC Mosaic is a maple pea variety which has similar seed type to CDC Acer but with improved lodging resistance. Certified seed of CDC Mosaic should come available in 2014.

Breeder seed of the dun pea variety CDC Dakota was first released in 2010. It was one of the top yielders in the Saskatchewan regional trial in 2010-2013. The dun type would typically be dehulled and sold in human consumption markets in India. Certified seed of CDC Dakota should become available in 2014.

Looking Ahead

CDC 3012-1LT is a new maple pea variety which has similar seed type to CDC Rocket but with improved yield. Breeder seed is expected to be released for the first time in 2015. Two new red cotyledon pea varieties were released in 2013, so keep an eye out for this new market class in the years ahead.

New Chickpea Varieties for 2014

The major objectives of the chickpea breeding program at the CDC are high yield potential with acceptable seed quality characteristics, and reduced production risk through improved resistance to ascochyta blight, early maturity, and plant characteristics for better crop management. Introgression of the imidazolinone (IMI) herbicide tolerance into new breeding lines is in full swing. In the next few years, we should see more IMI-tolerant chickpeas available. We continue to explore genomic and molecular techniques for use in selection program whenever feasible.

In the Market

In the past several years CDC Frontier and Amit continued to be the dominating kabuli varieties for the seeded acres, followed by smaller acres of CDC Leader, CDC Orion, CDC Luna, and CDC Alma. Over the past two years we have had relatively warm weather until September, allowing the chickpea crop to mature in time in most areas. In 2014, it is anticipated ample supply of CDC Leader and CDC Orion. Both varieties are kabuli type, medium to large seeded (>9 mm diameter) with good yield and slightly earlier maturing than CDC Frontier.

A limited amount of seed for a desi cultivar CDC Consul (formerly known as 603-3) was released to select growers in 2013. CDC Consul has a light tan seed coat colour, which is one of the desirable visual seed characteristics of desi type. The long-term (6-year) yield average of CDC Consul is 110% of the check cultivar (Amit) on both Brown and Dark Brown Soil zones. Seed size of CDC Consul on average is

300 g/1000 seeds with a long-term ascochyta score of 4.0. CDC Consul has a medium-late maturity range similar to CDC Vanguard.

Growers are strongly advised that an initial fungicide application is needed for all chickpea varieties at the seedling to pre-flowering stage, in order to limit early ascochyta spore development and spread. Growers are required to monitor their fields diligently for disease and spray if necessary. At the CDC chickpea breeding program, we only sprayed fungicide twice for ascochyta control in all of our nurseries. Timing for the first spray is very critical. It is recommended that chickpea is planted on stubble, especially in wet years. It is also important to avoid heavy clay soil that retains moisture, and avoid lower lying or poorly drained fields.

Looking Ahead

In 2014 breeder seed of a new kabuli variety, 1041-3, will be available to select seed growers. 1041-3 has high yield potential on both Brown and Dark Brown soil zones, comparable to CDC Leader and CDC Frontier. It has fair resistance to ascochyta blight with a long-term score of 4.7 on a 0-9 scale (0 being immune/no symptom and 9 being plants completely blighted). The average seed weight of 1041-3 is 425g/1000 seeds (9-10 mm diameter). On average, 1041-3 matured a few days earlier than the check variety Amit.

