

PULSEPOINT

June 2016

REDUCING AGRONOMIC CONSTRAINTS

Understanding Herbicide
Resistant Weeds

Blight Makes its Mark
on Lentil Seeds



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CHAIR'S MESSAGE

Information helps reduce agronomic constraints of pulse crops

This issue of PulsePoint is focused on reducing agronomic constraints. As farmers we try to reduce our agronomic constraints to the best of our ability every year on our farm. We try to stay informed on the new varieties, herbicides, fungicide, inoculants, seed treatments, and other products which, when used as suggested, will produce a better crop for us.

At Saskatchewan Pulse Growers we try to address these restraints by looking at what issues farmers are presented with in their fields to which there is no single treatment answer. These long-term views of agronomy create ongoing challenges in trying to mitigate short-term effects while trying to find long-term, sustainable solutions.

One example of this is the challenge farmers have with *Aphanomyces* root rot. Wet years have created a perfect environment for the spread of this disease. We have initiated research projects which investigate *Aphanomyces* in a couple different ways. First, we are trying to determine how to accurately identify the specific pathogens involved, as well as the intensity of their presence in the soil. Once we have a standard method of determining what and how much is present, then we can go to the next step of finding ways to reduce and eventually eliminate its effect. Other research projects are looking at ways

to reduce the effect of *Aphanomyces* in our field. The long-term solution is to have varieties that are resistant to the pathogens. Plant breeders have placed this high on their list of priorities, and are working closely with researchers in other countries. This approach will take some time before we have a tolerant variety available for growers.

The winter meeting circuit has provided farmers a way to voice the many issues that may be serious restraints in the short-term, but also in the issues that may present problems for rotations in the longer term. We are becoming more aware of the challenges that herbicide tolerant weeds present to our crops. We know that the weather (primarily rain and wind patterns) will influence which plant diseases and insects we will be faced with this year. Increasingly important is the need to ensure that we are aware of the rotational effects the different crop types have on our soil health, and intensity of diseases and insect pressure. Market conditions sometimes induce farmers to ignore rotational concerns and plant a specific crop in order to try and take advantage of high prices, which can create additional disease pressure and potentially lead to reduced efficiency of crop protection products.

The success of the pulse industry over the last 30 years has been to take

the lessons we have learned in the past and try not to repeat the mistakes of previous years. Growers have taken the pulse industry from when it was first thought to be risky to grow these crops, to a mainstream crop that is the anchor in our agronomic rotation and financial health of our farms.

I wish you much success during this growing season. Please stay safe and hopefully this is a great year for all of us.



EXECUTIVE DIRECTOR'S MESSAGE

Recognizing forty strong years of pulses in Saskatchewan

It is hard to believe that as the calendar marks June, we are already halfway through the International Year of Pulses (IYP). This year is something that many in the global pulse industry have been working towards for many years, and it is passing by so quickly. What is even more spectacular is that the goals that had been set for the year, including increased international collaboration on CODEX Reform and the creation of new demand for pulses through creating awareness, are taking on a life of their own as the media coverage and consumer interest about pulses has far exceeded industry expectations.

While the work in building IYP has been going on for several years, the work on behalf of the Saskatchewan pulse industry has been going on over the past 40 years. The hard work of many has built the pulse industry in the province from the ground up. In preparation for an upcoming grower recognition event that Saskatchewan Pulse Growers (SPG) is hosting on June 16, we created a timeline of some of the significant moments in Saskatchewan's pulse industry and I would like to share a few with you.

Without a doubt, Saskatchewan's pulse industry story begins with Dr. Alfred Slinkard. Dr. Slinkard joined the University of Saskatchewan as part of the Crop Development Centre (CDC) in 1972 and went straight to work. It was in 1978 the Dr. Slinkard released a pulse crop variety that would begin to shape

the history of pulses – the Laird lentil. The Laird-type lentil (large green lentil) is still the most commonly grown green lentil being planted today.

In 1984, the Saskatchewan Pulse Crop Development Board, or Saskatchewan Pulse Growers as it is known today, was formed. In its early days, the organization's key priority was to support research and innovation, largely with the CDC, in hopes for the development of pulse varieties that would allow for the adaptation of pulse crops into Saskatchewan crop rotations. At this time, pulses were seen as a potential opportunity crop, at a time when wheat and other crop prices were not offering growers a profitable return.

In the 1990s it was clear that pulse crops in Saskatchewan were on their way up. In 1994 pea acres in the province reached one million acres, and lentil acres followed, reaching one million in 1999. It was the belief of many at that time that this was only the tip of the iceberg. This led to farmers doubling the levy they contributed to SPG to one per cent in 2003, to increase the investment the organization could make into the development of new varieties.

In 2005 SPG and the CDC signed a 15-year pulse breeding agreement. This agreement, which is currently in its third five-year term, has been responsible for delivering over 110 pulse crop varieties to Saskatchewan growers royalty-free, including the Clearfield® variety CDC

Maxim, which was released in 2006 and still accounts for over 80 per cent of Saskatchewan's red lentil acres today.

These are just a handful of many important milestones that have led the way in the development of the Saskatchewan pulse industry. This is an industry that in 2015 was responsible for over \$2.4 billion of the province's agri-food exports, putting pulses on par with canola seed and non-durum wheat. It is also an industry that is going to achieve record pulse acres this growing season.

