

PulsePoint

October 2011

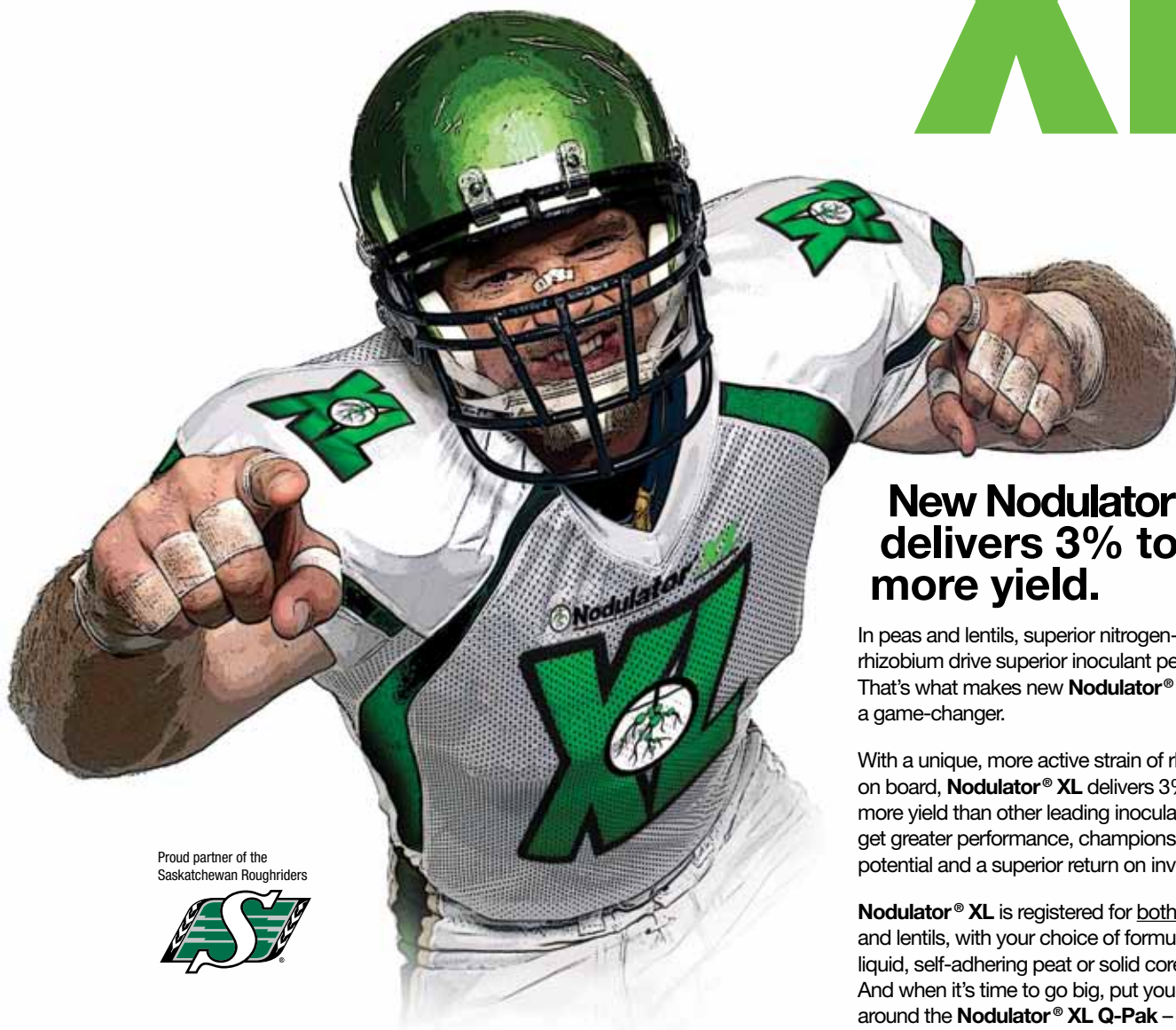
Smart Marketing: **Maximize Your Pulse Potential**

Canadian publication Mail Agreement 40021625



SASKATCHEWAN
pulse
Growers

Now, yields come in **XL**



Proud partner of the
Saskatchewan Roughriders

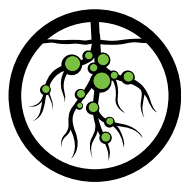


New Nodulator® XL delivers 3% to 8% more yield.

In peas and lentils, superior nitrogen-fixing rhizobium drive superior inoculant performance. That's what makes new **Nodulator® XL** such a game-changer.

With a unique, more active strain of rhizobium on board, **Nodulator® XL** delivers 3% to 8% more yield than other leading inoculants. You get greater performance, championship yield potential and a superior return on investment.

Nodulator® XL is registered for both peas and lentils, with your choice of formulations: liquid, self-adhering peat or solid core granule. And when it's time to go big, put your arms around the **Nodulator® XL Q-Pak** – a 364 kg (800 lb.) soft-sided tote that's easier to handle.



Nodulator® XL

XLerated performance. Accelerated yield.™

Inoculants



BECKER UNDERWOOD
Inventing the Future

www.nodulatorxl.com

Nodulator® and XLerated Performance. Accelerated Yield.™ are trademarks or registered trademark used under license by Becker Underwood Canada Ltd. The Becker Underwood logo is a trademark of Becker Underwood, Inc. and is licensed to Becker Underwood Canada Ltd.



Chair's Message

Business as Usual at SPG

by **Lee Moats**, Board Chair

Change, it is said, is a constant and we have certainly had our share of it at Saskatchewan Pulse Growers (SPG) this summer. After 16 years as our Executive Director, Garth Patterson decided to take on a new challenge and took a position with the Western Grains Research Foundation (WGRF) as their Executive Director. This was a big change for Garth and an even bigger one for SPG. During Garth's time as our Executive Director the pulse industry has gone from two million acres of peas and lentils annually in the mid-1990s to approximately four to five million acres of peas and lentils per year today. The organization itself has grown from a staff of two to a group of 14 dedicated professionals. On behalf of the SPG staff and the Board of Directors, I'd like to thank Garth for all of his hard work in building a vibrant, profitable pulse industry in Saskatchewan and all over the world. We wish Garth well in his new role at WGRF.

Although no easy task, the process of hiring Garth's replacement is underway. We expect this search will take some time, as it's vital that we find the right person for the role. In the interim we are very pleased to have David Sim onboard as acting Executive Director. Dave brings with him a wealth of experience in the agriculture industry, and will ensure that our various programs continue to run smoothly while we search for a permanent replacement for Garth.

This past summer also saw a change on the Board of Directors

with the resignation of Murray Purcell, our former Chair. Murray put a great deal of time in as a Director and then as Chair of SPG over his more than four and a half years on the Board. Murray's absence will be filled with the election process this fall, as will two other vacant positions. Nominations are now open and interested parties can find the nomination form on Pg. 36, or visit our website for more details on the election process.

However, many things remain the same at SPG. The Board of Directors is committed to ensuring that the SPG levy is spent wisely to generate value back to producers. The SPG staff continue to work hard to develop, deliver and manage programs that generate value for the industry. SPG continues to work closely with its many partners, including the Crop Development Centre (CDC). We are very proud to support this very successful pulse breeding program, and the value it provides to our producers.

Lee Moats



Dave Sim joined SPG as acting Executive Director in July.

Glyphosate:

As Saskatchewan producers we all know how important trade is to our farms, and the glyphosate issues this year made us all acutely aware of how susceptible we are to international regulations. Our most recent news on this issue is that applications for changing the residue limit have been made and we hope that new limits will be in place for the 2012 crop.

Driving market demand:

The agricultural industry in Western Canada is poised for one of the most significant challenges in a generation with changes at the Canadian Wheat Board. One frequently asked question is how pulse crop acreages will fare in this changing environment. While there are many variables to consider, the price of pulse crops relative to alternative crops is a key driver of acreage. Price is dependent on demand, and generating demand through market development is more important than ever if we are going to maintain and expand pulse acreage in Western Canada. Developing new market demand is one of SPG's main focuses and we continue to work hard to increase demand for pulse crops at home and abroad.

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:

Amanda Ryan

Contributors:

Daryl Beswitherick, Gino Castonguay, Crystal Chan, G. Chandrashekar, Brian Clancey, Jonathon Driedger, Amy Jo Ehman, Elaine Froese, Allison Fletcher, Lyle Hewitt, Courtney Hirota, Jeff Jackson, Tiffany Mayer, Ray McVicar, Lee Moats, Chuck Penner, Raelene Regier, Dr. Alfred Slinkard, Dr. Bert Vandenberg,

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:

Stobbe Photography

Smart Marketing

It's harvest time once again, and that means all the excitement that comes with it: market volatility, price shifts, speculation about supply and demand, and more. In this month's issue, we try to help arm you with the tools and information you need to make the best marketing decisions this season. Also, registration is now open for Pulse Days 2012 – flip to Pg. 32 for an advanced look at this year's agenda. We hope to see you there!

In This Issue

- 1 *Chair's Message – Business as Usual at SPG*
- 3 *Determining the Value of Your Crop*
As we get a better sense of final production numbers and remaining 2010/11 crop supplies, it becomes easier to make marketing decisions.
- 6 *Marketing Plans Need Perspective*
Understanding your personal situation is critical to designing a marketing plan.
- 8 *Pulse Producers Named 2011 Outstanding Young Farmers*
The Saskatchewan-based Outstanding Young Farmers credit pea production for helping them grow high quality crops.
- 10 *India – Is there Room For Growth?*
India's 2010/11 estimates put pulse production at 18.1 million tonnes – an increase of 3.4 million tonnes from the previous year.
- 12 *Pulse Grading at the Canadian Grain Commission*
Understanding how pulse grading works will help you make informed decisions about marketing your crops.
- 15 *Celebrity Chefs*
From our kitchen to yours, celebrity chefs share their favourite pulse recipes.
- 16 *Today's Special: Prairie-Grown Pulses*
Saskatchewan Chef Jenni Willems finds creative, surprising and sometimes mischievous ways to include locally grown pulses in her cooking.
- 18 *Pulse Markets at Home and Abroad – A Look Ahead*
Our market analysts provide critical views on pulse markets locally and globally.
- 24 *"He Lived, Breathed And Loved The Saskatchewan Pulse Industry"*
A tribute to the late Don Tait.
- 26 *How Pulse Canada is Working For You*
Recent and ongoing initiatives aimed at benefitting and strengthening the pulse industry.
- 28 *Ten Interesting Facts about SPG Research*
Things you might not know about SPG research and development.
- 30 *Improving Saskatchewan-Grown Faba Beans*
SPG-funded research examines new varieties of faba beans that appeal internationally, even to people who suffer from favism.
- 32 *Pulse Days 2012 Preview*
A sneak peak at this year's event, January 9 & 10.
- 34 *Pulse Days 2012 Registration Form*
- 36 *SPG Board of Directors Nomination Form*
We are now accepting nominations for our Board of Directors.
- 37 *Working for You/Your Check-off Dollars at Work*
- 38 *On Point*
- 40 *CDC Breeding Update*

Determining the Value of Your Crop

by Jonathon Driedger

Harvest is not only an exciting time of year for producers, as they bring in the fruits of their labour, it's also a critical time for market analysts. There are many things that can cause prices to change on a day-to-day basis, but the long-term value of a crop is determined by the broader, underlying fundamentals, specifically the supply/demand balance.

As we approach the midway point of harvest we are starting to get a pretty good sense of what the final production numbers will be, as well as what the remaining 2010/11 crop supplies are. The importance of these two numbers is that, combined, they give us the

total supply of each crop for the 2011/12 marketing year, which tells us how much is available to be consumed and provides half of our supply/demand picture. When we look at the individual pulse markets over the coming year, the increasing clarity of this picture will help us make better and more informed marketing decisions for each crop individually.

In the case of peas, supplies are inadequate to meet historically normal levels of demand. The latest Statistics Canada report estimates 2011 prairie pea production is at 2.128 million tonnes, down 30% from last year (although good

harvest reports so far could see the yields revised upward). Final ending stocks for the 2010/11 crop year were also smaller than the previous year, at 535,000 tonnes. The combined total gives us a projected 2.663 million tonnes of total supply for the current marketing year, down 32% and the lowest since 2003/04 (see *Canadian Pea Total Supply* graph). This means that export demand will need to be reduced by more than a million tonnes from last year, as current supplies won't allow for greater shipments.

A decline in supplies isn't necessarily bullish to prices. Crops with flat or declining demand

As we get a better sense of final production numbers and remaining 2010/11 crop supplies, it becomes easier to make informed marketing decisions for individual crops.

It takes a lot of time to milk
over 400 cows.

So the Schoutens started to
'think outside the barn'.



Arnold and Elaine Schouten run one of Ontario's top producing dairy herds, milking over 400 Holstein cows daily. That's a lot of energy spent on a repetitive, time-consuming task. With the next generation now becoming involved, the Schoutens have invested in their future by purchasing 10 robotic milking systems, leaving their hands free to run the rest of their operation.

That's the kind of 'doing things a bit differently' that farming demands in order to stay competitive. And it's where Scotiabank can help, with innovative products and lending that can give you access to the funds you need, when you need them.

To learn more, contact your branch today or visit scotiabank.com/agriculturalservices

Agricultural Banking



can often navigate their way through periods of tight supply without pushing prices to substantially higher levels. But this will be more difficult in the case of peas. Not only has demand been strong in recent years, with our key destinations comprised overwhelmingly of the growing economies of India, China and Bangladesh, but our stocks are declining at the same time as exportable supplies out of the U.S., Europe and the Ukraine.