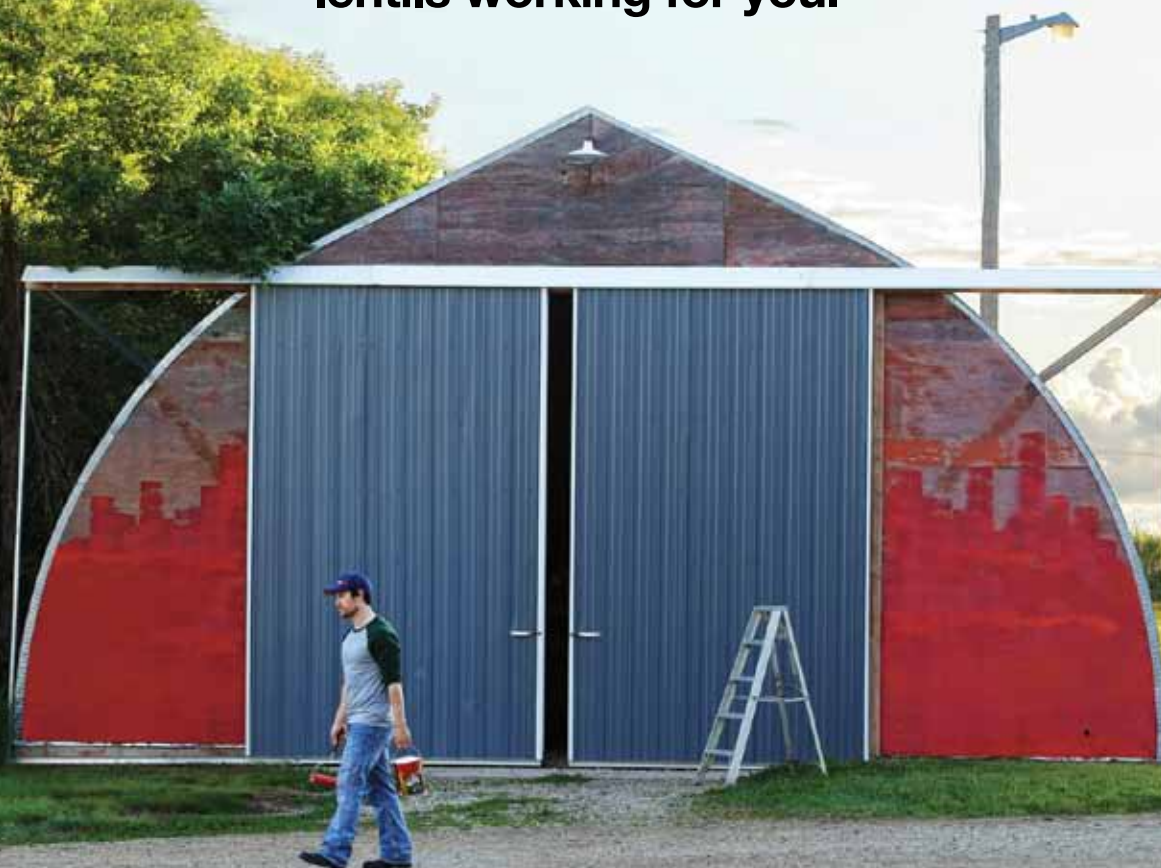


CDC 1041-3 2012 crop



Clearfield®
Production System for Lentils

**You don't do things halfway.
Get the complete system for
lentils working for you.**



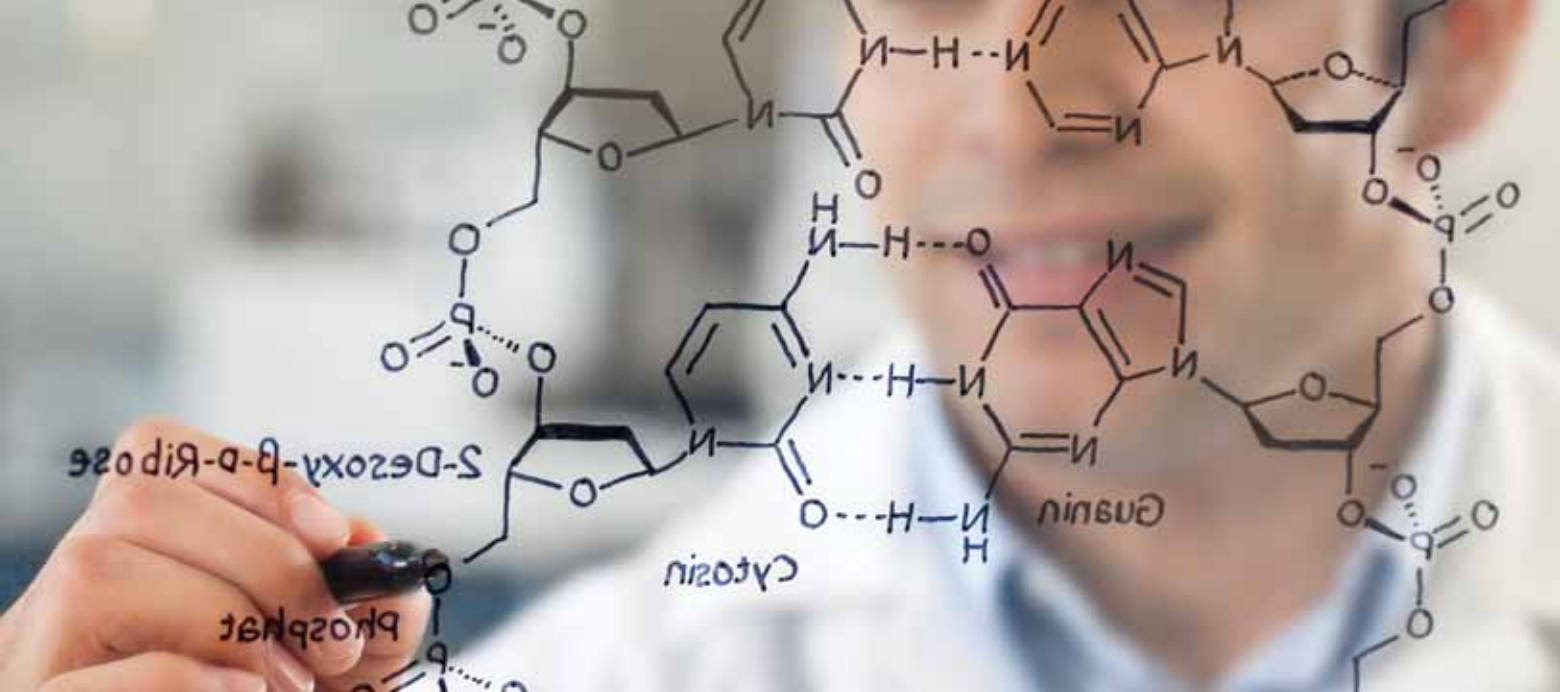
If settling for second best isn't your style, the **Clearfield** Production System for lentils was made for you. It's by far the best way to grow lentils. With high performing red and green lentil varieties and an unrivalled portfolio of crop protection offerings, it's designed to maximize your lentils' quality and yield potential. But the only way to take full advantage of all its benefits is by using the whole system. So why sell yourself short? See what the complete system can do for you at agsolutions.ca/clearfieldlentils or contact **AgSolutions®** Customer Care at 1-877-371-BASF (2273).

 **BASF**

The Chemical Company

Always read and follow label directions.

AgSolutions is a registered trade-mark of BASF Corporation; Clearfield and the unique Clearfield symbol are registered trade-marks of BASF Agrochemical Products B.V.; all used with permission by BASF Canada Inc. © 2013 BASF Canada Inc.



Breeding Superstar Pulses

SPG-funded genome sequencing research will accelerate pulse variety improvement

by Noelle Chorney

Thirteen years have passed since the completion of the first plant genome sequence, of the plant *arabidopsis thaliana*. Since then, genomics has become key to crop development around the world. Major crops such as corn and soybeans have since been sequenced, and large seed companies have become more efficient in developing new varieties as a result.

Now the two largest pulse crops will be included in that list, as Saskatchewan Pulse Growers (SPG) has funded genome sequencing projects for lentils and field peas. Sequenced genomes are an effective tool in improving varieties. This work will play a vital role in helping pulse breeders like Tom Warkentin with the Crop Development Centre (CDC) develop pulse varieties that are competitive with other crops.

"To keep pulses attractive to growers, we need to improve varieties," Warkentin says. "We need to produce a high value product."

"SPG has been a strong funder

of pulse research and growers in Saskatchewan are good at growing them," says Warkentin. "They're leaders in the field, and personally invested in the research."

SPG also recently contributed funds for sequencing the chickpea genome using the locally developed variety CDC Frontier. The common bean genome was also recently sequenced in the United States (U.S.). Both of these genomes are substantially less complex than lentils or field peas — in fact, they are approximately $\frac{1}{8}$ the size — but having this work already completed is a benefit when kicking off similar work in peas and lentils says Kirstin Bett, researcher at the University of Saskatchewan's Department of Plant Sciences. "There is a lot of similarity among plants. We can go looking for useful genes in lentils based on information on those that exist in chickpeas, because they are very likely to be there. That can speed up our process."

Having access to the entire

genomes, however, will be even more useful. When the research team can identify the actual genes that are responsible for important traits, they can identify those genetic 'markers' and modernize some of the known markers. "Modern methods are way more efficient," Bett says.

Both the pea and lentil projects involve international partnerships. "The agreement among researchers is to share information," Bett says. "We don't want to overlap with anyone else's work. There's too much to do to not share it." The CDC is taking the lead on sequencing the lentil genome, but they are collaborating with other

Genome sequencing

research will

accelerate

variety improvement

in brief

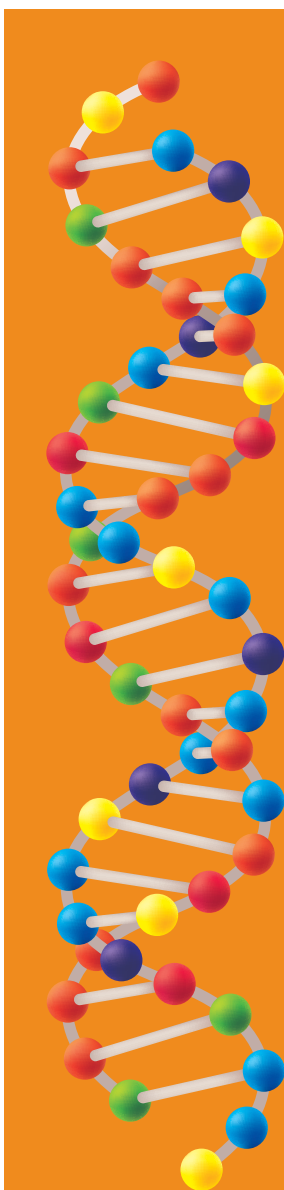
independent projects in Australia, the Czech Republic, Morocco, and Africa. All research teams have agreed to share their results and communicate about their areas of study to ensure that there is no duplication.

France Genomique, an organization that aims to optimize capabilities in the area of genomics and bioinformation, has taken the lead on the pea genome, and the CDC team is participating along with teams in the U.S., the United Kingdom, the Czech Republic, the Netherlands, and Australia. The teams are using different methods to sample the genome. When different sequencing methods are compared, the final results are more certain.

And while the research teams have a lot of work ahead of them, the benefits to growers will increase over time, says Bett. “Even a partially sequenced genome is useful.” Researchers will be able to use the sequenced genome as a tool to identify genes that influence important traits, such as disease resistance, plant architecture, and nutritional values of crops.

They will also be able to access important traits from worldwide plant populations, while “weeding out” the traits that are undesirable in the Canadian climate. Indian varieties of lentils, for example, are not well-adapted to the long daylight hours in Saskatchewan summers, but if the gene or genes that influence that trait can be identified, then other useful traits may still be accessed in those plant populations.

“If you’re blindly making crosses, there’s a higher likelihood of an undesirable outcome,” Warkentin says. “We only have so much time and space in the field. If we can enrich what goes into the field, we have a better chance to make better varieties. It allows you to ‘throw away the junk’ before you start. You’re increasing your odds of finding something that works. We can’t make the field component

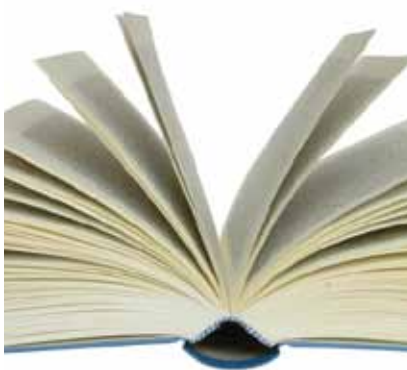


DNA Basics

DNA is a complex molecule that contains all of the instructions for life. Long strings of DNA bases (usually represented as letters, e.g., AATTGGTA) associate with other bases: T associates with A and G associates with C. Once associated, they form a spiral molecule known as a double helix. They continue to wind into more and more complex structures, ultimately forming chromosomes.