Where the pulse industry is headed, and how the public platform the International Year of Pulses has created to aid in getting us there, is still to be seen. However, if the last 40 years have been any indication of what the growers who have worked to build this world-leading industry are capable of, we are still just getting started.

In honour of 2016 International Year of Pulses, Saskatchewan Pulse Growers is hosting a recognition event for Saskatchewan pulse farmers on June 16, in Regina, SK. I hope you are able to join us for this event, featuring Canadian IYP ambassador celebrity chef Michael Smith. Space is limited, so please visit saskpulse.com to RSVP if you are interested in attending.

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Germain Dauk, Naicam, Saskatchewan

Contributors

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Andrea Lauder
Associate Editor:
Rachel Kehrig

Contributors:

Noelle Chorney, Megan Madden, Jane Caulfield, Trudy Kelly Forsythe, Delaney Seiferling, Saskatchewan Pulse Growers Staff, Kim Waalderbos, Lyndsey Smith, Brian Clancey, Larry Weber

Art and Production:

Meaghan Jaster

Marketing/Advertising Sales:

Dennis Dowd, dennis@blairmoremedia.com

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SECOND PHASE FUNDING FOR CROP ROTATION STUDY

Long-term gains expected from systems-based research project

Noelle Chorney



Dr. Yantai Gan, Research Scientist with Agriculture and Agri-Food Canada and team survey crops in the field as part of his rotational study.

Producers have long understood the importance of acting as stewards of their land. The land must be maintained and the fertility of the soil must be improved in order to continue production over multiple generations. Saskatchewan Pulse Growers (SPG) Agronomy and Seed Program Manager, Sherrilyn Phelps says, “Farming is not only about growing a crop in any one year, it is a long-term investment. Practices that have positive impacts over a longer term are critical for the success of the entire farming operation.”

To provide scientific evidence with measureable results for a systems approach to crop production, SPG has contributed \$125,099 in funding along with Agriculture and Agri-Food Canada’s \$328,387 to the second five-year phase of a research project that studies multiple agronomic aspects of the sequence and frequency of pulse

rotations in crop systems.

Dr. Yantai Gan, the principal investigator of the project, is leading a dynamic research team and conducting field experiments in Swift Current, SK, Indian Head SK, and Brooks, AB. The team is to explore the various benefits that a smart crop rotation system can bring to producers in Saskatchewan and Alberta.

SPG Director and Research Committee Chair, Corey Loessin, can see direct benefits for his own farm as well as for member producers. “The one thing that is really important to me as a producer, to our board, and to farmers in general, is farming system sustainability. It is not a new concept, but a renewed focus on managing a

whole system to prevent problems like herbicide resistance and soil depletion is important.”

Speaking sustainability, Gan says that, “Farming sustainability is to target on several key things including the increase of soil productivity, the maintenance and improvement of soil fertility over years, the enhancement of environmental benefits such as less carbon emissions, and more carbon sequestration back to the soil. All provide long-term economic benefits for the whole farm with reduced production risks.”

The inclusion of whole farm economics in the matrix of sustainability is very important. Phelps says, “With

The research will eventually help producers make predictions about yield and long-term soil health based on their crop choices.

high input costs, growers are watching bottom lines closely. If research can provide guidance into where the extra benefits can be found by using certain rotations, or if there are negative implications in using certain rotations, producers can make more informed decisions that capture the most value."

In the first phase of the research, the team tested 10 different crop rotations, and four control plots that are considered poor practice, such as continuous wheat cropping, or planting of the same pulse crop (lentils, peas, or chickpeas) for three years continuously prior to the wheat crop.

The goal of the second phase of the rotation was to collect a broad range of data from each plot in every rotation systems over a several-year period. Researchers are measuring plant establishment, crop yield, grain quality, disease incidence and severity, weed density and spectra, soil water

dynamics, and carbon and nitrogen cycles in the soil. The team is also evaluating the diversity of micro-organisms in the soil that may be associated with crop rotation systems.

The research team is testing multiple types of pulses in rotations, switching out chickpeas for lentils, for example, to determine the effects of deep-rooted pulses vs. shallow-rooted pulses on soil aeration as well as soil water content available for the following year's crop. Dr. Manjula Bandara at the Brooks station says, "Chickpeas, under good agronomic practices, are one of the most profitable crops. But to measure their true profitability, we also need to understand how they are affected by previous crop rotations, and how they affect future rotations."

The research will eventually help producers make predictions about yield and long-term soil health based on their crop choices. "We are enabling some