All these factors point to a pretty compelling case for yellow pea prices to remain firm throughout the year, and perhaps continue to work higher. Of course, growers also need to be diligent in managing risk

and protecting good profit margins. Making sales at current high prices may well be prudent for most farming operations, but growers do not need to rush to blow out their inventories in anticipation a sudden market collapse.

While the pea story is one of fundamental tightness, the exact opposite is true for lentils. Statistics Canada has projected lower lentil production in 2011 – down to 1.6 million tonnes – on account of smaller seeded area. But this won't be enough to offset the record-large overhang of 750,000 tonnes of old crop supply from last year, resulting in an enormous total supply at the start of the 2011 crop year (see

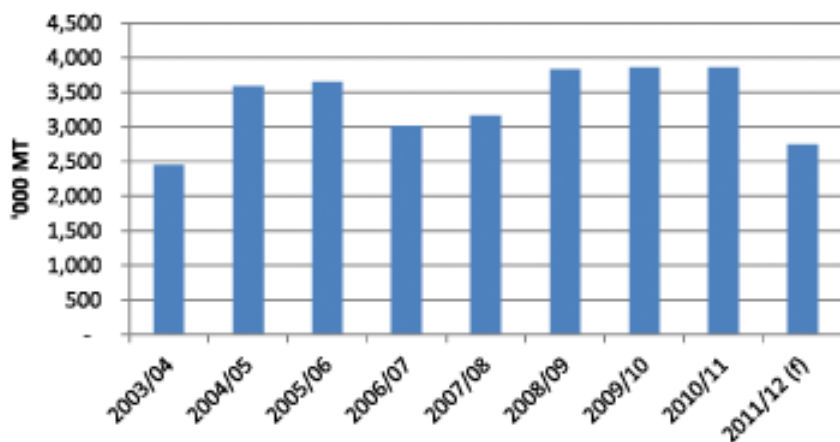
Canadian Lentil Total Supply graph).

One of the challenges in lentil marketing is that prices for the individual types can all be independent of each other. Much of the large old crop stocks consist of reds, primarily of lower quality, making this type most likely to continue lagging. High-quality large and small green lentils are in tighter supply, and should be better supported throughout the year. However, the entire complex reflects a different dynamic than that of peas, and therefore grower strategies should differ accordingly.

There are many factors that can and will impact the direction of crop prices overall, including the general economic and financial environment, sentiment from price strength or weakness in major crops like corn or wheat, foreign exchange rates and regulatory issues, just to name a few. At times these dynamics can overwhelm even positive fundamentals in individual markets. But you are more likely to make better marketing decisions when you have a sound understanding of the supply/demand balance of each crop in your overall portfolio mix.

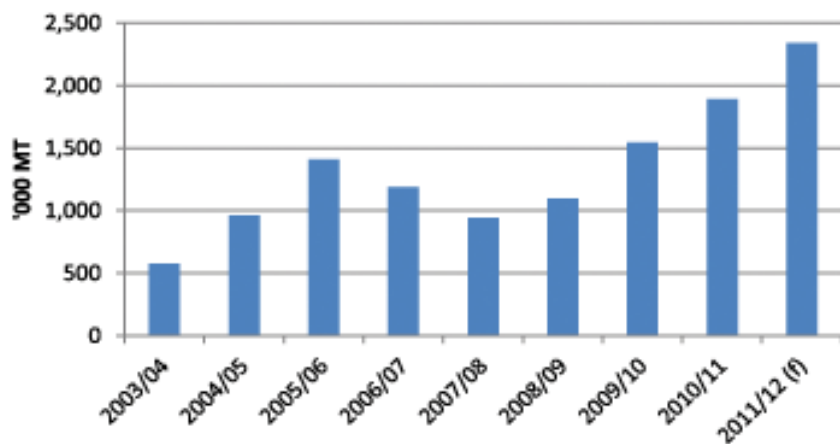
Jonathon Driedger is a Market Analyst at FarmLink Marketing Solutions. He can be reached at 877.376.5658 or jonathon.driedger@farmlinksolutions.ca.

Canadian Pea Total Supply



Source: FarmLink Marketing Solutions

Canadian Lentil Total Supply



Source: FarmLink Marketing Solutions

Marketing Plans Need Perspective

by **Chuck Penner**

I was recently doing some online research about the best breed of dog for our family. To my surprise, there are “breed selector” tools that allowed me to answer a bunch of questions and then showed me which type of dog was just right. I was also surprised to see that most of the questions weren’t about the dog; they were about me and my lifestyle.

It’s kind of the same situation when it comes to grain marketing plans. While some great tools such as cost-of-production calculators are available to help you set up a plan, understanding your own situation and needs is critical to making it work. Questions to ask yourself should include:

- Do you have enough cash in the bank to wait out the lows in the market?
- What are your monthly cash flow needs?
- How do you feel about volatility and risk?
- Can your operation still carry your land payments if prices (and revenue) drop by 25%?

- What best describes your interest in marketing – “can’t wait to look at the charts every day” or “please make it go away”?

At the same time, your view of the market is just as important as figuring out your needs. If you’re like most farmers, “bullish” would best describe your outlook; that’s only natural. And how you sell your crops is tied closely to your view of the market.

This article won’t review how to calculate cost of production, break-even prices or cash flow needs; there’s lots of help available from other sources to do that. Instead, here are some suggestions about how to look at markets this year and some pitfalls to avoid when setting up your plan.

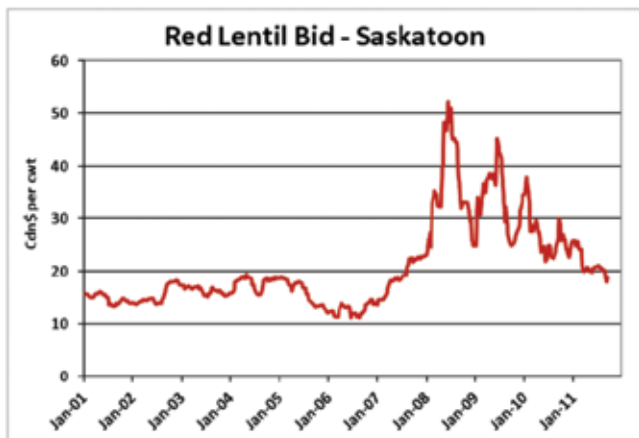
1) Recognize your market biases; we all have them. Some might say I’m mostly bearish – I prefer to think of it as “cautious,” especially when prices are high. I’ve found that most farmers (and traders) tend to be more bullish than bearish. While I love being around optimistic people, an

overly bullish bias can prevent you from recognizing danger signals that tell you to sell more aggressively. Also, be aware of the biases in the resources you use, whether they are news sources or advisors. Most people tend to ignore or screen out ideas that don’t fit with their own outlook/bias, so be careful.

2) Don’t overestimate your ability to predict the future. Most people agree that markets are highly unpredictable, but they still try to make predictions anyway. Aside from all the other variables – financial markets, other commodities, currencies, trade barriers – grain markets also have to deal with highly variable weather events, adding a large dose of randomness to the outlook. That’s why it’s better to watch for opportunities and warnings from all parts of the globe rather than try to forecast a particular price. Disciplined selling in increments is still the best strategy in unpredictable markets.

3) Use your long-term price memory as much as your short-term memory. It wasn’t long ago that red lentil prices were 40, 45 and 50 cents/pound – those prices stick in our memories. But where was the price just five years ago? In October 2006, red lentil bids were 14 cents. What price(s) are you using to set targets in your marketing plan? Or is it cost of production plus a bit of margin?

Understanding your personal situation and needs is critical to designing your best marketing plan.



Source: Saskatchewan Agriculture

4) Remember that prices are always cyclical. Some people (usually those selling commodity funds) will tell you that markets are in a new high-price era. That would be nice, but unfortunately history tells a different story. There has never been a time when grain prices have risen and then stayed near the highs for any length of time. Rather, the highs are always short-lived; that's why they're called "spikes." At the time of writing, the market is nervous about the size of U.S. crops, which could extend the highs a bit longer. Even so, the old saying that the best cure for high prices is high prices still holds true. This isn't a popular message, but it's a warning to sell more aggressively when prices are in their top third.

5) Nobody "has to" sell at harvest time. It's perplexing when someone says they were forced to sell at harvest because it's just not true; the marketing window is at least 18 months long. Sure, you can forward-price your crop to deliver during harvest; that can be a great strategy. Selling a truckload or two that won't fit in the bin is OK too, but dumping a big chunk at harvest will usually get you the lowest price of the year. Selling during harvest is one of the worst decisions you can make.

6) Use seasonal price charts. This point is partly related to the last one about periods of heavy deliveries.

For some crops, the seasonal lows actually happen just before harvest as farmers try to finish old crop sales and empty bins, but other factors, such as recurring import demand, can cause repeatable seasonal price patterns. Seasonal trends aren't foolproof – an abnormal weather year can cause prices to ignore the pattern – but they certainly improve the odds of success.



Source: LeftField Commodity Research

7) Don't be afraid to get some quality advice. Market advisors won't be right every time, but they can add valuable support for your plans. They have access to all kinds of tools and information and it's their job to pull together market data from around the world. If you have only a half-section of peas yielding 35 bushels/acre and an advisor helps you earn (or saves you from losing) just two bits a bushel, that's worth \$2,800.

These ideas are just a few things I've observed over the last 20 or so years in the business. Some might think I'm being overly pessimistic (I have my biases too) but hopefully these are useful reminders as you firm up your marketing plans for the 2011 crop, and the 2012 crop coming up soon.

bio

Chuck Penner operates LeftField Commodity Research out of Winnipeg, MB. He can be reached at info@leftfieldcr.com.



Pulse Producers Named 2011 Outstanding Young Farmers

by **Tiffany Mayer**

Franck Groeneweg can easily imagine what it must feel like to come in second at the Olympics.

He felt it two years ago when he and his wife Kari were nominated for Saskatchewan's Outstanding Young Farmers (OYF) award, but didn't capture the title.

"That was harder than we ever thought because you wonder, 'Well, what's wrong?' " Franck says. "We've compared it to the farming Olympics. Winning a silver or bronze medal is good, but for some reason, winning a silver just isn't as satisfying [as winning a gold]."

This year, though, the couple (who farm 9,060 acres of spring wheat, canary seed, canola and peas in

Edgeley, SK) knows what it's like to climb to the top of the podium. The dynamic farming duo were named the province's Outstanding Young Farmers in June.

"It's definitely a big honour," Kari says. "It's an honour just to be nominated but to have the title for 2011 is a really big honour."

OYF recognizes the accomplishments of farm operators aged 18 to 39, honouring them based on their environmental stewardship, financial and management practices, and overall progress in their careers, among other criteria.

The Groenewegs, both 34, demonstrated an aptitude in all these categories, with their Green Atlantic

Farms operation, which they've grown from 1,830 acres in 2002 to a current operation that includes owned, rented and custom-farmed land.

Though their largest crops are canola and wheat, the couple has the nitrogen-fixing abilities of peas to thank for helping them produce high-quality harvests.

"The soil is very mellow after peas," Franck says. "You can see the effect of peas on the land a few years down the road."

But the benefits don't stop there. Growing peas also allows the Groenewegs to see an increased protein in their wheat crop and a slight increase in their canola yields.

Franck and Kari Groeneweg, winners of the 2011 Outstanding Young Farmer award, farm 9,060 acres in Edgeley, SK.

The 2011 Outstanding Young Farmer winners credit pea production for helping them grow high-quality crops.

The effect of peas — and pulses, in general — can also be seen in Saskatchewan's history of OYF competitions. Program chair Barb Stefanyshyn-Cote said there is a long list of past winners growing pulses.

"I don't think you'd find anyone in Outstanding Young Farmers that isn't growing pulses," Stefanyshyn-Cote says. "The Outstanding Young Farmers participants are looking for opportunities for diversification and moving their operations forward and pulses offer that opportunity. Many snapped that up very early."

Though a soggy spring prevented the Groenewegs from planting a pea crop this year, the hope is to increase their 1,000 acres in the future so that their fields will be divided evenly between wheat, canola and peas.

"If we could go to that type of rotation, it would be nice but it's pushing the agronomics to get that out of the land," Franck said.

What's next for these self-professed "ambassadors to agriculture"?

Come November, they'll have the opportunity to talk about growing

pulses, as well as their farming experiences in general, with OYF members from across Canada at the program's national event in Brandon, MB.

And they can't wait, Kari says.

"We're excited to go to interact with forward-thinking farmers, to make industry connections across the country and to celebrate Canadian agriculture," she says.

For more information about the OYF program, visit www.saskoyf.ca.

bio

Tiffany Mayer is a freelance writer based out of St. Catharines, ON.

“

"I don't think you'd find anyone in Outstanding Young Farmers that isn't growing pulses."

***— OYF Program Chair
Barb Stefanyshyn-Cote***

Franck and Kari Groeneweg balance their family life with operating Green Atlantic Farms, which produces spring wheat, canary seed, canola and peas.

Photo by Klein Photography.

India's estimate for 2010/11 put pulse production at 18.1 million tonnes – an increase of 3.4 million tonnes from the previous year.

India – Is There Room For Growth?

by **G. Chandrashekhar**

According to the Indian Ministry of Agriculture's fourth advance estimate of foodgrains and commercial crop production for 2010/11, issued in mid-July, the country harvested record foodgrains aggregating 241.6 million tonnes. This estimate included the highest-ever crop size in wheat (85.9 million tonnes), coarse cereals (42.2 million tonnes) and pulses (18.1 million tonnes). Production also reached new highs among commercial crops, including oilseeds (31.1 million tonnes) and cotton (33.4 million bales).