A “genome” refers to an organism’s complete collection of genetic information, which includes the DNA of all genes as well as non-coding sequences (DNA sequences that do not relate to specific genes). For some organisms, the DNA in their genome may consist of as few as a couple of hundred thousand base pairs. In higher organisms, such as crop plant species, this may vary from a small genome such as the cucumber at 243 million base pairs to a monster such as bread wheat with 18 billion base pairs. Lentils and peas fall into the crops containing larger genomes. Both are comprised of sets of seven chromosomes with approximately 4 billion DNA base pairs.

Pea and lentil genomes contain a similar number of genes to chickpea and common bean genomes, but they contain many more non-coding sequences (thought to relate to a plant’s adaptability), making the genomes eight times larger overall.



If the lentil genome were instructions stored in a book:

- The book (genome) would contain seven chapters (chromosomes);
- Each chapter would contain approximately 570 million pairs of letters (A,C,G,T) stored as pairs;
- The book would fit into a cell nucleus the size of a pinpoint;
- Two copies of the book (all seven chapters) would be contained in most cells of a lentil plant and contain all the genes necessary to produce a lentil plant.

bigger; we just need to make what we have more efficient.”

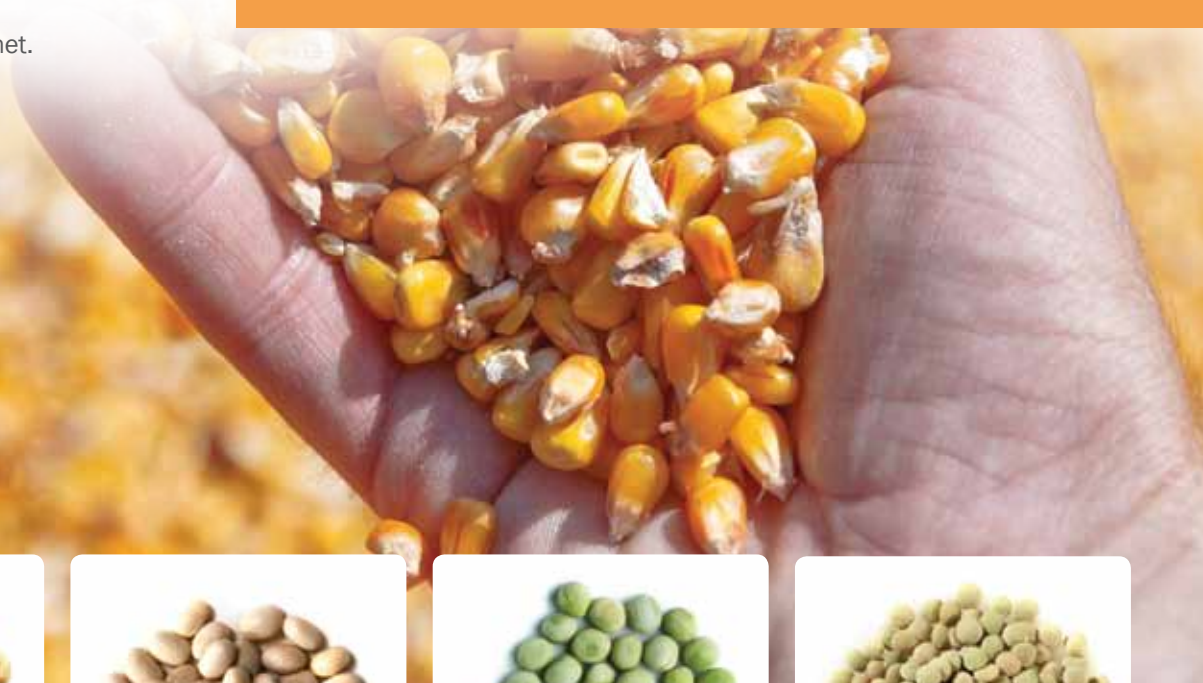
“This is the groundwork that will feed into the breeding program,” Bett says. “It will make the breeding program more efficient. The genetic gain from one variety to the next will be greater, a larger leap of improvement from one generation to the next. That will keep us in the game with the larger crops.”

bio Noelle Chorney is the owner of Tall Order Communications. She can be reached at tallorder@sasktel.net.

Corn: A Case Study

The corn genome is a mixture of some 32,000 genes, crammed into just ten chromosomes with a total of two billion bases of DNA. The genome sequence was published in the journal *Science* on November 20, 2009. In total the project cost \$29.5 million and was funded by the National Science Foundation and the U.S. departments of agriculture and energy. It also involved more than 150 U.S. scientists.

The resulting work has been added to substantially through large multinational plant breeding companies such as Monsanto, DuPont/Pioneer, and Syngenta. The use of this work and subsequent discoveries drives plant breeding in these crops today and has resulted in an increase in yield performance progress.



Work has already been done in sequencing chickpea and bean genomes, and having this work complete will help with the similar work being done for pea and lentil.

Trait Stewardship Responsibilities Notice to Farmers

Monsanto Company is a member of Excellence Through Stewardship® (ETS). Monsanto products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Monsanto's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. This product has been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from this product can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship. **ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS.**

Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup® brand agricultural herbicides will kill crops that are not tolerant to glyphosate. Acceleron® seed treatment technology for corn is a combination of four separate individually-registered products, which together contain the active ingredients metalaxyl, trifloxystrobin, ipconazole, and clothianidin. Acceleron® seed treatment technology for canola is a combination of two separate individually-registered products, which together contain the active ingredients difenoconazole, metalaxyl (M and S isomers), fludioxonil, thiamethoxam, and

bacillus subtilis. Acceleron and Design®, Acceleron®, DEKALB and Design®, DEKALB®, Genuity and Design®, Genuity Icons, Genuity®, RIB Complete and Design®, RIB Complete®, Roundup Ready 2 Technology and Design®, Roundup Ready 2 Yield®, Roundup Ready®, Roundup Transorb®, Roundup WeatherMAX®, Roundup®, SmartStax and Design®, SmartStax®, Transorb®, TruFlex™, VT Double PRO®, YieldGard VT Rootworm/RR2®, YieldGard Corn Borer and Design and YieldGard VT Triple® are trademarks of Monsanto Technology LLC. Used under license. LibertyLink® and the Water Droplet Design are trademarks of Bayer. Used under license. Herculex® is a registered trademark of Dow AgroSciences LLC. Used under license. Respect the Refuge and Design is a registered trademark of the Canadian Seed Trade Association. Used under license. ©2013 Monsanto Canada Inc.



Before opening a bag of seed, be sure to read, understand and accept the stewardship requirements, including applicable refuge requirements for insect resistance management, for the biotechnology traits expressed in the seed as set forth in the Monsanto Technology Stewardship Agreement that you sign. By opening and using a bag of seed, you are reaffirming your obligation to comply with the most recent stewardship requirements.



THE EXPERTS IN SHIPPING PULSES WORLDWIDE

CFT CORPORATION

2020 Winston Park Drive, Suite 300
Oakville, Ontario L6H 6X7 Canada

Telephone: (905) 829-5829
Toll Free: (800) 561-8238

Fax: (905) 829-5219
Email: cft@cftcorp.com

www.cftcorp.com



PEAS | LENTILS | CANARY SEED | FEED GRAINS | MUSTARD | FLAX

because it all begins
with a seed.



Helping you plant for the market.

Certified planting seeds available



Let it grow.

We help you grow! Call us.

North Battleford 306.445.4022 | Saskatoon 306.657.3455
wginfo@toepfer.com | www.westerngrain.com



We are stronger together.

Buyers and Processors of:

- Yellow, Green, Maple & Marrowfat Peas
- Lentils (all types)
- Chickpeas (all types)
- Flax
- Canary Seed
- Sunflowers – MB
- Millet – MB
- Beans (all types) – MB

Saskatchewan
(306) 873-3777
1(877) 975-4474 (toll free)

Manitoba
1(800) 785-7857 (toll free)

www.legumexwalker.com



2014 Seed Guide

LENTIL VARIETIES

CDC Asterix, CDC Invincible CL, CDC Imigreen CL, CDC Impress CL, CDC Impower CL, CDC Greenland, CDC Imax CL, CDC Dazil CL, CDC Redcliff, CDC Ruby, CDC SB-2 (Iberina™), CDC Peridot CL, Indian Head

PEA VARIETIES

CDC Saffron

CEREAL VARIETIES

Pasteur, Strongfield, Sadash

CHICKPEA VARIETY

CDC Leader, Common Chickpea

FLAX VARIETY

CDC Sorrel (Reconstituted)

CANARY VARIETY

Common Canary Seed

Book your seed for spring 2014
with Simpson Seeds Inc. today!