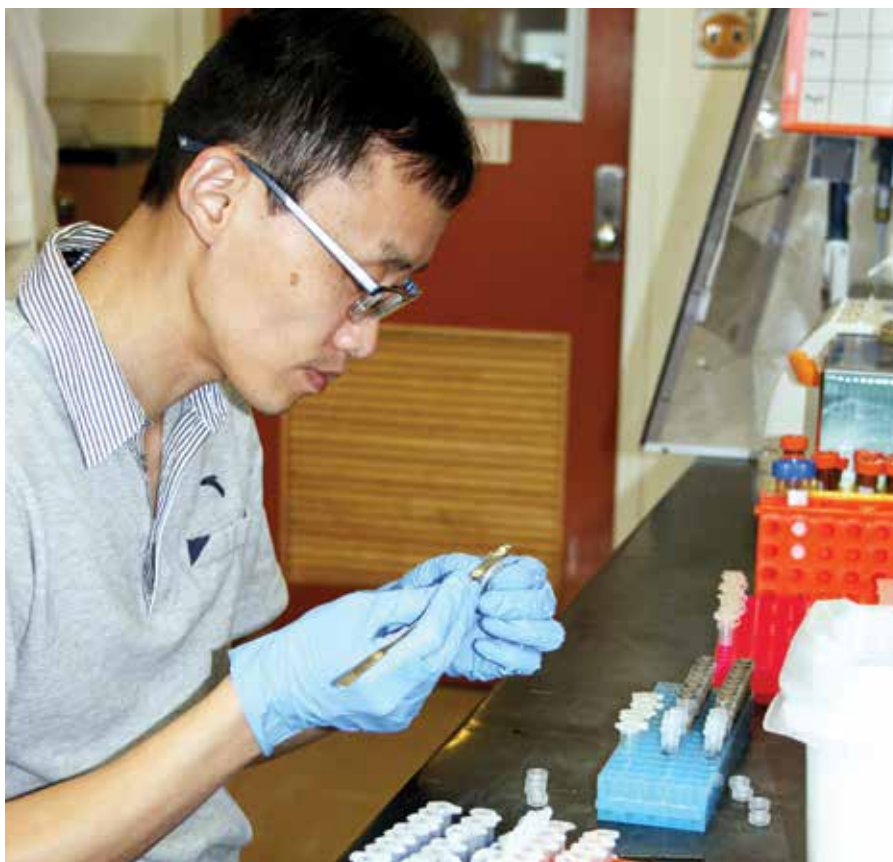
of the research that needs to be done to encourage farmers to work in longer crop rotation systems," says Loessin. "The sustainability aspect of pulse crops is something that we want solid data to support. With this project, we are generating that data over the long term."

Will it change current agronomic recommendations? Not immediately, says Phelps. "We will still be recommending crop rotations based on a three- to four-year rotation for pulses, oilseeds, and cereals. However, we will have more insight into what the best sequence is. Knowing the benefits and risks when you stray from the recommended sequence will also help growers make informed decisions based on their specific goals and growing conditions."

By the end of the project the 14 rotation systems will be running for eight years on the same land. Gan believes the significant amounts of data from those eight years will be invaluable to figure out how each rotation system really performs over the long-term. Researchers, agronomists, and producers alike can see the long-term potential of the project. Dr. Bandara says, "We are excited to be able to undertake this sort of comprehensive study. It can be difficult to get financial support for studies that do not show immediate results. But the long-term benefits of improving our understanding of sustainable crop systems are immeasurable."



Noelle Chorney is a freelance science writer, interpretive planner, content manager, and owner of Tall Order Communications. She can be reached at tallorder@sasktel.net



From the field to the lab, crop rotation research happens on multiple levels.

FARM FIELD DAYS TO HIGHLIGHT PULSES

What is going on around Saskatchewan this summer

Trudy Kelly Forsythe



Canada-Saskatchewan Irrigation Diversification Centre Field Day, 2012

Given that 2016 is the International Year of Pulses, farm field days across Saskatchewan this summer are showing a strong pulse focus. Saskatchewan Pulse Growers is a proud sponsor of all these upcoming field days.

WARC Field Day

Western Applied Research Corporation (WARC) is conducting several pulse trials at Scott this year that they are considering highlighting at its field day on July 13. One possible option is a trial called "Lentil Inputs." Jessica Weber, WARC's general manager, says it has two main objectives: to determine which combination of mainstream agronomic practices produce the greatest lentil yield, and to determine which of these practices provides the best economic return to the producer.

"We are hoping that this study will be carried out next year at several sites as lentils have become rather popular due to their high market value," she adds. "In this trial, we are looking at three seeding rates, two fungicide applications, and three different inoculant practices."

Last year's field day, which attracted over 200 people, highlighted several of its studies looking at faba bean seeding rate, fungicide application (timing and product), and inoculant options. This year, they are seeding wheat on the previous faba bean inoculant trial to determine the rotational impact of faba bean stubble treated with different inoculant combinations on wheat yield and protein, and to provide the overall economic outcome from each system.

"We are also conducting a study this year looking at the nitrogen benefits of adapted grain legumes on the succeeding crops," Weber says. "The main objective is to determine the contribution of legume crops to soil nitrogen and the succeeding crop. We are planning on seeding faba beans, peas, chickpeas, lentils, and soybeans this year and then in the following year we will seed wheat to determine the best nitrogen returns and greatest influence on wheat yields."

Weber says farmers who attend this year will have an opportunity to meet experts in the industry that can provide insight into the relatively new

field crops and their fertility and disease management requirements.

"For example, we have confirmed that Jeff Schoenau will be coming to talk about nutrient requirements of pulse crops," she says, adding the field day will, "also provide farmers an insight as to what they can expect for upcoming information, particularly in terms of risk management and economically smart planning."

ICDC Field Day

The Irrigation Crop Diversification Corporation (ICDC), along with the other partners at the Canada-Saskatchewan Irrigation Diversification Centre (CSIDC), will host their annual field day on July 14 in Outlook and will focus on some of the pulse-related work that is being done at the centre.