This upwardly revised production data raised eyebrows and sparked questions about the accuracy of the output estimate for some crops, including the size of pulse crops. At an estimated 18.1 million tonnes, India's pulse production would jump above the annual target of 16.5 million tonnes for the first time in recent memory, with a quantum increase of

3.4 million tonnes from the previous year's 14.7 million tonnes.

A major contributory factor to higher output was the record expansion of pulse area planted. Planted area in 2010/11 expanded to a new high of 70.8 million acres (28.3 million hectares), up from 62 million acres (24.8 million hectares) in 2009/10. Clearly, the incremental production has been realized through area expansion rather than yield increase. In 2010/11, yields averaged 563 lbs./acre (640 kilograms per hectare), marginally more than 519 lbs./acre (590 kgs/ha) the previous year.

I firmly believe that high open-market prices in 2008/09 and 2009/10 resulted in higher farm-gate incomes, which in turn encouraged growers to plant more pulses this year and better manage their input.

So is this massive increase in

acreage and production possible?

While the general belief is that India's agricultural constraints do not permit miracles to happen, there are exceptional situations such as the one in 2010/11. Although situations involving a massive expansion of pulse area planted and consequent increase in production don't happen often, this should not be interpreted to mean that 2010/11 was a one-off event. In fact, the increase in production just demonstrates the capacity of certain crops to rebound if conducive conditions existed.

One may express reservations about the government estimate and wonder if the crop size might be lower than the numbers suggest. But these are, at best, individual opinions, and may not be based on any scientific crop surveys, while the Ministry of Agriculture prepares crop estimates based on well-accepted methodologies, including crop cutting surveys.

As they say, the proof of the pudding is in the eating. Following a massive increase in pulse output, market prices have declined 25-40%. Many of the dals that were priced at Rupees (Rs) 80-100/kg a year ago are now being retailed at Rs 40-70/kg. Because of these consumer-friendly prices (combined with increased availability) pulse

Trends in Pulse Production

Pulse	2008/09	2009/10	2010/11
Tur/Arhar	2.3	2.5	2.9
Gram	7.1	7.5	8.3
Urad	1.2	1.2	1.7
Mung	1.0	0.7	1.8
Others	3.0	2.8	3.4
TOTAL	14.6	14.7	18.1

(Note: Tur/Arhar = Pigeon pea; Gram/Chana = Chickpea; Urad = Black matpe; Mung = Lentil)

Source: Ministry of Agriculture, Government of India

consumption in 2011 is set to expand. Clearly, price elasticity of demand is currently at play in the Indian market.

As we approach September, the harvest time for kharif season crop of 2011/12, much of the debate over the previous year's crop size becomes outdated. What is the outlook for the upcoming pulse crop?

It is abundantly clear that pulse acreage has slipped. As of mid-August, the total area planted to various pulses (mainly tur/arhar, urad and mung) was 10% lower than the same time last year. The latest available acreage estimate is 26 million acres versus 29 million acres of kharif season last year. Additionally, the distribution of rainfall has been somewhat erratic this season. So the prospect of any substantial jump in yields is rather limited.

As I have asserted on more than one occasion, it would be a miracle if pulse production in kharif season 2011/12 even comes close to last year's kharif production of 7.1 million tonnes. Currently, it appears the size of crop to be harvested would be in the vicinity of 6.5 million tonnes with a slightly downward bias.

It is of course too early to talk

about rabi season planting and production. Much would depend on soil moisture conditions in October and November, relative prices of competing crops for the season (wheat, oilseeds and pulses), and the minimum support price the government may announce.

The quantum jump in India's pulses production in 2010/11 has coincided with supply constraints from major exporting countries and firm international prices. Without doubt, India's imports have slowed in the last several months following improved domestic availability. Government companies that were active in the overseas markets until late last year stand withdrawn from the market.

Import volumes have declined, but not plummeted. If import prices are attractive or if import parity exists, India will continue to import pulses. For example, yellow pea is the cheapest pulse available in the world market and India continues to import it. It would be naïve to expect that import volumes into the world's largest market would expand each year – there will occasionally be years of crop rebound and fluctuations in import volumes.

At the same time, it may be emphasized that Indian consumption

is going up. Given the existing low levels of per capita availability and the huge skew in consumption patterns, the medium-to-long term potential of the Indian market to consume larger quantities of pulses is huge. Rising incomes and affordable prices will spur consumption growth.

Conservatively, current availability (domestic production plus imports) is an estimated 20-21 million tonnes, which translates to an availability of 37 lbs. per capita. However, the actual total availability – the marketable surplus after retaining for sowing plus dal milling/processing losses – is about 16 million tonnes, which means even lower per capita availability of 29.7 lbs.

In India, there is now growing awareness about the relationship between agriculture, nutrition and health. Policies to address malnutrition concerns, including protein and calorie deficiencies, are expected to strengthen. It will become a priority to raise protein consumption among the vulnerable sections of the population, and pulses are among the cheapest sources of vegetable protein. Because of this, we can expect demand for pulses to rise more rapidly than before.

bio

G. Chandrashekhar is the Associate Editor of The Hindu Business Line newspaper in Mumbai, India.



How Pulse Grading Works at the Canadian Grain Commission

by Daryl Beswitherick and Gino Castonguay

As you harvest your pulse crop, you may be wondering what grade you will get at delivery. At the Canadian Grain Commission (CGC), we encourage pulse producers like you to learn as much as you can about our grading process and your crop's quality before delivery so you can make informed decisions about marketing.

The Canadian Grain Commission sets the grading standards for these Canadian pulses:

- Peas
- Lentils
- Beans
- Faba Beans
- Chickpeas

Our grain inspectors follow a set process when they grade pulses, and you can find the grading specifications our inspectors use in our *Official Grain Grading Guide*, available at www.grainscanada.gc.ca.

The following is an overview of the process. Keep in mind the full process is more detailed and our inspectors consider a number of grading factors for each pulse crop.

Our grading process

Our inspectors follow the same basic process when grading any type of pulse crop:

1. Take a representative sample

2. Remove dockage
3. Assess foreign material
4. Assess damage
5. Assess colour

Taking a representative sample

A good representative sample lays the foundation for the rest of the grading process. If a sample accurately represents the makeup of the entire load or bin of pulses, the grading results will represent the lot of grain.

After our inspectors receive the sample from the producer, they use a Boerner-type divider to divide the sample down into a smaller, workable portion for inspection. If inspectors simply scooped out grain from the large sample, the smaller portion would not be representative of the grain being inspected. This is because different weights of material in grain can settle in different spots. Heavier material and small seeds settle on the bottom and lighter material, like chaff, settles on the top.

Removing dockage

Our inspectors remove dockage from a sample before they grade it. Dockage includes things like stems and pods, straw, broken grain and weed seeds. Since dockage is

removed before grading, it is not a grading factor. After dockage is removed, the sample is ready for inspection.

Following the specifications in our *Official Grain Grading Guide*, our inspectors determine dockage using the correct size of sieve for the type of pulse crop they are using. See below for more information about sieve sizes.

Assessing foreign material

The *Official Grain Grading Guide* defines foreign material as "material other than grain of the same class that remains in the sample after the removal of dockage." Foreign material can include other grains (not cereals), earth pellets, weed seeds or stones. Our *Official Grain Grading Guide* has set tolerances for the percentage of foreign material allowed in each grade.

To assess foreign material, an inspector picks out any foreign material from the sample and weighs it in order to determine the percentage.

Assessing damage

After assessing the amount of foreign material in a sample, an inspector assesses grading factors that result from damage to the grain. Again, each of these grading factors has

set tolerances for the percentage of each type of damage allowed in each grade.

Assessing colour

Our inspectors evaluate colour visually, using the colour description for each grade as detailed in our *Official Grain Grading Guide*.

We also provide our inspectors and grain company inspectors with colour guides, which comprise pictures showing the minimum acceptable colour quality for a sample. An inspector compares a sample to the picture and determines if the sample is better or worse

than the picture. Colour guides are reviewed and recommended by the Western Standards Committee, made up of members from different sectors of the grain industry including processors, exporters, and producers.

For green lentils, guides refer to adhered soil or vegetation, bleached kernels and lightly stained kernels. (See note below about red lentils.)

Assigning a grade

A sample must meet all the specifications of a particular grade before a grade can be assigned. If a sample meets all but one of the specifications, it will be assigned a

lower grade. Specific tolerances are found in our *Official Grain Grading Guide*.

Sieve sizes

In our *Official Grain Grading Guide*, you will find the sizes of sieves that should be used when determining dockage. Using the correct size of sieve ensures that only dockage – and not individual grains – are cleaned out of a sample. Failure to use the correct sieve could result in an inaccurate grade.

This chart is for informational purposes only.

Type of pulse	Size of sieve (depending on pulse size)		Perforation size (millimeters)	Manufacturer's designation (fraction of inches)
Beans	Depending on size of bean	No. 8 slotted	3.18 x 19.05	8/64 x 3/4
		No. 9 slotted	3.57 x 19.05	9/64 x 3/4
		No. 11 slotted	4.37 x 19.05	11/64 x 3/4
Chickpeas	Kabuli – large-seeded	No. 18 round-hole	7.14	18/64
	Kabuli – medium-seeded	No. 12 slotted	4.76 x 19.05	12/16 x 3/4
	Desi	No. 12 slotted	4.76 x 19.05	12/16 x 3/4
Faba beans	Depending on size of bean	No. 8 slotted	3.18 x 19.05	8/64 x 3/4
		No. 9 slotted	3.57 x 19.05	9/64 x 3/4
		No. 11 slotted	4.37 x 19.05	11/64 x 3/4
Lentils	Lentil sizing	No. 15 round-hole	5.56	14/64
		No. 12 round-hole	4.76	12/64
	Large lentils	No. 12 round-hole	4.76	12/64
Peas	Sieves that will achieve maximum removal of splits with minimum loss of whole peas	No. 9 round-hole	3.57	9/64
		No. 8 slotted	3.18 x 19.05	8/64 x 3/4
		No. 9 slotted	3.57 x 19.05	9/64 x 3/4
		No. 11 slotted	4.37 x 19.05	11/64 x 3/4

During the 2010/11 crop year, concerns were raised about quality issues in the lentil crop. To address this, the Canadian Grain Commission has offered information sessions to producers and the industry, and we are working with the Western Standards Committee and industry members to review lentil standards. We also continue to take part in ongoing discussions about issues such as bleaching in red lentils, and our Grain Research Laboratory is conducting research into the effects of bleaching on end-use quality of red lentils.

Role of the Western Standards Committee

The Western Standards Committee makes recommendations to the CGC on specifications for grades of grain and tools like colour guides.

You can bring grading issues forward for consideration by contacting the Canadian Grain Commission or your producer organization representative. The representative for Saskatchewan Pulse Growers is Vicki Dutton.

More information is available on our website.

Know your grade before you deliver

Before you make a decision about delivery, we encourage you to find out as much as you can about your crop.

We have two ways for you to receive grading and quality information: the *Harvest Sample Program* and the submitted sample service.

Harvest Sample Program

The *Harvest Sample Program* is a voluntary and free program which allows you to have your crop assessed for free, and allows us to collect valuable information on crop quality.

Each year when you register for the *Harvest Sample Program*, you will receive a kit to send us a sample of your crop.

In exchange for your sample, you receive protein content, and an unofficial grade. You can register for this program on our website.

Submitted sample service

You can also send your pulse crop sample to one of our service centres. In Saskatchewan, we have service centres in Saskatoon and Weyburn. For a fee, you will receive a Canadian Grain Commission certificate including:

- Grade (including main degrading reason if relevant)
- Dockage
- Moisture
- Protein content (available on request)

For more information, please contact:

Randy Dennis

Chief Grain Inspector for Canada

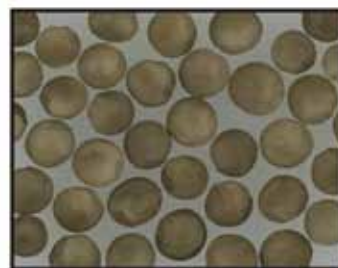
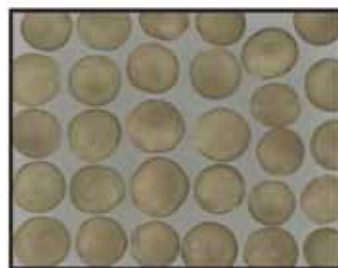
Canadian Grain Commission

Telephone: 204-983-2780

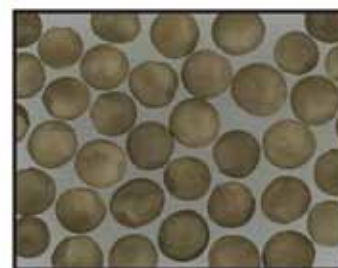
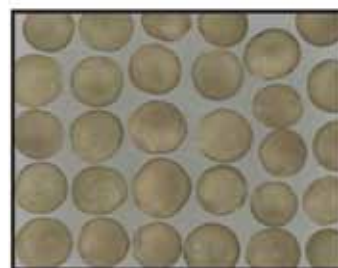
Stained Lentils



Damaged Lentils



Blue-black Lentils



These images are provided by the Canadian Grain Commission for informational purposes only.

Celebrity Chefs:

Recipes from a Saskatchewan Chef Who Loves Pulses

The **Celebrity Chefs** column is designed to excite your taste buds and provide new ideas on how you can include pulses in your family meals. This month's recipes come from Jenni Willems, owner of New Ground Cafe (featured on Pg. 16). Growing up in La Ronge on her mom's economical home cooking, Jenni learned the value of pulses early on and now makes them a staple in all her fare. Jenni recently catered SPG'S Field Day, and served

the following dishes, much to the delight of our attendees.