For any seed inquiries, please contact Trevor or Jamie
Call 306-693-9402 or visit us online at simpsonseeds.com

What a Great Year for Pulse Crops!

Reflections on the success of last growing season and what we can learn from it

by **Lyndsey Smith**

This year will go down in history for many as one of the best. Big yields and good quality didn't just happen to a few. Unlike anything Western Canada has ever seen before, each crop type and most areas experienced average-to-above-average production with decent quality.

The 2013 growing season wasn't without its challenges. Spring was late in some areas and the excess water hangover of 2012 and 2011 still weighed heavy. But Mother Nature managed to straighten herself out, and save for some nasty hail storms and perhaps a bit too cool of a stretch in August, the year finished very well for many.

When asked what surprised them the most this year, growers from all over the province mentioned just about every crop type — from stellar durum yield and quality to peas that yielded far more than expected. And while this is all very good news (let's ignore the price slide in the face of big production figures for now), what can we learn from 2013 so that, should the stars align again, growers can duplicate this bumper crop?

What Growers Say

From a grower's perspective, even a great year like this one had its share of anomalies and could-have-beens. Jim Hale farms near Lancer, SK, and while the pea yields on his farm were impressive, that was despite late-season pod shatter like he'd never experienced before.

"I'm still not sure why the pods split, but the weather turned really hot and dry quickly, and the pod shatter was extremely high in some spots," Hale says. Even still, his best fields went about 50 bushels per acre (bu/ac), and even the more poor fields hit the 35-40 bu/ac mark.

All that being said, on the topic of setting yourself up for success, Hale says there are likely two factors well within growers' control that simply must be top of mind: weed control ahead of seeding (with a careful eye on re-cropping restrictions) and establishing the ideal plant population. Even in a dry year, he says, a relatively high seeding rate has been a cost-effective way to reach the maximum yield potential.

"My pulse weed control plan spans two or three years," Hale says. Kochia is a particular

concern for Hale's area and it's simply not a weed he can manage in the pulse crop. He uses crop rotation not just for disease and marketing management, but for the opportunity to take out some of the tougher-to-kill weeds well ahead of pulses.

Likewise, Ron Edgar, who farms at Wolseley, SK, says that fall weed control and a pre-seed burn-off are key factors in setting up the pulse crop for success. On his 4,200-acre farm, disease suppression and control are also top of mind. Edgar treats all his pulse seed, inoculates, and applies one fungicide application. "We also harvest as soon as possible to maintain quality," he says.

It's interesting to note that the factors that go into a bumper crop — long-term weed control, background fertility levels, and ample plants per square foot — are also just good management practices overall. Still, taking the time to make sure these agronomic areas are managed well in advance of a great growing season means the pulse crop has all it needs to make the most of its genetic potential when the weather cooperates.

**Reflections on the
success of last growing
season and what we can
learn from it**

Plan Ahead

Dale Risula, Provincial Pulse Specialist with Saskatchewan Ministry of Agriculture, says that field selection and using the best seed you can get your hands on are the basis of a good pulse crop. This may seem overly simplistic, but there are some areas of the province that didn't receive much late-season rainfall and that could create herbicide carryover risks that could snip yield potential without any chance of remedy. What's more, the crop's relative non-competitiveness means that weed control largely has to happen in the years prior, meaning medium-term planning is essential to success.

Once you've got that sorted, Risula says a seed test is a must, as the big three diseases, anthracnose, ascochyta, and botrytis, will be detected by the test.

Depending on the results, a seed treatment may not be enough to counter the disease and an alternative seed source may be the best option. Test early, especially if you suspect disease levels may be high, as this gives you the most time to find a new seed source if necessary.

And speaking of seed, it pays to spend a little time looking over the seed variety listings each year. Saskatchewan's Ministry of Agriculture publishes the *Varieties of Grain Crops* each year (you can find it online at http://www.agriculture.gov.sk.ca/Varieties_Grain_Crops). This is a great resource if you're looking to double check the suitability of your varieties to your area, find something different, or research the latest new varieties out there.

Begin As If You Intend to Go On

You can't create something from nothing, and even though a crop can sometimes really delight and amaze in its ability to fill out and do its best, starting out with too-few plants hinders yield from the beginning. Starting with an ideal or targeted plant stand count and calculating the proper seeding rate is the best way to get there. Take into consideration 1,000 kernel weight, disease level, seeding conditions (moisture, soil temperature, and the forecast), and equipment when making the final decision. The seeds per linear foot will depend on your row spacing, but aim for 10-14 plants per square foot for lentils, about

eight for field pea and around four or so for chickpeas.

Any discussion on pulse agronomics would be remiss to not mention inoculants. Though this is very common practice (as it should be), Risula notes that growers should ensure they use the matching strain for pulse type and double check the safety between the inoculant and other seed treatments. The helpful, living bacteria in the inoculant are just that, bacteria, and can be killed off if products are handled and applied incorrectly or in the wrong order.



The Importance Of Phosphorus

At seeding, remember that pulses are incredibly dependent on a robust root system to reach full yield potential, and seed-placed phosphorus plays an integral role in achieving that. At the same time, safe rates of seed-placed fertilizer aren't high and vary depending on crop type (peas are more sensitive than lentils and chickpeas).

"Phosphorus cycles through several forms in the soil, and not all are readily available," Risula says. "It's important to keep background levels up, even if it

may be difficult to see a yield response from applied phosphorus every year."

But just because you don't see a big yield response doesn't mean you should skimp on phosphorus. In years where the weather co-operates, the soil will mineralize more phosphorus, making it available for the crop – but only if the background levels are there. Phosphorus management, like it or not, is a long-term endeavour.

Disease Diagnostics

Risula says that monitoring for disease goes without saying, and most seasoned pulse growers pencil in one or more fungicide applications depending on the area, crop and weather conditions. But Risula adds that in low-disease pressure situations it's also important to make sure what you're seeing is in fact early disease symptoms and not something else.

"There are abiotic and biotic stresses, like wind damage, insect feeding and even hail damage that can mimic disease symptoms," Risula says. When thinking about disease and disease control, don't just look at the forecast, look at the conditions the field has been growing under to date. "It's very important to identify the real problem and not panic," he says.

bio Lyndsey Smith is the editor of RealAgriculture.com, home of the Pulse School (among other things). Check it out at www.pulseschool.com.





Lunching with Canadian Lentils

How we promote Canadian Lentils domestically and measure our impact

by SPG

When SPG attends tradeshows and conferences promoting Canadian Lentils, our purpose is to increase domestic consumption of lentils, by building relationships with people who have a great deal of influence over food choices of consumers, known as “key influencers.” These key influencers include female bloggers, dietitians, chefs and culinary experts, and more.

For example, in October we attended Blissdom Canada, a conference bringing together more than 400 of the most influential female bloggers from across the country. Our second year taking part

in this event, this year we wanted to do something different that would allow us to stand out from the crowd. So we hosted a lentils-themed lunch and partnered with celebrity food blogger Julie Van Rosendaal to host it. (Julie develops some of our lentils recipes and is also the author of the *Spilling the Beans* cookbook,

amongst other things.)

We branded the lunch with Canadian lentils signage and banners promoting the lentils app, the *Lentils For Every Season* digital recipe magazine, and the website. We also provided attendees with lentil soup mix and recipe ideas to take home.



Event attendees play a trivia game during the Canadian Lentils lunch, testing their knowledge of the Canadian lentil industry.

in brief

How we promote
Canadian Lentils
domestically and
measure our impact

In a follow-up event survey, attendees were asked which event sponsor (of 31, including big names such as McDonalds, Tim Hortons, and Chevrolet) stood out and why. Here were some comments event management received:

- “Canadian Lentils was brilliant! Served us a tasty lunch when we were all starving for something savoury and healthy. Sent us away with recipes and product. I’ve been mentioning lentils for DAYS!”
- “The Lentils were amazing!!!!!!”
- “Lentils, awesome everything.”
- “Lentils – Omg! That lunch! Phenomenal.”
- “The Lentils lunch was unbelievable.”
- “Lentils – who knew? I am totally going to start eating more lentils.”
- “The meal Canadian Lentils provided was the most delicious thing I ate all weekend. I LOVE my recipe book from last year and think it’s fabulous that they are promoting something that is both healthy and inexpensive (not to mention Canadian). Yah Lentils!”
- “I say the Lentils because the lunch was INCREDIBLE. I will always remember that lunch.”
- “Canadian Lentils helped Blissdom redeem themselves in the food department with the lunch. Mmmmm hot lentil split pea soup and curried lentils. I was in vegetarian heaven. And then I got to take a huge jar of lentils back home with me. You got yourself a happy vegetarian that day.”
- “Lentils – I LOVE good food.”