Kelly Farden, manager of Agronomy Services with the Irrigation Section of the Crops and Irrigation Branch with the Saskatchewan Ministry of Agriculture, says farmers should attend this event to learn about pulse-related opportunities in their irrigation rotations, and the agronomics of growing pulses under irrigation.

"Historically the predominant pulse crop grown under irrigation has been dry beans and this has proven to be quite a profitable crop for irrigators over the years," Farden says. "More recently, we have seen a growing interest in our area for growing faba beans, soybeans, and marrow-fat peas under irrigation."

He adds that is why the ICDC and Agriculture and Agri-Food Canada (AAFC) research programs at CSIDC reflect that. "ICDC is currently involved in a number of agronomic projects focused on seeding dates, seeding rates, row spacing, and fertility with soybeans and seeding rates, disease management, and inoculants with faba beans."

AAFC is also doing some work

looking at water management with faba beans and the ICDC does varietal assessment trials with beans, soybeans, and peas under irrigated conditions.

"Last year, we saw the number of acres of lentils under irrigation increase exponentially from previous years," Farden says. "We expect to see a similar trend this year. We will likely discuss water management of lentils under irrigation at the field day as well."

WCA Field Day

The Wheatland Conservation Area (WCA) field day, on July 14 in Swift Current, hopes to offer attendees their lentil input study and/or faba bean input study, as well as other trials involving fertility, fungicide, and seeding rates with various crops. The day will also include some industry trials with companies showcasing their products and technologies.

"Producers will get a firsthand look at trials established in their area, and results from these regional studies are very relevant to area growers," WCA manager Bryan Nybo says, adding field days give producers a venue where they can provide WCA with feedback on potential agronomic issues of concern.

Indian Head Crop Management Field Day

Danny Petty, the executive manager of the Indian Head Agricultural Research Foundation (IHARF) says with close to 20 pulse crop trials underway at the Indian Head Research Farm, there will

not be enough time to view all of them at their main field day on July 19, but pulses will be a focus. Highlights will include displays of pulses from around the world and access to researchers from across Western Canada who will be on hand to discuss their work and answer questions.

"It is a great way for farmers to see the latest agronomy research firsthand," says Petty, adding the tours provide guests with the chance to meet and talk with researchers one-on-one, as well as allowing producers the opportunity to relay their experiences and provide their insight on future studies. "It is also a great way for producers to network with other producers and learn from their experiences."

SERF Field Day

Lana Shaw, research manager at the South East Research Farm says the afternoon of their field day on July 20 in Redvers will focus mainly on pulses, particularly highlighting regional variety trials for soybeans and beans, pulse-oilseed intercropping trials, a Saskatchewan Pulse Growers faba bean inoculant trial, and an heirloom bean variety trial that is unique to the area.

"I think the emphasis on intercropping is something that is fairly unique to our site," says Shaw. "We try to emphasize diversity and doing agronomy trials before farmers need answers rather than after."

NARF and AAFC Field Day

The Northeast Agriculture Research Foundation (NARF) will once again partner with AAFC to hold its annual field day featuring selected field trials of interest to local farmers, including ones on faba beans or soybeans. This year's event takes place July 20 at the Melfort Research Farm.

ECRF Field Day

The East Central Research Foundation's (ECRF) annual tour is July 21 this year at the ECRF Research Farm just a half-mile south of Yorkton. Potential pulse-related trials include the value of new legume crops in rotation with wheat, the influence of cultivation and seeding date on soybean production, evaluating inoculant options for faba beans, lentils in the Black soil zone, and BASF seed treatments.

Crop Diagnostic School

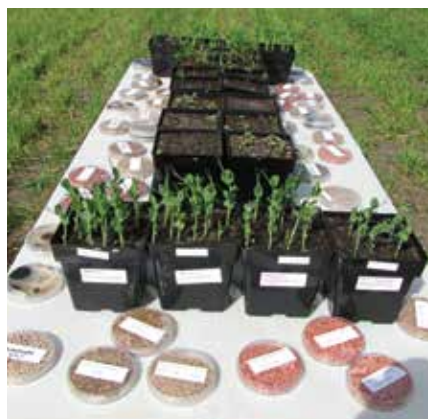
Shannon Chant, regional crops specialist with Saskatchewan's Ministry of Agriculture, says producers and agronomists should attend this year's Crop Diagnostic School in late July in Swift Current to hone their diagnostic skills on a number of crops using live plants and insect specimens.

Focus areas this year include insect, disease, and weed scouting and identification, soils and fertility, herbicide injury and crop staging, and a diagnostic exercise at plots established with known production issues or concerns.

"Each of the stations at the school has experts in that area from Saskatchewan and groups are kept small to allow networking between experts, agronomists, and producers," she says.