Want more pulse recipes? Contact us at pulse@saskpulse.com to receive a **FREE** copy of our new recipe booklet, or visit our website at www.saskpulse.com/consumer or our Facebook page.

Happy cooking!



French Lentil and Honey Vinaigrette

Juice and zest
of an orange
1 clove garlic,
minced
¼ cup (55 mL)
honey

¼ cup (55 mL) whipping cream
1 cup (250 mL) apple cider vinegar
1 cup (250 mL) canola oil
1 tsp. (5 mL) salt
1 tsp. (5 mL) teaspoon fresh ground
black pepper
A few fresh mint leaves
1 cup (250 mL) French (green)
lentils, cooked just until tender

Put all ingredients but the lentils in a blender or food processor and combine until smooth. Whisk in lentils.

Comments: Believe it or not, this vinaigrette freezes well!

Red Lentil and Italian Sausage Bake

2 cups (500 mL) split red lentils
2 cups (500 mL) pot barley
4 hot Italian sausages, casings
removed and scramble fried
1 tsp. (5 mL) fine sea salt or table salt
1 tsp. (5 mL) dried basil or 2 tsp. (10 mL)
fresh basil
2 tsp. (10 mL) onion powder
10 cranks of fresh, black pepper
2 Labrador tealeaves*, fresh or dried,
snipped (*fresh oregano can be
substituted)
½ tsp. (2 mL) dried chili flakes

1 28 oz. (796 mL) can diced plum
tomatoes
1 28 oz. (796 mL) can crushed
tomatoes
¼ cup (60 mL) canola or olive oil
2 medium carrots, diced
3 celery stalks, diced
1 medium yellow onion, chopped
3 garlic cloves, minced
1 green pepper, diced
2½ cups (625 mL) grated medium
cheddar cheese

Place the first 12 ingredients in a large ovenproof casserole dish. Do not discard the tomato tins. Heat the oil in a frying pan set over medium-high heat; add carrots, celery, onions, garlic and green pepper. Sauté until the onions and garlic are slightly caramelized and crispy. Stir into the casserole dish. Fill both tomato tins with hot water. Pour some of the water into the frying pan and scrape up the browned bits from the bottom of the pan; add this and remaining water to the casserole dish.

Preheat oven to 350°F (180°C). Cover the casserole with aluminum foil and bake for 40 minutes. Remove from oven and stir. Add more hot water if the mixture appears dry; it should be moist but not soupy. Season with salt and pepper to taste. Top mixture with cheddar cheese and bake for 20 minutes or until cheese is bubbly and slightly browned. Remove from oven and let stand 10 minutes before serving. Serves 6-10.

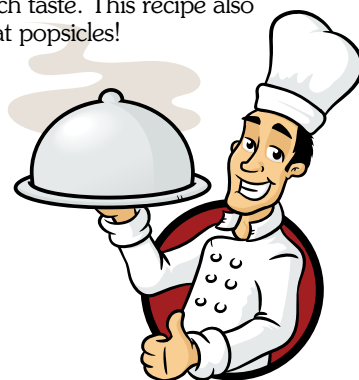
Comments: This hearty meal will fill you with healthy goodness on chilly fall days.

Mexican Chocolate and Lentil Ice Cream

1 cup (250 mL) cooked beluga (black)
lentils
¼ cup (60 mL) cocoa powder
½ cup (125 mL) brewed coffee, cooled
1 tsp. (5 mL) cinnamon
1 cup (250 mL) brown sugar
¼ tsp. (1 mL) cayenne pepper
2 cups (500 mL) whipping cream
1 cup (250 mL) whole milk

In a blender or food processor, mix first six ingredients until smooth. Pour into a large bowl and add milk and cream. Freeze in an ice cream maker as per manufacturer's instructions.

Comments: The lentils in this recipe are an unexpected surprise that add a unique texture without taking away from the rich taste. This recipe also makes great popsicles!



From our kitchen to
yours, celebrity chefs
share their favourite
pulse recipes.

Today's Special: Prairie Grown Pulses

by Amy Jo Ehman

What do meatloaf, French onion soup and chocolate ice cream have in common? In the hands of Saskatchewan chef Jenni Willems, they all include lentils!

Willems is a champion of prairie-grown pulses, promoting them as a versatile, nutritious and economical addition to the menu at her New Ground Café and catering business in Birch Hills, SK.

She began eating pulses at an early age – growing up in La Ronge, her mom relied on the *More-with-Less Cookbook*.

"We grew up eating lentil soup, refried lentils and lentil bake," Willems says. "Mom sent us to school with brown bean sandwiches. I could never trade those things!"

When Willems opened the New Ground Café in 2005, she knew lentils, chickpeas and other pulses would be on the menu, but she didn't know where to source them. As a self-described northern "bush girl," she was unfamiliar with the crops grown on prairie farms around Birch Hills.

One day, a farmer came to her door with a large pail of dried green peas. Willems was surprised to learn they were grown nearby. "I traded him for lunch. It was a huge pail. I think I used them for three years!"

That fed her passion to learn more about the foods produced south of the forest fringe and to feature them on her menu. Willems describes her cuisine as "comfort food with a twist" and while her flavours are often global (think Mexican quesadillas and Greek moussaka) the ingredients are sourced close to home.

"Comfort food is about low-cost cuisine," Willems says. "It's making do with less, stretching your protein and using what you have on hand. In Italy they call it *cucina povera*."

That philosophy of *cucina povera* earned her an invitation to attend Slow Food's Terra Madre symposium in Torino, Italy, in 2008, where delegates from around the world shared their enthusiasm for local, traditional foods. It was an eye opener for a chef from the Canadian prairies.

She visited small restaurant kitchens where simple

One of Chef Jenni Willems' pulse-inspired originals, smoked pork and red lentil stuffed green tomatoes.

Saskatchewan Chef Jenni Willems finds creative, surprising and sometimes mischievous ways to include locally grown pulses in her cooking.



yet wonderful dishes were created from as few as five ingredients, where “zero-mile” dinners were popular, and where pulses were the basis of many meals.

“Pulses are huge there,” Willems says. “They get so excited about their beans – *fagioli*. They’ll cry talking about their beans. I thought, ‘We should be doing that here in Saskatchewan!’”

But while she wears her love of pulses on her sleeve, she is not afraid to hide her passion now and then. Some of her customers at the New Ground Café have told her, in no uncertain terms, that they don’t like lentils or beans. For that reason, she’s become a master of disguise.

“If they can see them, they pick them out,” she says. “So, I make a meatloaf where they’re well mixed with the meat. They love it, as long as they don’t know what’s in it!”

She often substitutes puréed pulses into familiar desserts that call for mashed banana or pumpkin purée, but she also uses them in surprising ways. For a recent field tour lunch organized by Saskatchewan Pulse Growers, Willems served chocolate ice cream laced with small black beluga lentils cooked tender but firm.

“Everybody thought they were chocolate chips,” she laughs. “You have to be careful with chocolate because sometimes it gets waxy and solidifies. Lentils don’t do that. They stay soft. It’s a great way to add protein to ice cream.”

Willems’ passion for food dates back to her earliest memories. Until the age of four, her family lived in a pulp camp on Besnard Lake (northwest of Lac La Ronge) where her father worked as a timber scaler. She was fascinated by the camp cook and the delicious meals “Cookie” prepared for them.

She also remembers her grandmother’s stews, made from scratch with a few inexpensive ingredients, and learning to forage for wild foods such as berries and

mushrooms. “When I was a kid I used to wander in nature and just eat things,” she recalls. “I’m surprised I survived!”

She remembers a family trip to California, eating refried beans prepared by her aunt and thinking they were so delicious she had to learn to make them herself. She gravitated to the kitchen and started cooking. “We didn’t have a TV. My sister would chop wood and I would cook. It was just innate.”

After her family moved to La Ronge, Willems became acquainted with global flavours through school friends who had cultural ties to south India and the Philippines. She learned to make dahl, an Indian food made with pulses, and other vegetarian dishes. “When we got invited to meals, I was always in the kitchen. I just loved the pulses and the spices.”

For many years before the birth of her daughter Emma, now 15 (she also has a 13-year-old son, Alexander), Willems followed a vegetarian diet and has recently gravitated back to that way of eating. She says it’s more for health than economy, but the value of serving pulses in her restaurant cannot be denied. “Compare the cost benefits of serving beef stew or vegetarian chilli. Even if you add a bit of meat, the difference is amazing.”

Willems continues to source lentils and other pulses direct from farmers, and she hopes consumers will do the same – and that one day, locally grown pulses will be clearly marked as such on labels. She also hopes that consumers will embrace everyday pulse recipes more and more – hers perhaps! (See some of Jenni’s favourites on Pg. 15).

For more great pulse recipe ideas, visit www.saskpulse.com/consumer.



Chef Jenni Willems serves up some pulse goodness.



Amy Jo Ehman is a freelance writer in Saskatoon with a particular interest in local foods. She is author of the award-winning book, *Prairie Feast: A Writer's Journey Home for Dinner*.

Pulse Markets at Home and Abroad – A Look Ahead

by our **Australian Market Analyst**, Jeff Jackson, and **Brian Clancey**

Australian Pulse Update 2011

The situation for pulses in Australia right now is mostly positive from the production side and not so rosy from the sales side.

We've had supportive weather and good moisture in West Australia and Victoria, and adequate conditions in South Australia and Queensland. The only concern has been for Northern New South Wales and the area's desi chickpea crop – some traders think the yield potential there has already been affected. We also don't know how the season will end in Queensland and whether the production there will be adequate enough to counter the reduced crop in New South Wales.

See the table on next page for estimated current stocks and production for the 2011/12 season.

Lentil

With harvest already underway in Canada, most interest is focused on the situation in Australia. Exports from October 2010 to June 2011 were slightly more than 130,000 metric tonnes (MT) which, while nowhere near Canada's numbers, is still well in excess of previous years from Australia – 40% higher than last year and 20% over 2009. Assuming the Pulse Australia (PA) forecast number is close (some would argue it is on the low side), the carryover of old crop at the end of October will be in excess of 150,000 MT and a significant percentage of that will still be No. 1 grade. At this stage of the season the only impediment to having a crop of similar size to 2010 could be the below-average rainfall predicted

in South Australia. This means we could start the export year with more than 330,000 MT available, working off the PA estimate (which, again, is a conservative yield).

The ramifications are going to be significant to say the least. Unlike Canadian growers, Australians rely heavily on off-farm storage providers who will have much less to offer this season due to the carryover. There will be a scramble to sell off the combine and this will further impact prices. Traders are starting to book new crop sales in the low US \$600s (cost and freight) to most of the major destinations and it doesn't look like prices will improve until there is some reduction in stocks at the consumption end of the supply chain.

It will be another challenging year.

Supply and Demand Estimate for Chickpeas and Field Peas in 2011/12

	Chickpea		Beans		Field Pea	Lentil	Lupin		Total
	Desi	Kabuli	Faba	Broad	Dun	Red & Green	Sweet Lupin	Albus Lupin	
Final Estimate	311700	66400	286700	48100	428100	306300	522200	91400	2060900
Exports Oct '10-June 11	310000		223132		213785	130000			
2011 Area Estimate									
New South Wales	149200	8900	42800		40500	800	30350	37500	310050
Victoria	8000	24000	49000	6000	38000	77000	25000	200	227200
Queensland	70500	2000	2000						74500
South Australia	1000	8000	55000	16000	110000	110000	65000		99
Western Australia	10000	800	2500		55000		333000	700	402500
Total 2011 (ha)	238700	43700	151300	22000	243500	172800	453350	38400	1363750
% of 2010 area.	48%	99%	104%	105%	82%	104%	88%	75%	78%
2011 Est Production mt (5 year average yield)	159670	65140	305830	41200	383450	348560	445665	72060	1821575
2011 Est Production Pulse Aust Estimate mt	338600	48600	219250	41000	301600	226100	630900	38200	1844250

Source: STAT Publishing

Pea

The outlook here is much brighter. Pea exports were aided by a very buoyant market, especially to India, where the tonnage exported was nearly double that of the previous two years. Australian exports have slipstreamed those of Canada. There will be a minimal carryover and there are already firm new crop bids for November delivery. So far the weather has been good but there remains the risk of hot weather in September, which could change yields significantly.

Faba bean

At this stage, this crop faces a very similar scenario to that of peas, the

only difference being the lack of rain in the main faba bean growing area of Northern New South Wales. Again the yield factor used in this estimate is low and a good crop outcome in South Australia may compensate any fall off. Prices for French and U.K.-origin crop are lower than at the start of last season, which may dampen forward-selling by Australian farmers

Desi chickpea

After last year's weather, farmers voted with their feet and the area planted this year is down 50%. Traders are still hopeful that the crop will be more than 300,000 MT. With the lack of rain in some

areas, farmers are reluctant to offer new crop and therefore the amount of new crop that has been traded to destinations is very small. Stocks are low and it is just a waiting game until production becomes more assured.

Kabuli chickpea

The area planted this season was limited to some degree by the availability of seed, due to rain damage at harvest. The crops are looking good at this stage and farmers are hoping they will finish well, as the market is very strong at the moment due to poor crops in most of the other producing countries.

Maximizing the Value of Your Crop

by Jeff Jackson

Finally it's here! Another harvest season has begun. This is undoubtedly among the busiest and most exciting few weeks of the year. I am looking forward to seeing the first lentil samples and smelling newly harvested grain.