Canadian Lentils was the lunch sponsor for Blissdom Canada 2013 last October in Mississauga, ON. Attendees enjoyed a healthy and delicious lentil-based lunch and learned all about the Canadian Lentils brand.

During the lunch Julie played a game with attendees, testing their knowledge of lentils and Canadian agriculture, to ensure they understood where the lentils came from and how they are supporting local agriculture and economy when they eat Canadian lentils. The winners took home copies of Julie's

Spilling the Beans cookbook.

After we attend these conferences, we measure the impact we had on attendees to determine whether or not the return on investment was impactful. Since Blissdom is a conference for women who make a living through social media, we measured our online

impact afterwards. In this case, we had great reach. Our presence at the show generated 159 Tweets mentioning Canadian Lentils, which reached an estimated 376,487 Twitter accounts, and made an estimated 576,014 impressions (the number of times these Tweets mentioning Canadian Lentils showed

Give Your **Pulses** an Early Season **Pick Me Up.**

PULSE PRIMER™ is a seed nutrient dressing that has been specifically formulated to deliver an early season supply of essential nutrients that promote root and shoot development in pulses.

PULSE PRIMER includes calcium in the formulation to initiate and nourish the nodulation process.

Give your crop a boost in the spring when conditions threaten early season growth – treat your seed with **PULSE PRIMER** for a Stronger Start and Faster Finish!



Omex Agriculture Inc. is a market leader in the research, development and manufacturing of the most innovative line of plant nutrition products for the agriculture and horticulture sectors. Pulse Primer™ is a trademark of Omex Agriculture Inc.

**Stronger start.
Faster finish.**

up on Twitter). Canadian Lentils was also mentioned in several blog posts following the show.

Also following these events we will follow up with contacts that we made to strengthen our community of Canadian Lentils ambassadors in the Canadian female bloggers community.

For more information about Canadian Lentils and for recipe ideas, visit www.lentils.ca.

Several female bloggers in attendance Tweeted about Canadian Lentils after the conference. Here are a couple samples of what they wrote.



Come to Our Regional Meetings!

For sessions of market outlook, farm business management, agronomy, and more ...

We are bringing the meetings to you! SPG and the Saskatchewan Ministry of Agriculture are teaming up once again this year to bring pulse production meetings to four locations in pulse growing regions of the province.

To register in advance call the Agriculture Knowledge Centre at 1-866-457-2377. Registration is also available at the door. Registration costs are \$20/person.

North Battleford – Monday, February 3, 2014 *Dekker Centre/623 Carlton Trail, North Battleford*

8:30 a.m.	Registration Opens
9:00 a.m.	Opening Remarks and Introductions
9:15 a.m.	Local Pulse Research/ <i>Laryssa Grenkow, Western Applied Research Corporation</i>
9:45 a.m.	New Pulse Crop Varieties for Your Area/ <i>Tom Warkentin and Kirstin Bett, Crop Development Centre, University of Saskatchewan</i>
10:30 p.m.	Refreshment and Networking Break
11:00 a.m.	Faba Bean/Soybean Production/ <i>Greg Stamp, Stamp's Select Seed, Dale Risula, Saskatchewan Ministry of Agriculture</i>
11:30 a.m.	Herbicide Resistant Weeds/ <i>Sherrilyn Phelps, Saskatchewan Ministry of Agriculture</i>
12:00 p.m.	Lunch
1:00 p.m.	Saskatchewan Pulse Growers Update
1:30 p.m.	Farm CEO Version 2.0/ <i>Brent VanKoughnet, Agri Skills Inc.</i>
2:10 p.m.	Refreshment and Networking Break
2:40 p.m.	Market Outlook/ <i>Larry Weber, Weber Commodities</i>
3:40 p.m.	Closing Remarks

Rosetown – Tuesday, February 4, 2014 *Civic Centre/1005 Main Street, Rosetown*

8:30 a.m.	Registration Opens
9:00 a.m.	Opening Remarks and Introductions
9:15 a.m.	Local Pulse Research/ <i>Yantai Gan, Semiarid Prairie Agricultural Research Centre</i>
9:45 a.m.	New Pulse Crop Varieties for Your Area/ <i>Tom Warkentin and Kirstin Bett, Crop Development Centre, University of Saskatchewan</i>
10:30 p.m.	Refreshment and Networking Break
11:00 a.m.	Soybean Production/ <i>Garry Hnatowich, Irrigation Crop Diversification Corporation (ICDC)</i>
11:30 a.m.	Herbicide Resistant Weeds/ <i>Rory Cranston, Saskatchewan Ministry of Agriculture</i>
12:00 p.m.	Lunch
1:00 p.m.	Saskatchewan Pulse Growers Update
1:30 p.m.	Farm CEO Version 2.0/ <i>Brent VanKoughnet, Agri Skills Inc.</i>
2:10 p.m.	Refreshment and Networking Break
2:40 p.m.	Market Outlook/ <i>Larry Weber, Weber Commodities</i>
3:40 p.m.	Closing Remarks

Swift Current – Wednesday, February 5, 2014 Stockade Building/Exhibition Grounds, Swift Current

8:30 a.m.	Registration Opens
9:00 a.m.	Opening Remarks and Introductions
9:15 a.m.	Local Pulse Research/Yantai Gan, <i>Semiarid Prairie Agricultural Research Centre</i>
9:45 a.m.	New Pulse Crop Varieties for Your Area/Tom Warkentin and Kirstin Bett, <i>Crop Development Centre, University of Saskatchewan</i>
10:30 p.m.	Refreshment and Networking Break
11:00 a.m.	Soybean Production/Garry Hnatowich, <i>Irrigation Crop Diversification Corporation (ICDC)</i>
11:30 a.m.	Herbicide Resistant Weeds/Shannon Chant, <i>Saskatchewan Ministry of Agriculture</i>
12:00 p.m.	Lunch
1:00 p.m.	Saskatchewan Pulse Growers Update
1:30 p.m.	Farm CEO Version 2.0/Brent VanKoughnet, <i>Agri Skills Inc.</i>
2:10 p.m.	Refreshment and Networking Break
2:40 p.m.	Market Outlook/Larry Weber, <i>Weber Commodities</i>
3:40 p.m.	Closing Remarks

Regina – Thursday, February 6, 2014 Evraz Place/1700 Elphinstone Street, Regina

8:30 a.m.	Registration Opens
9:00 a.m.	Opening Remarks and Introductions
9:15 a.m.	Local Pulse Research/Yantai Gan, <i>Semiarid Prairie Agricultural Research Centre</i>
9:45 a.m.	New Pulse Crop Varieties for Your Area/Tom Warkentin and Kirstin Bett, <i>Crop Development Centre, University of Saskatchewan</i>
10:30 p.m.	Refreshment and Networking Break
11:00 a.m.	Soybean Production/Garry Hnatowich, <i>Irrigation Crop Diversification Corporation (ICDC)</i>
11:30 a.m.	Herbicide Resistant Weeds/Shannon Friesen/Danielle Stephens/ Brent Flaten, <i>Saskatchewan Ministry of Agriculture</i>
12:00 p.m.	Lunch
1:00 p.m.	Saskatchewan Pulse Growers Update
1:30 p.m.	Farm CEO Version 2.0/Brent VanKoughnet, <i>Agri Skills Inc.</i>
2:10 p.m.	Refreshment and Networking Break
2:40 p.m.	Market Outlook/Larry Weber, <i>Weber Commodities</i>
3:40 p.m.	Closing Remarks

Keynote speakers



Greg Stamp

Greg Stamp is a partner in Stamp's Select Seeds, a 3,000-acre irrigated seed farm and seed retail located at Enchant, AB. Greg's main role on the farm includes seed sales, agronomy, customer support, data management, prescription maps, irrigation management, and of course machine operation.