More Info

For additional information about these field days, visit the Events page at saskpulse.com



Pulses on display at Crop Diagnostic School



Attendees talking with expert John Heard from Manitoba Agriculture at the IHARF Field Day

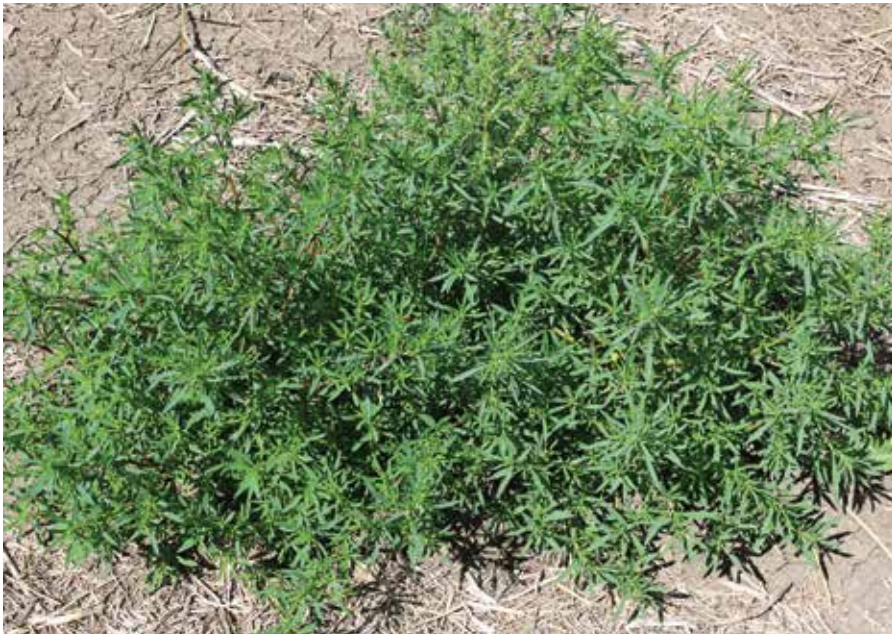


Trudy Kelly Forsythe is the owner of Cultivating Communications. She can be reached at trudy@CultivatingCommunications.com

SURVEY SAYS

The latest weed survey findings show significant shifts in farmers' foes

Lyndsey Smith



Kochia continues to be a weed that plagues pulse crops.

If you had to guess which nasty weed was most abundant in your pea or lentil crops, what would you say? It is nearly a trick question, because the most abundant weed was, in a way, put there on purpose —volunteers from a canola crop you seeded the year or years previously.

Accurately knowing which weed you are dealing with is key to management.

That is perhaps one of the more striking findings from the 2014/15 Saskatchewan Weed Survey, conducted by Agriculture and Agri-Food Canada (AAFC) and supported by Saskatchewan Pulse Growers, Western Grains Research Foundation, Saskatchewan Ministry of Agriculture, and the Canada-Saskatchewan Growing Forward 2 bi-lateral agreement. The summer survey has been conducted every decade since the '70s to inventory weed populations

by relative abundance. This latest survey includes data from a total of 2,242 fields.

The survey is conducted in the summer, after farmers have applied weed control to best reflect weed pressure based on typical management practices, seeding and spray timing, crop rotation, tillage, and more.

Shifting Populations

Julia Leeson, weed monitoring biologist with AAFC, says that the expanded canola acreage is the likely culprit to volunteer canola taking the top spot in pea and lentil fields. What is more, when canola does volunteer it does so in high density, likely contributing to its rapid climb up the Top 10 list.

Weeds becoming more prevalent or spreading over a larger acreage hinge on several factors, says Clark Brenzil, provincial weed specialist for the Saskatchewan Ministry of Agriculture. A wet or dry weather trend, a move to zero-till, tighter crop rotations, the introduction of herbicide-tolerant crops, and weed

physiology all play a role in the increase or decrease of weed populations.

A summer survey means weeds are more mature and easier to correctly identify, a key take-home message when using the research results, says Brenzil. Accurately knowing which weed you are dealing with is key to management, as some weeds, such as Japanese brome vs. downy brome or members of the sow-thistle family, could be easily misidentified, complicating effective control.

Narrow-leaved hawk's-beard was not on the lentil list in 2003, but takes the number two spot in this survey, likely due in part to the adoption of zero-till practices. Spiny annual sow-thistle moved up 28 spots on the list (number eight in lentils, and seven in peas), possibly due to misidentification as perennial sow-thistle, not annual, compounded by the prevalence of Group 2 resistance in annual sow-thistle.

Next Steps

You might be wondering what happens to all the weed survey data, beyond offering up interesting trivia and informing a plan of attack for scouting and spraying. Leeson says that the survey is also used heavily in plotting research goals and strategies for the coming years for both the private and public sectors.

Also of note, a smaller sub-set of fields were also sampled to measure herbicide resistance incidence. Those findings are not yet available, Leeson says, but will be widely circulated once testing is complete.



Lyndsey Smith writes from Ottawa, Ontario. Find her on Twitter as @realloudlyndsey

Table 1. 2014/15 Lentil in Saskatchewan (199 fields)