Of course, this is also the time of year to bear down on the market and determine how to maximize the potential value of your crop. Here's my opinion on the best way to go about doing this.

Production estimates

Every season as growers begin the lentil harvest, people begin asking about quantity and quality. How's

it running? What's it look like? Growers ask growers, marketers ask growers, and international buyers ask marketers. And after a couple weeks of harvesting, what are this year's early returns? In a word, average.

What does average quality and yield mean to growers? Since April, I have discussed with growers and marketers what the seeded acreage number was. The answers have

varied, but in my opinion, close to two million acres were seeded. Of those, more than 300,000 were left unproductive due to excess moisture. Also in my opinion, the split between red and green lentils is 55/45, tipping slightly in favour of red lentils with the balance in green (all inclusive of laird, richlea and eston types). These estimates translate into a production of approximately 400,000 metric tonnes (MT) of reds and more than 350,000 MT of greens.

The market for green and red lentil, as of today, has been sluggish. In a typical grain marketing year, sluggish demand at harvest means the price of lentils could fall two to three cents due to harvest pressure and growers needing movement. So far we have not seen this, which to me means two things: 1. The crop is not large enough to put demands on the storage needs of growers. 2. Growers are still reasonably cash-rich (they've likely pre-sold canola or other crops at good values) and can wait on the lentil market to move to values they feel they are more deserving of. But will lentils move to these values?

As I see it, warehouses of green lentil buyers around the world are not overstocked with green lentils. Due to high prices and mediocre quality, buyers have spent the last year buying hand to mouth. If you have grown good quality green lentils (No. 1 or 2 grade), it's a safe bet that somewhere, someone is looking to buy right now. But will you sell?

Red lentils, as in most cases, are a different story. Red lentil growing regions worldwide have seen much better production this season than the past few. Canada sits on perhaps 180,000 MT of carryover, and it seems there is an abundance of red lentils everywhere. No one in the world seems eager to buy red lentils today – at least not at the value we've become used to.

Market strategy for green and red lentil

As always, growers need to evaluate their production against current market values, and the potential for price increase verses decrease. Should you find yourself in need of cash or storage space you will need to sell some product – but what should you sell and what should you hold for potential gains?

Of course this decision will require you to take into consideration all the products in your marketing arsenal, but for our purpose here we will stick to lentils. I believe it's likely we will see demand for green lentils first, and that there's room for upside to the lentil value, especially for No. 1 or so-called "X2" lairds. Will we have produced more of this quality than we did last year? Although it's still early, I believe we will have. Acres were down significantly but certainly harvest conditions were better.

Today's No. 1s and X2s are valued at about 33 cents, while last season most growers received 36 cents or higher for this quality. Will we get the same price this year? My suggestion is that you will get a better price if you resist selling at the first sign of demand. You should still sell during periods of demand but don't accept the first offer – keep buyers coming back until you have gained close to that 36-cent mark.

As for No. 2 lairds, so far we have seen an abundance of No. 2 quality (and again this is early speculation). Unfortunately this may put a bit of pressure on the No. 2 price, creating a wider gap than the normal two-cent spread between No. 1s and No. 2s. I believe it's wise to look for 31 to 32 cents and sell into demand when it comes to this level.

I have a more difficult time with red lentils. Currently the market for reds bears in the 20-cent neighbourhood. As mentioned earlier it feels like there's plenty of supply right now, which the world will need to chew through before we see

significant price movement. There is potential for the price to move up in the early part of spring, possibly to the mid-20s level, but that is a ways off yet. All in all, it feels like this could be a sluggish year – at least early on for reds, due to oversupply.

Conclusion

If I was a grower and needed to generate cash today, I would focus on moving canola and yellow peas at current levels. If I needed to move lentils, I would strongly consider selling a larger portion of reds at current levels and holding greens.

But that's just my opinion, and the great thing about opinions is that we all have one. I was asked by the Saskatchewan Pulse Growers to share mine with you this month and I hope it has provided you with some food for thought and discussion among neighbours and friends. Happy harvesting everyone!

bio Jeff Jackson is Market Manager, Pulses, for Scoular Canada and is based in Calgary, AB. He can be reached at jjackson@scoular.com. The opinions above are the writer's and are not necessarily the opinions of Scoular Canada.

On the Market

by **Brian Clancey**

August and September are among the busiest months of the year for farmers. They are also the most volatile for markets, as prices shift and opinions change about what will be available in the coming season. Market analysts nervously watch each weather front during these months, as weather affects the pace of harvest and can hurt product quality – even of crops that are already mature.

Statistics Canada's reports can add to market uncertainty because of disagreements over the accuracy of the numbers. But, as we learned last year, it is important to look beyond how much was grown and how much was carried over from the previous season.

Preliminary outlook for this marketing year

Normally at the end of August, Saskatchewan's lentil harvest is 59% complete, while the field pea harvest is 62% complete and the chickpea harvest is 26% complete. This year's harvest is advancing at a slower than normal pace, which may make it harder to get a firm fix on the actual size of the crop.

Statistics Canada's August production forecast is based on how fields look at the end of July – not what is coming out of the combine. Not surprisingly, there can be a big difference between the August and December estimates. Since 2006, the August production estimates have been, on average, 11% lower than the final number for lentils, 2% higher for peas and 3% higher for chickpeas. Some of these differences stem from changes to seeded area estimates. Over the same period, the August seeded area estimate was an average of 1% lower than final number for lentils, but 3% higher for peas and 16% higher for chickpeas.

Lentil

Right now, Statistics Canada expects the lentil crop for this coming marketing year to total 1.6 million metric tons (MT), from 2.54 million acres. The crop is down almost 350,000 MT from last year and the seeded area is down 830,000 acres because returns from lentils were not as competitive with canola and wheat as they had been in the past.

After last year's harvest, and with the expected decrease to crop sizes, international markets are closely monitoring initial deliveries from our growers, and this is especially true of lentils.

Roughly 20% of last year's lentil crop was No. 1 or No. 2 grade quality, a huge drop from the previous four years which saw 75–94% of the lentil crop fall into those two grade fractions. On top of that, a large fraction of last year's No. 2 grade lentils were wrinkled, making them undesirable in some markets.

Very few No. 1 or No. 2 grade lentils were carried over from last season and it is generally believed that all good quality lentils in the coming marketing year will come from the current harvest. To have the same tonnage of No. 2-or-better lentils as last year, 26% of the crop needs to fall into the top two grades. To match the average quantity of top-grade lentils harvested between 2001 and 2009, roughly 51% of this year's crop needs to fall into the top two grades.

In the case of the highest quality, only 5% of this year's crop needs to be No. 1 grade to match last year's supply. Another 27% needs to make it into that grade fraction to match the average annual quantity harvested between 2001 and 2009.

If the weather cooperates and more crops qualify for the top two grades, the average prices paid for good quality lentils in 2011/12 will be down from last season. Average grade spreads should also change. The spread between prices paid for

No. 1 product and bids for lower grades should get smaller for green lentils, but could increase for red.

During the past year, average prices paid for Extra 3-grade large green lentils were 12.6 cents/pound lower than those paid for No. 1 grade product. During the previous five marketing years, the average difference was 5.4 cents/pound. In the case of red lentils, Extra 3 was discounted an average of 5.6 cents/pound to No. 1 grade product, compared to the five-year average of 7.8 cents/pound.

Field pea

Farmers did a better job of getting this year's field pea crop planted. They were able to plant 2.3 million acres out of an intended 2.52 million acres. Production is forecast at 2.16 million MT, down almost 700,000 MT from last year.

Chickpea

Chickpeas are probably putting in the best performance of all pulses in terms of price. Kabuli chickpea markets have hit record highs in recent months, due to a crop failure in Mexico and smaller than expected crops in other major producing regions, including Turkey. Unfortunately, farmers only planted 75,000 of the 105,000 acres they intended this year, as spring seeding conditions made growing the crop look riskier than it had been in previous years. As a result, we could see production collapse from more than 128,000 MT last year to 53,900 MT this year.

What's the bottom line? It does not look like we will have enough peas and chickpeas to meet demand in the coming marketing year. This means prices will have a strong undertone, responding quickly to any increase in demand.

For the second year in a row, lentil supply is an issue. If the latest seeded area and production estimates are accurate, there will be more lentils available to sell this

season than last. The percentage of good quality lentils will be higher, which will make it easier to sell new crop lentils but could also lead to lower average prices. Stay in touch with local buyers in order to take advantage of any surges in demand.

Speculation on carryover

Statistics Canada's report on stocks in all positions, released Sept. 7, will be as important as the production estimates, as it is the official carryover estimate from the 2010/11 marketing year. The lentil number is expected to be high, while relatively few peas or chickpeas should remain.

Lentil

Inferred domestic use of lentils is expected to be at record levels, as a large quantity of sample-grade lentils were dumped into livestock feed markets. Even so, ending stocks are expected to come in around 500,000 MT (half of those being red lentils), and it is assumed that the carryover is almost entirely No.

3 and Extra 3 product (only 21% of last year's harvest was thought to be No. 2-or-better). As most traditional human consumption markets are not interested in lentils of those grades, the carryover may as well not exist when it comes to mainstream markets.

However, lentils left over from last season need to be segregated from new crop on farms and in the export pipeline, as some buyers worry that poor quality product may leak into new crop shipments. (The exception to this rule is buyers who can handle large volumes of offgrade product.)

Pea

Judging from the amount of peas in the licensed elevator and terminal system on July 31 and what we know about exports in July, roughly 300,000 MT of peas were likely carried over from last year. This number, combined with a smaller harvest this year, means that Canada will have almost 1.2 million MT fewer peas to sell in the coming

months than last season.

There is a risk that such a drop in supply will cause prices to rise to levels which discourage demand. There is uncertainty surrounding the Indian market. On one hand, there's risk that demand will be down from last year because of a record rabi or winter season pulse harvest. However, at the same time pulse production in India is expected to drop under 16 million MT in 2011/12, which suggests demand for peas will improve as the marketing year advances.

Chickpea

Chickpea ending stocks will remain low at around 23,000 MT. There is a worldwide shortage of kabuli-type chickpeas, and as a result, markets would welcome a much higher ending stock number. This means there is no ending stock number that could have a negative impact on prices.

bio Brian Clancey is the Editor and Publisher of the www.statpub.com market news website and President of STAT Publishing. He can be reached at editor@statpub.com.

Supply and Demand Estimate for Lentils in 2011/12

	Large Green	Medium Green	Small Green	X-Small Red	Small Red	Other
Acreage	1,099,000	52,000	230,000	251,000	1,004,000	14,000
Yield	1,342	1,569	1,404	1,183	1,332	1,039
Production	669,000	37,000	146,500	134,700	606,400	6,600
Carry In	192,000	9,400	25,700	28,100	242,900	1,900
Supply	861,000	46,400	172,200	162,800	849,300	8,500
Exports	475,000	25,600	95,000	89,800	468,800	4,700
Seed	43,500	1,700	6,300	8,000	33,400	300
Feed, Waste and Other	146,600	7,800	29,300	28,300	144,800	1,400
Total Usage	665,100	35,100	130,600	126,000	647,000	6,400
Ending Stocks	195,900	11,300	41,600	36,800	202,300	2,100
Stocks/Use	29%	32%	32%	29%	31%	33%

Source: STAT Publishing

Supply and Demand Estimate for Chickpeas & Fieldpeas in 2011/12

	Desi	Kabuli	Small Kabuli	Yellow	Green	Other
Acreage	5,000	65,000	5,000	2,075,000	175,000	50,000
Yield	1,323	1,492	3,042	2,070	2,158	1,967
Production	3,000	44,000	6,900	1,948,400	171,300	44,600
Carry In	3,400	14,300	6,900	252,200	44,800	3,000
Imports	0	1,000	0	6,500	27,400	100
Supply	6,400	59,300	13,800	2,207,100	243,500	47,700
Exports	3,000	38,300	10,500	1,757,100	193,900	38,000
Seed	400	9,300	1,100	119,000	30,000	3,000
Feed, Waste and Other	1,000	7,000	2,000	140,600	14,900	1,800
Total Usage	4,400	54,600	13,600	2,016,700	238,800	42,800
Ending Stocks	2,000	4,700	200	190,400	4,700	4,900
Stocks/Use	45%	9%	1%	9%	2%	11%

Source: STAT Publishing

“He Lived, Breathed And Loved The Saskatchewan Pulse Industry”

by **Ray McIvor, Dr. Alfred Slinkard,**
and **Dr. Bert Vandenberg**

In loving memory of Don Tait

It was with great sadness that we learned of Don Tait's passing on August 28, 2011. An early producer and avid promoter of Saskatchewan pulse crops, Don made immeasurable contributions of time, money and spirit to the Saskatchewan pulse industry.

Don was instrumental in organizing the Saskatchewan Pulse Crop Growers Association in 1976, known today as the Saskatchewan Pulse Crop Development Board. He was also a member of the Agri-Food Innovation Fund, the Saskatchewan Food Council and the Standards Committee of the Canadian Grain Commission, and was an advisor to the Crop Development Centre at the University of Saskatchewan (U of S). Don is an Honorary Life Member of the Saskatchewan Institute of Agrologists and the Saskatchewan Agriculture Graduates Association and has been inducted into the Saskatchewan Agriculture Hall of Fame. He received a Distinguished Agriculture Graduate award from the University of Saskatchewan and has been recognized as the Pulse Promoter of the Year.

But beyond his career achievements, Don's peers remember him as a strong leader and a passionate believer in Saskatchewan pulse crops.