Greg is the past president of the Southern Applied Research Association, and a Director with the Alberta Barley Commission. He has a diploma in Ag. Technology from Lethbridge College and a Bachelor's of Science degree from the University of Lethbridge.

Greg lives at Vauxhall, AB, with his wife and children.

For more information visit www.stampseeds.com or follow Greg on Twitter @stampgreg and @stampseeds.



Larry Weber

Larry Weber is the President of Weber Commodities based in Saskatoon, SK. He operates a commodity analysis company with growers, the trade, and importers as clients. Larry started his career with Pioneer Grain Company in 1981, now James Richardson International, and held various positions with the most senior being Director of Transportation in 1989.

Larry's last position was with the Winnipeg Commodity Exchange (WCE) where he was Director of Operations. Larry was also involved as the WCE's representative on the Western Grain Marketing Panel in 1995 and the representative on the Canadian Grain Commission's Grain Standards Committee. He was actively involved with grain policy with Agriculture Canada and served on committees representing transportation and marketing policy. In 1996 Larry was an integral part of the Central American Regional Commodity Exchange Project (CARCEP) to establish trading houses in Costa Rica, Guatemala, Honduras, Nicaragua, and El Salvador. Larry's market letter is widely distributed throughout all of Canada.



Brent VanKoughnet

Brent VanKoughnet is Owner/Manager of Agri Skills Inc. a company that specializes in agricultural innovation and human resource development services. Agri Skills presently provides market development consulting services, custom skills development and training programs, and field scale precision trial services to several major manufacturers and retailers in Western Canada and the northern United States. He has recently completed training in the area of mediation and conflict resolution.

Brent's career has included Grain Merchant, Louis Dreyfus, Agricultural Marketing Manager, Canada, Norwest Labs, Winnipeg Manitoba; Agri-Business Instructor and Marketing Coordinator, Assiniboine Community College, Brandon Manitoba, Agronomist, Special Projects and Marketing, Redfern Farm Services a multi outlet independent fertilizer dealership in Rivers Manitoba. He completed a Master's degree in Agricultural Economics from the University of Manitoba in 1992 and manages the family farm in Carman.

Brent brings a unique combination of practical experience and insight from the perspectives of a grower, a marketer, a consultant, a mediator, and a facilitator.



Garry Hnatowich

Garry is the Research Agronomist for the Irrigation Crop Diversification Corp., based at the Canada-Saskatchewan Irrigation Development Centre in Outlook, SK. His research is focused on variety development/evaluation and agronomy. Garry began his career as a Research Associate at the University of Manitoba. He moved to Saskatchewan in 1984 and found his home. Garry has more than 30 years of research experience across Western Canada, the United States, and beyond North America. During this time he held senior research agronomist/scientist/manager positions with several national and international companies. He has authored or co-authored more than two dozen refereed journal articles, contributed to numerous extension publications, and participated in more than 600 extension events.



**IF THERE'S A
MORE ADVANCED
PULSE FUNGICIDE
OUT THERE, ONLY
THE GOVERNMENT
KNOWS ABOUT IT.**



priaxor® ds

It's the pulse fungicide "they" don't want you to know about. New Priaxor® DS fungicide is incredibly advanced chemistry that packs an impressive range of benefits. It provides more consistent, broad-spectrum disease control through its multiple modes of action, and it delivers the unique benefits* of **AgCelence®**. In short, that means greener leaves and stronger stems for higher yield potential**. Visit agsolutions.ca/priaxords to find out everything insiders already know.

 **BASF**
The Chemical Company

***AgCelence** benefits refer to products that contain the active ingredient pyraclostrobin. **All comparisons are to untreated, unless otherwise stated.

Always read and follow label directions.

AgSolutions is a registered trade-mark of BASF Corporation; and **AgCelence**, and **PRIAXOR** are registered trade-marks of BASF SE, all used with permission by BASF Canada Inc. **PRIAXOR DS** should be used in a preventative disease control program. © 2014 BASF Canada Inc.



Changing The Way We Look At Pulse Quality

Pulse Canada is working to identify the quality needs of suppliers and consumers of pulses and pulse food products

by **Tanya Der**

The evolution of quality standards

The definition of pulse quality is evolving. As pulses expand from being an ingredient in soup, salad, or curry to being used in other everyday foods like pasta, bread, and breakfast cereals, the definition of quality is being pushed to new levels. The quality for a pulse used in soup might be defined differently than a pulse used for a snack or breakfast cereal.

Quality measures are also becoming more complex. Pulses are most often consumed whole, but they can also be ground, pre-cooked, flaked, fractioned, or pureed to make convenient and quick-cooking ingredients. Pulse fractions like flours, fibres, proteins, and starches can all differ in purity and performance expectations. This diversification of products

and ingredients has brought with it different ways to look at quality.

Pulse ingredients are gaining traction in the food industry. New product launches containing pulse ingredients have increased ten-fold in North America over the last decade, from 160 new pulse products in 2002 to 1,750 in 2012. Not only are pulses making their way into a diverse range of new applications, the number of companies and manufacturers introducing pulses to their product lines is also increasing. Food processing industries in countries like India, China, and the Middle East are including pulse ingredients in noodles, biscuits, and salty snacks. Examples of North American food product launches include products such as Rice & Bean Triscuits by Mondelez, Fibre One Cereal by General Mills, and the LARABAR by Small Planet Foods.

The importance of pulse quality attributes

Quality specifications for pulses as raw commodities are very different than the specifications for pulses as food ingredients. Traditionally the commodity trade has been focused on physical quality attributes like size, shape, and colour. The integrity of the seed and the degree of wrinkling are also important in commodity markets. When pulses are processed in commercial food manufacturing environments, different parameters

Pulse Canada is working to identify the quality needs of suppliers and consumers of pulses and pulse food products

become important for the efficient operation of the plant, including cooking time, rate of water hydration, and gelling properties.

Food companies that are required to label nutritional value want the guarantee that they are getting superior quality in food ingredients and a consistent value for nutrients like protein, fibre, vitamins, and minerals. From a food manufacturing perspective, the product developer needs assurance that the ingredients will function consistently to their processing standards. For instance, they will want to ensure that the pulse ingredient can properly thicken, absorb water, emulsify, foam, or dissolve within their process formulation to achieve the desired body, texture, and taste in the final food product. As consumers expect the same quality every time they buy items like bread, pasta noodles, or crispy crackers, parameters like starch damage, flour granulation, and particle size suddenly become factors that help food manufacturers deliver the quality consumers expect.

How is the pulse industry adapting to these changing markets?

The evolving market requirements for quality standards pose both opportunities and challenges for the pulse industry. To capture the opportunities in the processed food sector, the pulse industry will need to create the capacity to consistently supply pulse products that satisfy the quality requirements of the end user.

“We are witnessing an emergence of pulse ingredients that are distinct in both form and performance,” says Tanya Der, Manager of Food Innovation & Marketing with Pulse Canada. “There will be a need for ways to measure the quality of these ingredients.”

The pulse industry is currently working to ensure a) consistency in assessing pulse quality attributes, and b) that the methods for quality evaluation are available and

accessible to organizations and labs around the world. Because the makeup of pulses is different than other grains, traditional tests used to characterize quality in the wheat or soy industry may not necessarily work for pulses. For instance, measuring the water absorption capacity of pea flour using the method intended for soy flour could cause issues with gelation and skew readings. Therefore, modifications of existing methods are needed to accurately analyze pulse ingredients. Modifications could include stating a specific granulation in the sample prep or adjusting water addition and tempering conditions.

Harmonizing pulse quality evaluation methods

CICILS, the international pulse association, is currently undertaking a project to assess the potential for developing uniform standards for pulse quality test methods. The food and ingredient industry will be surveyed to determine the level of interest by the end user of pulse ingredients in establishing international standards for characterization of pulses. The survey, which was completed in 2013, aimed to determine: which pulse ingredients are being tested; what quality measurements and methodologies are being used (or being requested of their suppliers); if there any challenges to quality testing; and if companies benefit from the standardization of methods specific for pulses.