Rank	Area	Frequency (%)	Field Uniformity		Field Density (#/m ²)			Relative Abundance
			All	Occurrence	All	Occurrence	High	
1	Canola/Rapeseed	38.3	16.5	43.1	4.1	10.7	193.2	42.1
2	Wild Oats	42.4	12.9	30.3	2.9	6.8	96.0	34.4
3	Green Foxtail	28.1	9.5	34.0	4.2	14.8	269.2	33.5
4	Wild Buck Wheat	32.5	8.1	24.9	1.0	3.2	43.8	19.5
5	Stinkweed	19.2	5.2	27.0	2.3	12.2	268.6	19.4
6	Narrow-Leaved Hawk's-Beard	18.9	6.5	34.5	1.9	10.0	87.4	18.6
7	Canada Thistle	28.3	4.4	15.6	0.5	1.7	13.0	12.6
8	Spiny Annual Sow-Thistle	18.9	4.9	25.7	0.6	3.3	37.2	11.5
9	Kochia	23.4	4.2	17.8	0.5	2.0	43.8	11.2
10	Wild Mustard	13.3	4.1	31.0	0.9	6.9	107.2	10.9
11	Wheat	20.7	4.0	19.2	0.5	2.5	26.8	10.7
12	Lamb's-Quarters	22.7	3.4	14.9	0.5	2.2	52.2	10.5
13	Perennial Sow-Thistle	12.8	2.2	17.5	0.2	1.4	14.2	5.8
14	Barnyard Grass Species	7.5	1.3	17.0	0.5	6.3	42.6	5.0
15	Redroot Pigweed	2.9	0.9	31.7	0.7	25.8	139.0	4.7
16	Russian Thistle	8.8	1.7	19.1	0.2	1.7	6.8	4.2
17	Dandelion	10.4	1.4	13.8	0.1	0.8	3.0	4.0
18	Round-Leaved Mallow	6.8	1.0	15.0	0.1	0.9	2.2	2.7
19	Annual Spurge Species	8.0	0.8	9.5	0.1	0.6	3.8	2.7
20	Shepherd's-Purse	2.8	0.9	32.2	0.2	6.3	15.4	2.3

Source: Saskatchewan Weed Survey of Cereal, Oilseed and Pulse Crops in 2014 and 2014, Agriculture and Agri-Food Canada.

Table 2. 2014/15 Pea in Saskatchewan (127 fields)

Rank	Area	Frequency (%)	Field Uniformity		Field Density (#/m ²)			Relative Abundance
			All	Occurrence	All	Occurrence	High	
1	Canola/Rapeseed	43.2	19.1	44.2	6.0	13.9	158.0	33.1
2	Green Foxtail	43.9	18.2	41.4	4.5	10.2	62.6	28.6
3	Narrow-Leaved Hawk's-Beard	40.0	13.6	34.0	5.3	13.2	153.2	27.8
4	Wild Oats	51.2	16.7	32.6	3.6	7.0	78.4	26.3
5	Wild Buckwheat	52.1	15.0	28.7	1.5	2.8	19.4	19.7
6	Wheat	29.3	9.6	32.9	0.9	2.9	15.0	11.9
7	Spiny Annual Sow-Thistle	25.9	8.1	31.2	1.3	4.8	55.4	11.6
8	Canada Thistle	42.3	6.3	14.9	0.6	1.5	12.2	11.3
9	Wild Mustard	9.2	3.4	36.6	2.4	26.3	259.6	9.8
10	Stinkweed	18.1	5.4	29.6	1.4	7.8	46.2	9.4
11	Kochia	25.6	6.2	24.3	0.8	3.1	31.0	9.3
12	Shepherd's-Purse	15.5	6.2	39.9	1.2	7.9	37.4	8.9
13	Lamb's-Quarters	29.4	5.2	17.7	0.5	1.7	20.6	8.5
14	Barnyard Grass Species	20.8	4.7	22.5	0.9	4.2	30.0	8.0
15	Dandelion	22.4	3.3	14.6	0.2	0.9	3.6	5.5
16	Black Medick	7.9	3.4	42.5	0.5	5.8	25.2	4.2
17	Perennial Sow-Thistle	12.6	3.2	25.0	0.2	1.6	7.0	4.1
18	False Cleavers	8.8	2.3	26.0	0.3	3.7	23.2	3.4
19	Barley	8.4	2.2	26.1	0.3	4.1	26.4	3.4
20	Foxtail Barley	10.5	2.1	19.8	0.2	2.2	8.0	3.3

Source: Saskatchewan Weed Survey of Cereal, Oilseed and Pulse Crops in 2014 and 2014, Agriculture and Agri-Food Canada.

BLIGHT MAKES ITS MARK ON LENTIL SEEDS

Foliar fungus particularly damaging with early-flowering infection

Kim Waalderbos



Stemphylium blight affecting lentil plants.

There is a newer fungus that is drifting airborne into lentil fields across Saskatchewan, and it can have an impact on the quality of your lentils.

Stemphylium blight, caused by the fungus *Stemphylium botryosum*, is evident, sporadically, in fields throughout much of Saskatchewan, says provincial crops specialist Dale Risula. “We do not fully understand the epidemiology of it yet to know how it functions or what conditions it thrives best in, though this is under investigation,” he says.

Fungicide products used for anthracnose or ascochyta blight are effective for controlling stemphylium blight.

Stemphylium blight has been identified more frequently as a lentil disease in data from commercial seed testing laboratories, and in provincial data

reported in the Canadian Plant Disease Survey (see chart on opposite page).

This seed disease data caught the attention of Dr. Sabine Banniza, a researcher at the University of Saskatchewan and motivated her to dedicate the past decade to “have a closer look at the importance of stemphylium blight on lentils.”

“The difficult thing with this pathogen is that it is airborne and a common organism in the environment,” says Banniza. “In the right conditions in lentils it can be a real problem.”

In the field, Banniza says stemphylium blight can be “easily mixed up” with anthracnose or ascochyta blight. The drop of leaflets symptoms can resemble anthracnose, and the leaf lesions can look similar to ascochyta blight. However, in the seed testing laboratories, researchers can clearly and easily see the difference between pathogens Banniza explains.