Ray McVicar, Saskatchewan Ministry of Agriculture, Regina

When I began my job at Saskatchewan Agriculture as Provincial Specialist, Special Crops, in December 1992, one of the first people to come to visit me was Don Tait. At that time Don was the Chair of the Saskatchewan Pulse Crop Development Board. He made the extra effort to introduce himself and to let me know that I was very welcome to attend their upcoming Board meetings and annual meeting during Crop Production Week. I remember how his visit gave me confidence to join the meetings as an advisor to the Board and to work together with Board members and other advisors to promote the pulse industry.

“Don Tait was a tireless proponent of crop diversification and a pioneer of the pulse industry.”

Don Tait was a tireless proponent of crop diversification and a pioneer of the pulse industry. For example, when the new Pulse Crop Field Lab project was being discussed, Don was instrumental in working up front and behind the scenes to secure federal government funding for the project. Don played a very big part to ensure that construction of the pulse crop research facilities at the U of S went ahead. Pulse crop growers and the provincial economy continue to benefit from that effort and the research that takes place there.

Don had an excellent way of convincing people to come together to get things done, and he was not shy in asking for money and effort from everyone involved to help build the pulse industry.

SPG Founding Director Don Tait made immeasurable contributions to the Saskatchewan pulse industry, but his friends and colleagues remember him for much more.

Dr. Alfred Slinkard, former pulse crop breeder

Don was an amazing man and he lived, breathed and loved the Saskatchewan pulse industry.

He was the vice-president of the initial founding group of the Saskatchewan Pulse Growers Association in the 1970s. He was president of the group when they went through the hoops with the Farm Products

Marketing Board and actively promoted the producer plebiscite that

resulted in approval of the first SPG levy. This levy provided funds that the organization used to get matching funding from the provincial and federal

governments for much needed research, development and industry promotion activities of this fledgling pulse industry. It is unlikely that the check-off would have been approved at that time without his continuing efforts in promoting this levy. SPG truly owes Don Tait a debt of gratitude for all of his efforts on behalf of the Saskatchewan pulse industry.

“He would say, ‘You don’t even know what dry is!’”

The initial breeder seed increase of laird lentil was grown under my supervision on his farm in 1978. I would tell him how dry it was for my plots in Saskatoon and he would say, “You don’t even know what dry is!”

Dr. Bert Vandenberg, Professor at U of S and NSERC Industrial Research Chair

I met Don during my first year in Saskatchewan when I was a graduate student at U of S, the year that SPG was formed. During the final year of my PhD program, Al Slinkard asked me to contribute to a research project and after that I started attending SPG monthly board meetings as an “advisor,” but really as an apprentice.

I always enjoyed Don’s wit and his sense of humour – he could re-energize a meeting with a sharp quip. But more than that, I was impressed by how totally dedicated he was to the pulse industry and especially to the principle that sound

and focused research was the foundation of the developing pulse industry.

Don had a big influence on my career by instilling in me a strong sense of personal commitment to the long-term goals of the growers and the small exporting companies who were so intent on developing the pulse industry in Saskatchewan.

“He was a true gentleman.”

He always saw the big picture. He made an important contribution to my research program later on when the Agri-Food Innovation Fund pulse research chair was developed – Don was a key industry advisor who provided excellent input from the farm perspective. His contribution to our pulse industry will be long remembered. He was a true gentleman.



Don Tait 1936-2011



“SaskPulse truly owes Don Tait a debt of gratitude for all of his efforts on behalf of the Saskatchewan pulse industry.”

— Al Slinkard

How Pulse Canada is Working For You

by **Courtney Hirota**

Promoting Free Trade between Canada and Columbia

Pulse Canada joined Prime Minister Stephen Harper and International Trade Minister Ed Fast in mid-August to announce the implementation of a Canada-Colombia Free-Trade Agreement. The Canada-Colombia Free Trade Agreement (FTA) immediately removed the 15% import duties on Canadian peas, lentils, chickpeas, canaryseed and buckwheat, and will re-establish competitive, duty-free access for Canadian beans which were previously subject to a prohibitive 60% tariff. This tariff has been removed for the first 4,000 tonnes of beans, with the duty free tonnage over 12 years until the market is completely open. This is a significant achievement that the Canadian pulse industry has been working towards since 2004.

A similar agreement was signed between the United States (U.S.) and Colombia in 2006, but is still awaiting approval by Congress and has yet to come into force. Once passed, the U.S.-Colombia agreement will also immediately eliminate tariffs for U.S. peas, lentils, chickpeas, canaryseed and mustard seed. With the Canada-Colombia agreement in place, Canadian exports are currently enjoying a tariff advantage over U.S. exports.

Identifying Market Opportunities in China

With a rapidly growing population and food manufacturing industry, China is an attractive market for Canadian pulses. In 2010, Pulse Canada signed

a Memorandum of Agreement (MOA) with the Chinese Cereals and Oils Association (CCOA) to develop foods using pulse ingredients.

Pulse Canada is now narrowing the focus of the project by surveying food companies in China to identify the food product areas with the greatest commercial potential, and is also studying the attributes of potential targeted food sectors such as noodles, baked goods, snack foods and more.

In mid-July, Pulse Canada hosted representatives from CCOA and the Academy of the State Administration of Grain, as well as a senior representative from a major flour miller and bakery product manufacturer. The delegation visited pulse utilization researchers in the Montreal, Winnipeg, Edmonton and Saskatoon areas and attended meetings with Saskatchewan Pulse Growers (SPG) and the Crop Development Centre (CDC). The focus of the visit was determining Canada's capacity to develop pulse food products.

This project represents just one area in which Pulse Canada is working with SPG to expand markets for pulses and establish profitable growth for Canadian growers, processors and exporters.

Maintaining Relationships with Transport Officials

Following the March 18 release of the final report of the Rail Freight Service Review Panel, pulse industry representatives have met with Minister Ritz's office and with staff for Minister Denis Lebel and

Minister Steven Fletcher, the new Ministers responsible for transport. The government has stated that it intends to move forward with the action plan laid out on March 18.

In that regard, the government will appoint a facilitator this fall who will work with railways and shippers to develop a service agreement that will form the basis of commercial negotiations. Transport Canada will also seek Cabinet approval to draft legislation that will give shippers a statutory right to an agreement, as well as a process to establish one should negotiations break down. At this point, it appears legislation will be brought to the House of Commons in 2012.

Pulse growers and members of the pulse and special crops trade have made it a top priority to stay in front of the issues and provide leadership, not only within the agriculture community but within the Canadian shipping community. Pulse Canada and the CSCA have created a service-level agreement and have been working with shipper groups across the country to reach a common understanding of the agreement. This work will help speed up the facilitation process

A look at Pulse Canada's recent and ongoing initiatives aimed at benefitting and strengthening the pulse industry.

in brief

and ensure that the interests of the pulse and special crops industry are addressed.

Developing Pulse Recipes for Health Care Facilities and Institutions

Pulse Canada is collaborating with the Saskatoon Health Region (SHR) to develop pulse recipes that will be tested in health care facilities. This partnership is part of Pulse Canada's mission to increase the use of pulses in institutional food-service settings.

The initial phase of the SHR project has seen the redevelopment of up to 12 recipes – three soups, two salads, three main dishes, two desserts and two muffins – for a batch size of 50 servings. SHR has conducted two taste panels of these recipes, and will continue to test larger-sized servings in the coming months. Once the recipes have been finalized Pulse Canada will create a manual to distribute to foodservice outlets including cafeterias and hospitals.

Promoting Pulses as Sustainable and Environmentally Beneficial

Pulse Canada has been invited to participate in one of the most important sustainability-focused groups within the food value chain, The Sustainability Consortium (TSC). TSC is a group of food and consumer

packaged goods companies working together to measure the environmental impact of retail products, and includes retail members such as BASF, Cargill, Mars, Kellogg's, McDonald's and Walmart.

Pulse Canada's first contribution to the group will be the (as-yet unpublished) results of the SPG-funded Life Cycle Analysis (LCA) research on peas and lentils (featured in the June issue of *PulsePoint*). Sharing the pulse LCA results with TSC is an important opportunity to highlight the science-based environmental benefits of peas and lentils to an influential food industry audience.

Among other benefits, the LCA report shows that non-renewable energy use of a four-year crop rotation in Western Canada is reduced by 25% and 21% when including peas and lentils in the rotation, with energy savings and reduced greenhouse gases extended to all crops in the system.

Promoting Benefits of Pulses to the Food Manufacturing Industry


Pulse Canada, SPG and the Canadian International Grains Institute (CIGI) shared a booth at the Annual Institute of Food Technologists (IFT) Food Expo in New Orleans, LA, in June. This was an opportunity for us to promote the nutritious, healthy, sustainable and functional attributes of pulses to the

food manufacturing industry on a large scale and to make key contacts within the industry.

Working with Loblaw's to Educate Consumers on Health and Nutrition

As part of its efforts to share the health and nutrition benefits of pulses with consumers, Pulse Canada has partnered with Loblaw's to facilitate an in-store nutritional promotion study. As part of this program, dieticians will be placed in grocery stores in Ontario to educate consumers on healthy choice products, by touring them through stores and doing live demonstrations. Consumers will also have access to pulse recipe cookbooks through this program.

Focus group research has shown that one of the key reasons consumers don't eat pulses is because they are not familiar with them. Loblaw's nutritional promotion campaign is an opportunity to address this barrier by giving consumers an interactive, in-store education on the uses and benefits of pulses. If successful, Loblaw's plans to expand the program to all Ontario Loblaw's stores (about 42) in early 2012 and to other provinces in the following months.

 Courtney Hirota is the Director, Marketing & Communications, for Pulse Canada. She can be reached at 204-925-3785 or chirota@pulsecanada.com.

Pulse Canada has been working with the Saskatoon Health Region to test pulse recipes in health care facilities, including soups, salads, main dishes, desserts and baked goods, all designed to be served in institutional food-service settings.



Ten Interesting Facts about SPG Research

by Crystal Chan

Our R&D program was recently named a leader in Canadian innovation. Here's more you might not have known ...

- 1 In the 2009/10 fiscal year, Saskatchewan Pulse Growers' (SPG) Research and Development (R&D) expenditure accounted for approximately 60% of the total operating budget.
- 2 There are three R&D investment programs: the Pulse Breeding Program with the University of Saskatchewan Crop Development Centre (CDC), the general Call for Proposal Program, and the Pea Genetic Improvement Program.
- 3 SPG is currently funding 68 research projects, a \$17.5 million commitment.
- 4 SPG calculates the Scientific Research and Experimental Development (SR&ED) percentage every taxation year, and then publishes this information on our website and in *PulsePoint Magazine*.
- 5 Thanks to the Pulse Breeding Program, 84 varieties have been released royalty-free since 1997 – an average of 5.6 varieties per year! Further to this, SPG receives exclusive global distribution rights for all pulse varieties developed by the CDC, and we provide new and improved, royalty-free varieties to our Select-status seed growers.
- 6 These were the top pulse varieties in Saskatchewan (by acres) in 2010:
 - Pea (Yellow) – CDC Golden
 - Lentil (Large Green) – CDC Plato
 - Lentil (Other Green) – CDC Viceroy
 - Lentil (Extra Small Red/Other Red) – CDC Maxim
 - Chickpea (Large Kabuli) – CDC Frontier
- 7 Developing a new variety takes seven to 10 years, with the final stage of the process being the release of the breeder seed. Occasionally, if there is a strong economic incentive, a winter nursery is used to increase the rate of expansion of breeder seed (shortening the time for variety release).

The Pulse Breeding Program is a collaborative research agreement between SPG and the University of Saskatchewan's Crop Development Centre (CDC). The objective of this agreement is to develop new and/or improved varieties of pulse crops to be made available to Saskatchewan pulse producers on a timely and cost-effective basis. The commercialization of pulse crop varieties occurs under the SPG Variety Release Program.

The Call for Proposal Program is a competitive program that is open to researchers involved in various disciplines of pulse crop research. Each October, we ask for Request for Proposals from interested research parties and then carefully and strategically assess each proposal. This program gives SPG the flexibility of addressing the long-term research strategy, as well as responding to emerging threats by funding relevant and important research.

The Pea Genetic Improvement Program was designed to ensure that the western Canadian pea industry remains competitive in world markets through the adoption and use of the best available pea varieties. This program also recognizes a variety of different pea programs – domestic and international, private and public – that may contribute to the development, growth, and success of the pea industry in Saskatchewan.

Did you know that every year SPG invests approximately 60% of our budget into research projects that will benefit our growers?



8 SPG awards scholarships annually for both undergraduate and graduate students who are studying agriculture or pursuing pulse-related studies at the U of S.

9 An independent study carried out in 2008 showed that, for every dollar SPG invests in research, Saskatchewan producers see an average return of \$20.19.

10 SPG's Pulse Breeding Program has recently been praised as a Canadian leader of innovation in the Science, Technology and Innovation Council's State of the Nation this year – a huge honour and accomplishment!

For more information about SPG's R&D program, past and current, please visit our website or contact Kofi Agblor, Director of Research at SPG, at kagblor@saskpulse.com or 306-651-0859.

bio

Crystal Chan is the Research Project Manager at Saskatchewan Pulse Growers. She can be reached at 306-668-9171 or cchan@saskpulse.com.



Improving Saskatchewan-Grown Faba Beans

by Lyle Hewitt

While most of us are familiar with the old cliché, “one man’s meat is another man’s poison,” you may not know that this also applies – quite literally – to some pulse crops.