An international strategy for harmonization of methods to determine pulse quality is important to the industry as it will ensure marketing messages on pulse quality parameters are consistent and comparable between products.

There are various associations focused on standardization of analytical methods. One association is the American Association of Cereal Chemists (AACC) Technical Methods Committees, a group



that originated in 1922 when food scientists found the need to standardize methods in the wheat industry. In 2002, the AACC expanded to include a methods committee specific for pulses and legumes. This Pulses and Grain Legumes Technical Committee develops new methods and is a respected source for methodology in the international food industry. Recently approved methods include “determining cooking time for pulses” and “determining firmness of cooked pulses.” Cook time and seed firmness are important quality characteristics that are of interest to researchers for assessing cook quality and particularly for processing or canning whole pulses. The committee agreed that “water hydration capacity” (WHC) should be the next method of focus. WHC analysis will be important as pulse flours and fractions become more prominent as a functional food ingredient.

The pulse industry has a broad range of diverse markets it caters to. Defining the tolerances requires an agreement on how that tolerance will be evaluated so that both buyer and seller can be sure that what is being traded meets everyone’s needs. Harmonized testing and availability of standard methods will be integral for the industry in accommodating the needs of these ever growing and changing markets.

bio Tanya Der is the Manager of Food Innovation & Marketing for Pulse Canada. She can be reached at tder@pulsecanada.com.



How Above Average Yields Affect Your Taxes

How to manage your 2013/14 taxes while still capitalizing on peak market prices

by Amy Wright

Optimism is in the air as we move into 2014. With many growers realizing above-average yields in 2013, there is potential to realize significant returns when the commodities are sold.

Whether you farm as a sole-proprietor, as a partnership, or in a corporation, higher returns will impact the amount of tax you pay, which ultimately will affect the cash you have available to pay down debt, reinvest in the business, or to fund retirement. The key is to manage the impact of the tax so that it is as low as possible while still allowing you to capitalize on peak market prices. This of course gives you the greatest return for your hard work.

Important considerations for this tax year

In years of above-average returns, growers can sometimes forget to speak to their tax advisor in advance,

which often leads to surprises toward the end of the year. It is important to realize that tax planning cannot be done retroactively. The following considerations outline common issues that many growers may not be aware of:

- *You can't transfer deferred grain tickets* – Grain sales that are deferred into the next tax year cannot be transferred to a corporation or a partnership. Once you have realized the sale of your inventory and settled it with the buyer, the income to be received at some point will remain personal income, even if you have since transferred your farm operation to a corporation or a partnership.
- *Excess cash impairs the use of the capital gains exemption and tax-free transfers* – Higher returns may create a build-up of excess cash within a farming corporation, especially where the corporation

doesn't have significant debt. Where the farming corporation accumulates too much cash, the shares will no longer qualify for the capital gains exemption or be eligible for tax-free transfers to children, which could result in a significant tax liability on a transfer of the shares or upon death. Please note the ability to transfer shares to a surviving spouse without tax consequences is unaffected if there is a build-up of excess cash within the farming corporation.

- *Salaries paid to spouses and children are subject to scrutiny* –

**How to manage your
2013/14 taxes while
still capitalizing on peak
market prices**

Many tax advisors recommend you pay salaries to spouses and children to help minimize taxes. However, the Canada Revenue Agency may question the salaries paid, and if they are deemed unreasonable based on the value of the work the recipient does for the farm operation, the expense will be denied. However the income will remain in the hands of the person who received it. This results in double taxation.

Planning Opportunities

Most tax considerations, including the ones outlined above, can be planned for in advance, resulting in a much more favourable tax position at the end of the year. This requires you, the grower, to be forward thinking and to alert your tax advisor of your situation and plans for the upcoming year. The following are a few considerations to start the discussion:

- *Consider incorporating your farm early in 2014* – If you were considering incorporating anyway, and it is the right time for your operation, do it sooner rather than later. This may give you some added flexibility to market your grain and plan your tax affairs. Incorporating will also allow you to share income with a spouse or adult children via dividends, which are not subject to the reasonableness scrutiny that is attributable to wages. It is always a good idea to consult a tax advisor prior to incorporating to determine your options.

- *Consider incorporating your farm partnership early in 2014* – Similar to the above, if the time is right to incorporate your farm partnership, you should consider capitalizing on the higher inventory values. The sale of the partnership interest to the corporation creates an amount owing to the individuals that can be paid out of the corporation over

time. The total amount owing is determined based on the total value of all assets held by the partnership, including inventory. If yields are higher than average it is feasible that your partnership may be worth more than it ever has been because of high inventory values. This means more funds available to be paid to you from the corporation in the future.

- *Consider a holding company to manage cash on hand* – Growers that operate in a farming corporation may consider setting up a holding corporation and structuring their operation to move extra cash out of the farming company and into the holding corporation. This helps preserve the ability for the shares of the farming corporation to qualify for a possible use of the capital gains exemption or a tax-free transfer to a child in future years. It also protects the excess cash generated by the



business from unsecured creditors, and helps build future wealth while still taking advantage of the tax deferral that corporations can offer.


- *Consider debt reduction strategies to reduce excess cash* – Where possible, the early repayment of debt can help reduce cash on hand, in turn saving interest costs and improving cash flow on an annual basis. Shareholder loan repayments can also be considered to help reduce excess cash.

Shareholder loans can be repaid on a tax-free basis to the shareholder. In the event funds are needed at the corporate level at a future point in time, the individual shareholder can lend the money back to the corporation on a tax-free basis.

Many people consider income tax a cost of doing business and do not realize there are opportunities available to reduce the cost of income tax, aside from deferring grain sales and pre-purchasing

inputs. As with all other expenses, managing the income tax cost will increase the remaining after-tax cash available from your business. As a pulse grower, you work very hard for your money, and we would like to see you end up with as much after-tax cash available as possible.

bio Amy Wright, CA, is a Senior Manager of Tax Services for EY. She can be reached at Amy.Wright@ca.ey.com.



Bayer

**Trilex[®]
EverGol[™]**

A strong pulse.

At the heart of plant health is a quality seed treatment. Trilex[®] EverGol[™] seed treatment for pulses provides exceptional disease control and superior crop establishment.

Not only does Trilex EverGol provide exceptional protection from diseases like rhizoctonia and ascochyta, it also promotes overall plant health. The result is a higher performing root system, increased biomass and faster emergence, even when facing minimal disease pressure.

To learn more about Trilex EverGol, visit BayerCropScience.ca/Trilex

Bayer CropScience

BayerCropScience.ca/Trilex or 1 888-283-6847
or contact your Bayer CropScience representative.
Always read and follow label directions. EverGol[™] and Trilex[®] are trademarks of the Bayer Group. Bayer CropScience is a member of CropLife Canada.

C-61-11/13-BCS10161859-E

OnPoint

SPG's 2012/13 Annual Report available online

Visit our website www.saskpulse.com to view the 2012/13 Annual Report.



SPG/BASF Pulse Promoter of the Year Award

Each year, the BASF Pulse Promoter Award is presented to an individual who has made an extraordinary contribution to the development of the pulse industry in one or more of these areas: production, marketing, promotion, research, extension, processing, management, or innovation.



This year SPG collected nominations until November 29, and SPG's Board chose a winner from our list of worthy candidates in early December.

In early January we announced the 2013 Pulse Promoter of the year is Tom Warkentin, Plant Breeder at the Crop Development Centre at the University of Saskatchewan as well as a professor in the Department



The Canadian Lentils' Lentils for Every Season recipebook won a CAMA award in the category of "online magazine or publication." Sign up to receive your own copy every three months, at www.saskpulse.com

of Plant Sciences. (For more information on Tom, flip to Pg. 6.)

Tom will receive a \$1,000 gift card from WestJet, courtesy of BASF.

CAMA Awards 2013



SPG's 2011-12 Annual Report won a CAMA award in the "annual reports" category.

Congratulations to SPG's Communications & Market Promotion team, who were honoured with two awards at the Canadian Agri-Marketing Association (CAMA) Awards on November 21 in Quebec City. This national

competition includes some of the biggest agricultural communications firms in Canada and SPG was pleased to be able to take part.