Risula says often growers do not recognize the blight, or if they do, it is

late in the growth cycle when the effects of the foliar disease can contribute to the plant dry down. However, thanks to research work by Banniza and others, it is becoming clear due diligence earlier in the season is key.

Using special tunnels that isolate her lentil plants as much as possible from the surrounding environment, Banniza and team compared a group of control plants against the impact of inoculating healthy lentil plants with *S. botryosum* at four different growth stages – seedling, early-flowering, mid-flowering, and podding stage.

Banniza replicated this research three consecutive years using this same method in field trials. Each time, the research team measured the severity of disease weekly, and at harvest, the plots were assessed for yield, seed weight, seed staining, seed size (roundness and plumpness), and per cent of seed infected with *S. botryosum*.

Banniza found plots inoculated at early-flowering had the highest per cent of seed infection (compared with the control plot), followed by mid-flowering, and seedling stages.

There was no significant effect on seed yield among plants that were inoculated at the four different growth stages, but this may have been influenced by some infection in the control plots that were supposed to be disease free. However, the seed quality attributes most affected by the stage of inoculation were seed weight and staining.

For farmers, these results highlight the issue of lentil seed from infected plants being downgraded to a lower class, resulting in a lower price.

These results do offer a bit of good news, says Banniza. While it is easy to misidentify this blight in field, it appears

the most critical timing of infection for stemphylium blight is the early-flowering stage that is also the time when you want to be scouting fields for other disease-causing pathogens.

Risula says growers are advised to err on the side of caution and apply fungicides at the early-flowering stage if stemphylium blight is suspected, or has been an issue in the past. "If you can catch it early, you have a better chance of avoiding the seed quality and staining issues," he says.

Also, the fungicide products used for anthracnose or ascochyta blight are effective for controlling stemphylium blight Banniza says, noting applying at early-flowering facilitates good coverage in the lower plant regions because the canopy is still a bit open.

The missing piece of the puzzle yet to solve is what happens if farmers keep stemphylium-infected seeds for the next year's planting. "We do not know the seed to seedling transmission," Banniza

notes. "Ideally we want disease-free seed for planting next year, but is there a certain threshold that can be tolerated – that we do not know yet."

Fortunately, Risula says we will have a lot more information in a short while from ongoing research that can be shared with growers and plant breeders to help better understand this disease.



Kim Waalderbos is a freelance writer and dairy farmer. She can be reached at kwaalder@gmail.com.

Survey on Lentil Disease in Saskatchewan, 2012-2015


A total of 101 lentil crop fields were surveyed for plant diseases in Saskatchewan between 2012 and 2015. In the survey, root rot and anthracnose were the most prevalent diseases observed, while stemphylium blight was also consistently observed in fields.

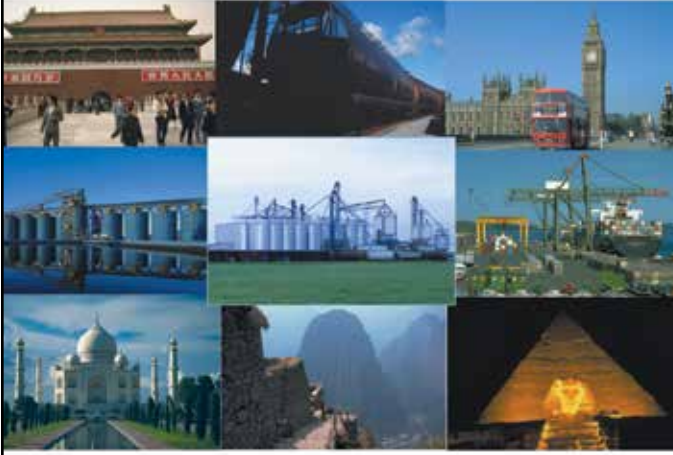
Year (Numbers of Crops)	Percentage (%) of Lentil Crops Surveyed with Disease Symptoms					
	Root Rot	Anthracnose	Ascochyta Blight	Sclerotinia Stem and Pod Rot	Botrytis Stem and Pod Rot	Stemphylium Blight
2012 (28)	75	71	32	32	29	36
2013 (37)	65	60	30	32	27	35
2014 (18)	72	83	6	56	0	39
2015 (18)	83	78	0	11	17	50

Source: 2016 Canadian Plant Disease Survey published by The Canadian Phytopathological Society, page 185.



Stemphylium blight on leaves.





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UNDERSTANDING HERBICIDE RESISTANT WEEDS

Research aimed at giving pulse producers more options in the field

Megan Madden



Soil applied Group 14 herbicide symptoms on emerging Group 2 resistant kochia.

Cleavers, wild mustard, and kochia. Group 2 herbicide resistance in these problem weeds was the primary driver behind the Saskatchewan Pulse Growers' investment into a project researching alternative modes of action for managing herbicide resistant weeds in pulses.

Co-funded by the Government of Canada (\$31,500) and Saskatchewan Pulse Growers (\$12,000), the research began in 2014 as part of the Growing Forward 2 Pulse Cluster and is scheduled to be completed in 2017.

Where did the resistance come from in the first place? Resistance evolves from the continuous or frequent use of a single herbicide mode of action. Group 2 (ALS inhibitors) herbicides tend to be at higher risk for resistance evolution since they are commonly used in multiple crops, are highly effective, and work on a single target site within the plant.