Faba beans are a staple food in many parts of Europe and other areas in the world, making them a promising opportunity for Saskatchewan’s burgeoning pulse industry. But faba bean consumption can also cause dramatic health problems – known as “favism” – in a minority of the population. Studies estimate that up to 400 million people worldwide have a genetic deficiency that could cause them to have some level of intolerance to faba beans. The condition is especially prevalent in Mediterranean countries where the bean is popular.

Luckily, science is coming to the rescue of both favism sufferers and pulse producers. Funded by the Saskatchewan Pulse Growers (SPG), researchers in Italy have found that some new faba bean varieties may be safe for everyone to eat.

Major Opportunity

Although faba beans are treated as an “emerging crop” among Saskatchewan pulse growers, they

are hardly new. They are, in fact, one of the most ancient types of beans known to man, and their seeds have been found in archaeological sites in the Middle East dating back to 6250 BC.

The beans have long been popular in Europe, North Africa, the Middle East and parts of Asia where they are used for human consumption and animal feed. Annual world production of the bean hovers between 4.1 and 4.8 million tonnes, similar to current global lentil production.

Currently, China dominates the production market, producing 40 to 45% of the crop. The Canadian prairies, on the other hand, have only grown a tiny sliver of the market – producing 4,000 to 15,000 tonnes per year. But Saskatchewan pulse producers have proven that they are capable of tackling major challenges on the world markets, and gaining insights into new, safer varieties of faba beans that could help Saskatchewan producers gain a competitive edge.

The Curse of Favism

For almost as long as people have been eating faba beans, doctors

have diagnosed favism as an ailment related to faba bean consumption. This allergic-like reaction (although not clinically classed as an allergy) causes red blood cells to rupture, leading to a wide range of symptoms which can include malaise, lethargy, nausea and vomiting, headaches, abdominal pain, chills, tremors, and fever – not a pleasant way to finish off a plate of beans. In rare cases, sufferers have slipped into comas.

To make matters worse, favism-sufferers can react up to 48 hours after they’ve eaten faba beans. The lack of immediate warning signs can be especially problematic if faba beans are hidden in a dish and sufferers are not aware they’re eating the trigger food. On the island of Sardinia (where there is a higher incidence of the condition), 10 to 20 people per year are hospitalized and require blood transfusions due to favism attacks.

Favism only affects a tiny portion of the male population, primarily in southern Europe, North Africa, Pakistan-Bangladesh, Southern China, Taiwan and the Middle East. However, the disorder is linked to much more common genetic deficiency, which could point to bigger problems.

Modern medical research has determined that favism is actually an extreme form of a condition with an extremely long name: *Glucose-6-phosphate dehydrogenase deficiency* – or *G6PD deficiency*. Up to 30% of some ethnic groups in the Mediterranean world have *G6PD deficiency*, but most show

SPG-funded research examines new varieties of faba beans that will have a more international appeal, and be safe for people who suffer from favism.



Faba beans, grown in Saskatchewan, are one of the most ancient types of beans known to man – their seeds have been found in archaeological sites in the Middle East dating back to 6250 BC.

few if any symptoms. In fact, the condition has some benefits. People with G6PD deficiency are more resistant to malaria, which could give people with favism an evolutionary leg up over their bean-eating peers, and could then lead to higher rates of favism in the future (which would be bad news for pulse producers).

Bean There, Done That

There is no cure for favism and for thousands of years there has been only one treatment: don't eat faba beans (or any of the other substances or medications that can trigger favism.) But lately scientists have taken a new approach: find out what inside the bean is causing the reactions and get rid of it.

Research has determined that there are two offending aspects of faba beans: chemicals vicine and convicine, which react negatively with G6PD-deficient blood cells. Once the substances were identified, crop scientists in Europe focused on breeding them out. A number of breeders, including Dr. Gérard Duc

of Dijon, France, have created new cultivars of faba beans with very low levels of vicine and convicine.

However, researchers did not know whether the new beans would work in preventing favism – until recently. Through research funded by SPG, Dr. Paolo Arese, MD of the University of Torino, Italy, conducted a major clinical study of how favism sufferers tolerated the new cultivars. The study was approved by the Ethical Committee of Sassari, Sardinia, and all volunteers gave their written consent to participate.

The fundamental setup of the experiment was not complicated. Dr. Duc provided a supply of the low vicine/convicine faba beans. A group of volunteers with total G6PD deficiency were fed huge amounts of beans – up to a gut-busting 10 times the amount of a normal bean meal. Researchers studied their reactions and performed lab work on blood samples.

"All volunteers who were willing to ingest large amounts of raw faba beans and donate their blood deserve

special thanks for their patience and endurance," Dr. Arese says.

The results were extremely positive. While the test subjects may have suffered a little normal indigestion from overeating, they showed no signs of favism days later, even after consuming such large amounts.

The results of this SPG-funded research will help identify the best, most marketable cultivars so that Saskatchewan producers can make educated planting decisions and can market their faba beans all over the world, including the Mediterranean. The Crop Development Centre (CDC) in Saskatoon is now working on developing varieties of the small-seeded type of faba bean that are low in vicine and convicine.

bio Lyle Hewitt is a Senior Associate at Martin Charlton Communications based out of Regina, SK.

The Crop Development Centre (CDC) in Saskatoon is now working on developing varieties of the small-seeded type of faba bean that are safe for everyone to eat.



Pulse Days 2012

"New Horizons" January 9 & 10, 2012



This year's event will focus on new developments and opportunities in our expanding industry.

It's almost time to start a new year, and *Pulse Days 2012* "New Horizons" will preview new developments and opportunities in our expanding industry. At Saskatchewan Pulse Growers (SPG), we are busy planning a content-rich agenda, featuring exciting new initiatives and market opportunities for moving forward. A couple topics you can expect to hear about this year:

- Best crop management practices
- Overcoming current obstacles
- Green initiatives for growing pulses and maximizing the benefits of environmentally friendly production practices
- The business of farm ownership and succession planning (with renowned speaker Elaine Froese)
- New markets and opportunities for Canadian pulses
- Market outlook panels for peas and lentils

REGISTER NOW

Registration for *Pulse Days 2012* is now open! Register by December 21, 2011, and save 50%. Early registration rates are \$25 (SK residents) and \$50 (non-SK residents).

To register, fill out the form on Pg. 34 and fax it to 306-668-5557, phone 306-668-0350 between 8 AM and 4:30 PM, Monday to Friday, or go online at www.saskpulse.com/producer.

Your Pulse Days registration gives you access to:

- A program featuring world-renowned speakers
- Networking opportunities with industry representatives, researchers, producers, and more
- Our free shuttle service between Saskatoon Inn and Prairieland Park on Monday, January 9
- Access to the Western Canadian Crop Production Show at Prairieland Park Monday and Tuesday and a free pass for Wednesday or Thursday
- Free beef on a bun dinner January 9, (at the Annual General Meeting), lunch and coffee break refreshments
- A USB stick with all the Pulse Days presentation content on it, for you to take home after the event
- Door prizes
- And much more!

Pulse Days 2012 is a chance for Saskatchewan growers to learn about exciting new developments and opportunities in our industry.

** All Photos by Geoff Howe.*



Preliminary Agenda

Pulse Days 2012

Monday, January 9, 2012

Prairieland Park

4:30 PM Kickoff to Pulse Days Event –

Beef on a Bun Dinner

5:30 PM Annual General Meeting

7:00 PM Opening Reception, Research Presentations, and Silent Auction hosted by the Canadian Agri-Marketing Association (CAMA)

Tuesday, January 10, 2012

Live presentations at the Saskatoon Inn, live video feed at Prairieland Park

8:00 AM Registration Opens

8:40 AM New Production Practices

- Glyphosate use on lentil
- Managing herbicide-resistant weeds in pulses
- Managing crop rotations while minimizing disease

9:45 AM Green Pulse Production

- Planting a green crop
- Getting the most from carbon credits

11:00 AM The Business of Farming

- Succession planning: who gets the farm and when?

12:00 PM Lunch and Networking Break

1:10 PM Global Trends

- The emergence of new markets and opportunities

1:55 PM Pea and Lentil Market Outlook Panels (moderated by Kevin Hursh)



This year's agenda will talk about recent research outcomes on green production practices.



This year's agenda will talk about the developing opportunities for Saskatchewan pulses at home and abroad.

** For more information on this year's agenda, visit our website at www.saskpulse.com/producer.

A special THANK YOU to our Platinum sponsors for making Pulse Days 2012 possible!

Sponsors

novozymes
Rethink Tomorrow

syngenta

BASF
The Chemical Company

Pulse Days 2012 REGISTRATION FORM

Pulse Days Participant 1

Name: _____

Farm Name / Company Name: _____

Address: _____

City/ Town: _____ Province: _____ Postal Code: _____

Phone: _____ Email: _____

☐ I prefer to attend at Saskatoon Inn

☐ I prefer to attend at Prairieland Park

Permission to share information with sponsors

Sponsors of Pulse Days 2012 would like to contact you with information about their products and services. Do you give your permission for Saskatchewan Pulse Growers to release your name, address, email, and phone number to sponsors of Pulse Days 2012 for marketing purposes?

☐ YES, I grant permission

☐ NO, I do not grant permission

Pulse Days Participant 2

Name: _____

Farm Name / Company Name: _____

Address: _____

City/ Town: _____ Province: _____ Postal Code: _____

Phone: _____ Email: _____

☐ I prefer to attend at Saskatoon Inn

☐ I prefer to attend at Prairieland Park

Permission to share information with sponsors

Sponsors of Pulse Days 2012 would like to contact you with information about their products and services. Do you give your permission for Saskatchewan Pulse Growers to release your name, address, email, and phone number to sponsors of Pulse Days 2012 for marketing purposes?

☐ YES, I grant permission

☐ NO, I do not grant permission

Deadline for early registration is Wednesday, December 21, 2011 at 4:30 PM

Within SK:

\$25 CDN x _____ persons registered = \$ _____

Outside SK:

\$50 CDN x _____ persons registered = \$ _____

PAYMENT OPTIONS

(Payment by cheque or credit card number must accompany this form or you will not be registered. Sorry, no refunds will be permitted.)

☐ MasterCard

☐ VISA

☐ Cheque (please make cheque payable to Saskatchewan Pulse Growers)

Cardholder Name (PLEASE PRINT)

Cardholder Signature

Card Number

Expiry Date

Return Registration Forms to:

Pulse Days 2012

207 - 116 Research Drive, Saskatoon, SK S7N 3R3

Fax: (306) 668-5557 (credit card orders only)

You can also register by phone. Call (306) 668-0350 during office hours (8:00 AM - 4:30 PM, Monday to Friday).

Online registration is also available at www.saskpulse.com.



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

WESTERN GRAIN

Farmers • Processors • Exporters

Bringing the world
to the Farm



Lara George David Vicki Heidi

The Duttons'

*When marketing, call us. We thrive on finding the best markets
in the world for Western commodities.*

As producers and exporters we thrive on the challenge
of adding value to production.

Farmers • Processors • Exporters

SASKATOON
Ph: (306) 657-3455 Fax: (306) 657-3450
Email: heidj@westerngrain.com

NORTH BATTLEFORD
Ph: (306) 445-4022 Fax: (306) 445-4033
Email: vicki@westerngrain.com

PEAS • CHICKPEAS • LENTILS • CANARY SEED • MUSTARD • FEED GRAINS • FLAX



ROY LEGUMEX INC.

Since 1948

Buyers and Processors of:

- Yellow and Green Peas
- Lentils (all types)
- Chickpeas (all types)
- Beans (all types)
- Canaryseed
- Sunflowers
- Flax
- Millet

Roy Legumex now in Regina:
306-586-8955

1-800-785-7857 (toll free)

www.legumex.com

250 Caron Street (Box 40), St. Jean, MB R0G 2B0

Want More Pulse Recipes?



We have a FREE recipe booklet available
with great pulse recipes so you can kick
start your way to a healthier lifestyle.

Please contact us at 306-668-0350 or
pulse@saskpulse.com to get your FREE
copy today!

2012 Board of Directors Nominations

Two Director positions are open on SPG's Board. Nominations are being accepted until **12 PM** on **FRIDAY, OCTOBER 21, 2011.**

Responsibilities:

- 10 Board meetings per year (one per month except during harvest and seeding)
- Conference calls as required
- Average time commitment of 50 days per year
- Terms are three years, with a maximum of two consecutive full terms

If you are a registered pulse producer (i.e. you have sold a pulse crop and paid check-off to Saskatchewan Pulse Growers within the last two years), and would like to be instrumental in growing our pulse industry, fill in the nomination form below. It must be signed by three other registered producers.

Nomination Form

In accordance with the Saskatchewan Pulse Growers Regulations, I, the undersigned hereby submit my name as a candidate for election to a seat on the Board of Directors of the Saskatchewan Pulse Growers.

First Name	Last Name
Address/Town	
Postal Code	Email
Telephone	Fax

Signature

I have grown the following pulse crops:

2010

2011

I nominate the above pulse producer as a candidate for election as a Director of the Saskatchewan Pulse Growers.

Name of Registered Producer (signature)	Name of Registered Producer (signature)	Name of Registered Producer (signature)
Name (please print)	Name (please print)	Name (please print)
Address (box number and town/city name)	Address (box number and town/city name)	Address (box number and town/city name)
Telephone	Telephone	Telephone
Fax or Email	Fax or Email	Fax or Email

Please return this form to:

Saskatchewan Pulse Growers, 207-116 Research Dr., Saskatoon SK, S7N 3R3
Fax: 306-651-3043 Email: sweber@saskpulse.com

Note: Only registered producers can hold office, vote, or nominate others. If your dealings with the Saskatchewan Pulse Growers (e.g. check-off) have been through your company name, rather than your own name, you must sign a "Designated Representative Form" which designates you as a representative of the company for election and nomination purposes. Please contact the Saskatchewan Pulse Growers Office at 306-668-0590 if you think this might apply to you.