SPG's entries won in the following categories:

*Annual Reports 2011-12 – SPG's Planning for Growth report
Online magazine/publication – Lentils for Every Season digital recipe magazine*

SPG's Board of Directors Elections – Update

Five people have been named to the Saskatchewan Pulse Growers (SPG) Board of Directors by acclamation following the close of nominations on Friday, September 27. The five candidates who were nominated include returning SPG Directors Corey Loessin from Radisson, Lee Moats from Riceton, Morgan Nunweiler from Rosetown, and Tim Wiens from Herschel, as well as newcomer Jean Harrington from Glenside.

"SPG is very pleased to be able to fill all positions on the Board, including the addition of one new Director," says Carl Potts, SPG Executive Director, "Mr. Nunweiler and Mr. Moats have served on the

SPG Board for three years, while Mr. Wiens and Mr. Loessin have served since late 2012. We also look forward to welcoming Ms. Harrington as a new Director."

The Directors will begin their terms following the SPG Annual General Meeting (AGM) taking place on Monday, January 13, 2014 at TCU Place as part of the new multi-day conference CropSphere.

UPCOMING EVENTS

CropSphere 2014

January 14&15/Saskatoon

CropSphere 2014, Saskatchewan's newest agricultural conference, will take place January 14 & 15, in Saskatoon. SPG has partnered with the Saskatchewan Canola Development Commission (SaskCanola), the Saskatchewan Oat Development Commission, the Saskatchewan Flax Development Commission (SaskFlax), the Saskatchewan Wheat Development Commission, and the Saskatchewan Barley Development Commission to bring growers a first-class event, which will take the place of previous separate meetings hosted by these groups during CPW. CropSphere will be held at TCU Place Arts & Convention Centre in downtown Saskatoon.

With sessions on production, marketing, and general agricultural issues, growers will have all the information they need to head into a new crop year. Continuing Education Units (CEUs) will also be available for Certified Crops Advisers.

For more information visit www.cropsphere.com.

FarmTech 2014

January 28-30/Edmonton

FarmTech 2014 will be running from January 28-30 at the Edmonton EXPO Centre at Northlands in Edmonton, AB. This year's sessions will include topics involving technology, environmental issues,

agrology, and farm management practices. Speakers will include researchers, agronomists, farmers, and other professionals. Keynote addresses from Michael "Pinball" Clemons, astronaut Chris Hadfield, Dick Wittman, and Lutz Goedde.

For more information, including agenda and session details, visit www.farmtechconference.com.

SPG Regional Meetings 2014

We are bringing the meetings to you! SPG and the Saskatchewan Ministry of Agriculture are teaming up once again this year to bring pulse production meetings to four locations in pulse growing regions of the province. Visit our website for full agendas for each location.

- February 3: North Battleford/ Dekker Centre
- February 4: Rosetown/ Civic Centre
- February 5: Swift Current/ Stockade Building
- February 6: Regina/ Evraz Place

All meetings begin at 8:30 AM. Registration is \$20 and available at the door, or by calling the Agriculture Knowledge Centre at 1-866-457-2377.

CropConnect Conference

February 18-19, 2014/Winnipeg

A partnership of five commodity groups has been formed to host the first ever CropConnect Conference in Manitoba in 2014.

Manitoba Canola Growers Association, Manitoba Corn Growers Association, Manitoba Flax Growers Association, Manitoba Pulse Growers Association, and the National Sunflower Association of Canada make up the host committee for the CropConnect Conference. CropConnect will run for two days offering a wide range of speakers, access to crop specific information, a tradeshow, and a banquet. The event will also include the five participating organization's annual general meetings.

For more information, visit www.manitobapulse.ca.



Canada's favourite sportscasters, Jay Onrait and Dan O'Toole, will be helping kick off CropSphere 2014, as the keynote speakers at the CropSphere Opening Reception sponsored by BASF Canada.

CSCA Convention 2014

July 6-8, 2014/Saskatoon

The 2014 Pulse and Special Crops Convention is returning to Saskatoon, July 6-8! Join the CSCA and business partners from around the globe to make business connections, and to gain valuable insight into research, trends and market opportunities for your company. Early-bird registration opens April 1, 2014.

For more information please visit the Canadian Special Crops Association website at www.specialcrops.mb.ca/convention/.

GINGER PUMPKIN LOAF

INGREDIENTS

¼ cup	(60 mL) split red lentils
2 ½ cups	(625 mL) all-purpose flour
1 cup	(250 mL) packed brown sugar
1 tsp	(5 mL) cinnamon
1 tsp	(5 mL) ground ginger
2 tsp	(10 mL) baking powder
1 tsp	(5 mL) baking soda
¼ tsp	(1 mL) salt
1-14 oz	(398 mL) can pumpkin purée
½ cup	(125 mL) canola oil
½ cup	(125 mL) buttermilk
3	large eggs
2 tsp	(10 mL) freshly grated ginger
1 tsp	(5 mL) vanilla
½ cup	(125 mL) chopped walnuts or pecans, or green pumpkin seeds

STEP BY STEP

1. Preheat oven to 350°F. In a small saucepan, cover lentils with water by an inch or two and bring to a boil. Simmer for 15-20 minutes, or until very soft. Drain.
2. In a large bowl, stir together the flour, brown sugar, cinnamon, ginger, baking powder, baking soda and salt. In the bowl of a food processor combine the lentils, pumpkin, oil, buttermilk, eggs, ginger and vanilla; pulse until well-blended and smooth.
3. Add the wet ingredients to the dry along with the nuts and stir just until combined. Scrape into a greased large (9x5-inch) loaf pan and bake for 1 hour, until the top is domed and springy to the touch. Cool on a wire rack.

Servings: 16 slices



Visit Lentils.ca for more recipe ideas



ROASTED APPLE & LENTIL TART WITH CRANBERRIES

INGREDIENTS

1 pkg	(400 g) puff pastry (defrosted)
1	egg, whisked
2 Tbsp	(30 mL) bread crumbs
1	medium sized gala apple, cored and thinly sliced (skin on)
½ cup	(125 mL) cooked green lentils
¼ cup	(60 mL) dried cranberries (soaked in hot water for 10 min & drained)
¼ cup	(60 mL) chopped pecans
1 Tbsp	(15 mL) brown sugar
½ tsp	(3 mL) ground cinnamon
1 Tbsp	(15 mL) salted butter, melted
2 Tbsp	(30 mL) honey (to drizzle on baked tarts before serving)

STEP BY STEP

1. Preheat the oven to 450°F. Cut the puff pastry in half. Roll each half to a thickness of 1/8" on a lightly floured surface and place on a baking sheet that is covered in foil.
2. Lightly brush egg around the 1" border of each rolled pastry. Sprinkle 1 Tbsp of bread crumbs evenly in the limits of the border of each of the tarts (the crumbs will absorb some of the moisture from the topping, preventing a soggy base).
3. In a medium bowl, combine the apples, lentils, cranberries, pecans, brown sugar, and cinnamon. Add the melted butter and mix.
4. Divide the mixture evenly between the two tarts (evenly dispersing the topping). Bake the tarts for approximately 25 minutes.
5. Drizzle with honey, cut, and enjoy!

Servings: 10-12 small tarts or 1 large



It's Unanimous!

Emerge victorious with nitrogen
and phosphate.

The formidable one-two punch in TagTeam® continues to knock out the competition. It beat single-action (nitrogen-only) competitors in farmer-conducted, head-to-head trials by a whopping 8%.* TagTeam boosts nitrogen and phosphate uptake to remain the world's only undisputed *MultiAction*® champion.

Give your crops twice the fight right from the start with TagTeam.

TagTeam®

MultiAction®
Legume Fertility

Novozymes is the world leader in bioinnovation. Together with customers across a broad array of industries we create tomorrow's industrial biosolutions, improving our customers' business and the use of our planet's resources. Read more at www.novozymes.com.

www.useTagTeam.ca 1-888-744-5662

novozymes® 
Rethink Tomorrow

Smart farmers read the fine print.

*On average, TagTeam pea and lentil inoculants outperformed competitor single-action (nitrogen-fixing only) inoculants by 8% in western Canadian independent large-plot research trials. That's an average increase of 2.7 bushels per acre. Summary of 30 lentil and 85 pea trials conducted between 1997 and 2012.

© TagTeam and *MultiAction* are registered trademarks of Novozymes A/S. All rights reserved. 13017 08.13