Working for You



Communications

- SPG staff attended the Institute of Food Technologists (IFT) Annual Meeting & Food Expo in New Orleans in June, to showcase the benefits of Canadian lentils to food technology industry members and to make connections with other professionals. SPG staff lured attendees to their booth with samples of delicious pulse foods, including the very popular lentil sliders (mini burgers).
- SPG Board and staff members attended the Canadian Special Crops Association conference in Vancouver in July, where attendees learned about a variety of pulse topics, hosted an evening reception and took part in the tradeshow, showcasing information about Saskatchewan pulses to the more than 500 attendees.
- SPG, in collaboration with Pulse Canada, hosted a "From Field to Plate" media tour in Saskatoon in August, touring a group of nine esteemed North American media members to a Saskatchewan farm, a processing plant, and more, to educate them on the many benefits of Saskatchewan-grown pulses. As a result, tour attendees have already begun publishing articles and content about Saskatchewan pulses in a variety of media forms. SPG also hosted a film crew from CTV's Canada AM in late August. The segment aired in late September and is available online.

Research & Development

- SPG staff attended a Pulse Flour Milling Committee meeting in Toronto to take part in the Pulse Flour Milling and Utilization project.
- SPG staff attended the Canadian Plant Geonomics Workshop in Niagara Falls in August to learn about recent advances and developments in genomics research and how this research is furthering our understanding of plant sciences and new opportunities for biotechnology applications in pulse genetics.
- Member of the Chinese Cereal and Oil Association (CCOA) met with SPG staff and other local pulse representatives in July to learn more about Saskatchewan pulse production and opportunities to increase the use of Canadian pulses in Chinese foods.
- The Science Advisory Body of the Pulse Science Cluster met in July to review the first annual research progress report and to offer recommendations for improvement. The representatives included scientists from the U.S., Australia, Italy and Canada.

*Visit the SPG website at www.saskpulse.com for news and updates listed on our homepage weekly.

Your Check-off Dollars at Work



Highlights from current and recently completed SPG-funded research projects.

Enhancing Iron Concentration and Bioavailability in Lentils

One third of the world's population is estimated to be iron deficient, and one of the major causes of this is low iron concentration and bioavailability in diets. Lentils are significantly higher in iron concentration and can therefore play a very important role in improving nutrition. With this in mind, SPG funded a two-year project under the direction of Dr. Raymond Glahn at the USDA Robert Holley Center for Agriculture and Health, that has two objectives:

1. Profile the iron concentrations and bioavailability of current lentil samples, and identify those that can be directed toward human nutrition research and testing for efficacy.
2. Establish the fundamental information required to develop a breeding strategy to enhance iron concentration and bioavailability of lentils.

Measuring Environmental Sustainability of Growing Pea, Lentil and Chickpea

This recently approved study, under the direction of Dr. Diane Knight, U of S, aims to better position pulse producers to make claims on the environmental sustainability of their products. The project integrates estimations of carbon and nitrogen inputs and the influence of cropping sequence on nitrogen fixation from lentil, pea and chickpea. To achieve this, the three-year project will focus on the following objectives:

1. Quantify nitrogen fixation credit of pea, lentil and chickpea grown in sequence with oilseeds, pulses and cereals by determining nitrogen fixation and pulse residue inputs.
2. Determine carbon and nitrogen inputs of pea, lentil and chickpea as they are affected by cropping sequence.
3. Examine the influence of previous crop (oilseed, cereal or pulse) on soil carbon input of pea, lentil and chickpea.

For more information about SPG funded research projects, please contact Crystal Chan, Research Project Manager, at cchan@saskpulse.com or 306-668-9171.

On Point



Lee Moats

Photo by Geoff Howe.

Get to Know Your Board Members:

Earlier this summer, SPG welcomed a new Chair of our Board, Lee Moats. Previously, Lee had been on the SPG Board in the position of Director.

Lee has a diverse background of professional, practical, and volunteer experience. After receiving a bachelor's degree in agriculture, majoring in agronomy, Lee spent eight years working as an Agricultural Representative/Extension Agrologist for Saskatchewan Agriculture, and 20 years working for Ducks Unlimited Canada in a number of positions, including Manager of Agriculture Programs and Director of Strategic Development. He has also served as Director of the Saskatchewan Soil Conservation Association, Founding Director for the Saskatchewan Winter Cereal Growers Association, President of Winter Cereals Canada, and Commissioner of the Saskatchewan Winter Cereal Development Commission. He

is currently the President of the Riceton Co-op, and Secretary/Treasurer of the Riceton Volunteer Fire Department.

Lee and his family farm a third generation, 2,660-acre farm in the Riceton area. They have adopted a no-till system, and pulse crops make up 24-40% of their annual acreage.

Lee's focus as Chair of the Board will be on long-term market development and expanding Saskatchewan pulse acreages through high-value, dependable markets.

Save the Date for Pulse Days 2012

Registration is now open for *Pulse Days 2012*, which will take place Jan. 9 & 10, 2012, in Saskatoon. This year's agenda is full of valuable information for Saskatchewan producers about new developments and opportunities within our industry and we are excited for another huge turnout this year. For more information on the agenda and what to expect this year, see Pg. 32 or visit our website at www.saskpulse.com/producer.

Nominations Now Open for 2012 Board of Directors

Three positions are open for Directors on the Board of the Saskatchewan Pulse Growers. If you are a registered pulse producer (i.e. you have sold pulses and paid check-off in the last two years), and would like to be instrumental in growing Saskatchewan's pulse industry, fill in the nomination form found on Pg. 36. The nomination form must be signed by three other registered growers and be submitted to the SPG office before 12 PM, Friday, October 21, 2011. You can also download this form from our website at www.saskpulse.com/producer.

SPG Awards Five New Undergraduate Scholarships

SPG awarded six \$5,000

scholarships this year to first-year U of S students who are pursuing a career related to agriculture. This year's winners were carefully chosen based on their strong academic backgrounds, as well as leadership skills and community involvement. This year's winners were:

- Kelsey Richardson of Delisle
- Jason Fleischhacker of Fulda
- Jill Martens of Fiske
- Ashley Macdonald of Plenty
- Brittany Clark of Rosetown
- Marina Tetreault of Leoville

Good luck to our winners as they begin their first year of post-secondary education this fall! Please visit the SPG website to find out how to apply for next year's scholarships.

PULSES IN THE MEDIA

Canada-Columbia Free Trade Agreement – August 15, 2011

A Free-Trade Agreement between Canada and Columbia was made effective August 15, 2011 – a huge coup for the Canadian pulse industry. The agreement removed all duties on Canadian peas, lentils, chickpeas and other crops, and will re-establish competitive, duty-free access for Canadian beans (previously subject to a 60% tariff).

The Canadian pulse industry, including Pulse Canada and other provincial pulse groups such as SPG, has worked closely with the federal government to facilitate developments such as these that will benefit our local industry.

Pulses are Canada's second-largest agri-food export to Columbia (following cereals). Columbia is Canada's eighth largest market for pulses and special crops, with annual imports from Canada reaching more than \$82 million and 110,000 tonnes in 2010.

**Food Network Chef
Michael Smith Promotes
Saskatchewan Grown Lentils
– August 15, 2011**

“The world’s best lentils are grown right here in Saskatchewan,” popular TV chef Michael Smith said during a visit to Regina on August 15. Smith was in town to host the Lentil Cup, a cooking competition that challenged local chefs to come up with creative uses for lentils.

Smith was also in town to produce videos as part of an SPG lentil-promotion campaign that will launch later this fall.

“We’re asking Canadians to embrace lentils,” Smith said. “I have been cooking with lentils all my life.”



**“The world’s best lentils
are grown right here in
Saskatchewan.”**

— Chef Michael Smith

**Saskatchewan Pulse Growers
named Innovation Leader for
Canada – July 21, 2011**

SPG was given the huge honour of being mentioned in the Science, Technology and Innovation Council’s State of the Nation 2010, a report that defines how we measure innovation in Canada and tracks the continued efforts and progress of innovation throughout the country. In the report, SPG was lauded for its creative use of check-off money to invest in valuable research on new pulse varieties.

“The Saskatchewan Pulse Growers’ expenditures in R&D as a percentage of the total of their investments have increased to 60% in the 2009/10 fiscal year,” wrote the authors of the report. “These investments in innovation have ensured the competitiveness of Saskatchewan producers and profitability of the pulse industry as a whole.”

SPG Wins Award for Consumer Website

On September 17, SPG was awarded the bronze award in the World Wide Website category, during the Canadian Farm Writers international conference in Ontario. Winners were chosen by a panel of 26 judges, comprised of journalists, professors and communicators from

various mainstream publications from Canada and the U.S.

SPG’s consumer website was launched earlier this year as a means to educate consumers on the health benefits, versatility and overall total value of Saskatchewan-grown pulses. If you have not already seen the website for yourself, check it out at www.saskpulse.com/consumer.



SPG’s award-winning consumer website aims to educate consumers on the many benefits of pulses and features a diverse collection of pulse recipes, including one for cranberry lentil muffins, pictured below.



**For more information about SPG activities, please call
306-668-5556, email pulse@saskpulse.com
or visit www.saskpulse.com**

SPG Showcases Exciting New Varieties

by Raelene Regier

Despite the half-inch of rain and the pea-sized hail the night before, the 2011 Select Grower Field day, held in July, was a success. The annual event is organized by Saskatchewan Pulse Growers (SPG) and the University of Saskatchewan's Crop Development Centre (CDC) with additional support from Alberta Pulse Growers.

This year more than 60 attendees spent the morning touring breeder seed plots of pea, lentil and the first potential small seeded faba bean line, CDC FB 34-2. This line of white flowered faba bean could be released as early as 2012. A commercialization plan is currently being evaluated and should be in effect by December 2011.

Unfortunately, the wet fields

meant we could not tour all the plots. The highly anticipated new large green lentil, CDC 3393-3, was not seen but still generated a lot of buzz due to its high yield. Growers were able to see many other potential 2012 releases in the field including CDC Cherie, a small red lentil yielding 124% of CDC Milestone. Growers were also happy to see that CDC Maxim, a small red Clearfield lentil released in 2007, was increased this summer and will be on the 2012 breeder seed order form.

CDC Saffron and CDC Raezer, two pea varieties that were released and sold out in 2011, were also increased this summer and are expected to be popular again in 2012. There are also three new yellow lines that are still under evaluation, only one of which will likely be released in 2012. Potential releases in 2013 include a low phytate pea and a red cotyledon pea.

After the morning tour, the buses went back to the Kernan farm and enjoyed a pulse-filled lunch prepared by Chef Jenni Willems (see a profile of her on Pg. 16). The finishing touch? Black lentil ice cream for

dessert! (See the recipe on Pg. 15.) The field day concluded with a visit to the investigation nursery in Saskatoon to tour the dry bean regional and coop trials, the chickpea ascochyta nursery, and the soybean west trial.

A big thanks goes out to everyone who made it out this year, including SPG's commercial partners, the international guests who travelled from as far away as Italy, the United Kingdom, Australia and Pakistan, and of course the Select growers for your support in the Variety Release Program and the CDC pulse breeding program. I also want to thank all the CDC staff who helped us make this day a success. I hope to see you all again next year!

For a copy of the Field Day handout with specific information on new varieties, please email rregier@saskpulse.com.

bio Raelene is the Commercial Seed Manager at Saskatchewan Pulse Growers. She can be reached at 306-668-1053 or at rregier@saskpulse.com.

in brief
SPG's 2011 Field Day showcased some of the newest varieties to be released in 2012 to our growers.



CDC Raezer is one of the pea varieties that was released and sold out in 2011, and is expected to be popular again in 2012.

The CDC's Bert Vandenberg introduces the tour to potential 2012 release CDC Cherie, a small red lentil yielding 124% of CDC Milestone.



Field Day attendees enjoyed a pulse-filled lunch, catered by Jenni Willems of the New Ground Café in Birch Hills.

Join us online



Join the SPG Facebook group and follow us on Twitter to stay up-to-date on pulse events, recipe ideas, and helpful farming and marketing tips. Search **Saskatchewan Pulse Growers** on Facebook and **@SaskPulse** and **@SKPulseProducer** on Twitter.



The ultimate combination

Hit the field with TagTeam® and win the fight for more phosphate and nitrogen.

TagTeam gives your pulse crops access to more phosphate and nitrogen. By increasing uptake of these crucial elements, TagTeam improves overall crop growth and standability. Your crops grow bigger, stronger, and deliver an average of 8% more yield compared to single-action competitors – that's more than \$18.00* profit per acre! Get the most from your crops with the powerful combination of TagTeam.



TagTeam mini-bulk is now available for pea/lentil, chickpea, and soybean.

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

novozymes® 
Rethink Tomorrow

TagTeam®

MultiAction®
Legume Fertility

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

Smart farmers read the fine print.

Source: Summary of 36 lentil and 177 pea independent large-plot research trials. *On average, TagTeam inoculants for pea and lentil outperformed competitor, single-action (nitrogen fixing only) inoculants by 8% in independent large-plot research trials. That's an average increase of 2.6 bushels per acre, for a net return of \$18.82/ac. Net return is calculated after the cost of inoculants is removed, using current commodity prices of \$15.00/bu for lentils and \$8.00/bu for peas. See our website for details.