Kindersley farmer Brett McBride says he is running out of options in his pulse crops. "As a lentil grower our biggest weed challenges are Group 2 wild mustard and Group 2 or 9 kochia. Unfortunately, the abuse of Group 2 in both cereals and pulses across the prairies have left us with a growing problem, specifically for lentils, as new options have been very limited."

Beckie, Research Scientist - Herbicide-Resistant Plants with Agriculture and Agri-Food Canada on this project. "Group 2 herbicide resistance is the most common weed resistance in Saskatchewan, with a number of broadleaf weed species having evolved resistance to this group."

Sherrilyn Phelps, Agronomy and Seed Program Manager with

"Group 2 herbicide resistance is the most common weed resistance in Saskatchewan, with a number of broadleaf weed species having evolved resistance to this group."

"Pulse crops are highly reliant on ALS inhibitor (Group 2) herbicides," says Eric Johnson, research assistant in the Department of Plant Sciences at the University of Saskatchewan who has been working with Hugh

Saskatchewan Pulse Growers cautions that tightened rotations with pulses can see even more hard-to-control weeds if not managed properly. "If weeds are not properly taken care of in preceding crops, then we just see more significant



Volunteer canola can be a real problem in pulse crops

issues in the year that land is in a pulse crop," she adds.

In addition to the broadleaf problem weeds, this project is searching for alternative modes of action to control wild oats – primarily focusing on Group 14 (flumioxazin, sulfentrazone, and fluthiacet-methyl) and Group 15 (pyroxasulfone and propyzamide). Preliminary results show lentils tolerated both fall and spring applications of pyroxasulfone at rates up to 400 grams of active ingredient per hectare and for the past two years, fall applications were superior in controlling wild oat than spring applications. Further research is required to determine the efficacy of pyroxasulfone on broadleaf weed species such as wild mustard in lentils.

"I know that pyroxasulfone is coming shortly so it is great to see it was included in this research," adds McBride. "Hopefully, it will come to our market as

a pre-emergent. Right now, requiring a good shot of spring moisture to activate it has some challenges at times in the Brown soil zones."

While the results have varied with the growing conditions since 2014, early findings have found promise in other modes of action and control options. However, growers are reminded that many new products may not be registered for use on pulse crops.

What other trials have seen early results?

- Fluthiacet-methyl is a Group 14 post-emergence herbicide that is registered in soybeans in the United States and in previous studies, it has been shown to be quite effective in controlling Group 2 resistant kochia- making it a potential tank-mix partner with Solo® in Clearfield® lentils. The research is currently searching for ways to reduce

crop injury by testing applications at different node stages.

- Fall applied flumioxazin (a Group 14 soil applied herbicide) has resulted in good control of narrow-leaved hawksbeard and early spring germinated kochia in lentils. The lentils showed good tolerance to the application.
- In 2015, combining ethafluralin with a low rate of propyzamide in the fall resulted in excellent control of wild oat and kochia in lentils, however, lentil injury was noted with the same application in 2014.
- Pre-emergence applications of sulfentrazone or clomazone followed by post-emergence applications of Viper® (imazamox + bentazon) have been effective in suppressing or controlling cleavers in field peas in the Black soil zone. Sulfentrazone is registered for use before peas and is a great option in combination with Viper® to improve cleavers control.

McBride says some of these active ingredients have proven valuable to his farm, and he looks forward to seeing others at work. "We typically will seed canola into some of our lentil stubble so imazamox in-crop is our main option right now," he says. "Short of a new herbicide tolerant lentil system being introduced, the research work that the Government and the Saskatchewan Pulse Growers are conducting is invaluable to us moving forward and keeping lentils in our rotation."



Megan Madden is the owner of southpaw PR inc., a strategic communications consultancy. She can be reached at southpawMegan@gmail.com or megan@southpawpr.com.



Crop Diagnostic School 2016

A hands-on workshop to advance your agronomic knowledge.

The Crop Diagnostic School will be a one-day, hands-on learning opportunity to examine plants, dig in the soil, pull weeds, catch insects and hone your diagnostic skills. The focus areas are:

1. Insect Scouting and Identification - Attendees will be given an opportunity to use a sweep net and identify both pests and beneficial insects in a real field situation. Various insect specimens, both alive and preserved, will be available for observation and discussion.

2. Disease Scouting and Identification - Test your knowledge of cereal leaf diseases, Fusarium Head Blight, canola diseases, pulse root rots & diseases and how to tell the difference between disease and herbicide injury. Experts will be on hand to assist with identification and to teach you about disease diagnostics.

3. Weed Scouting and Identification - Hone and learn weed identification skills for common weeds in pulse crops and in the Brown Soil Zone. New for this year, a few problematic and common forage crop weeds will be included. Live weeds will be on hand to learn their identifying characteristics. As part of the diagnostic exercise, attendees will identify weeds in a designated weed patch.

4. Herbicide Injury and Crop Staging - Effective weed control requires using herbicides at the proper plant growth stage and application rate. This station will take you through staging various crops and different types of herbicide injury symptoms that occur from misapplication.

5. Soils and Fertility - This year stations will demonstrate different crop responses to: changes in salinity, changes in rates of ESN and urea, different nutrient depleted soils and changes in rhizobium inoculants and rates of N on pulses. If time permits, participants will practice hand texturing and discuss soil moisture and profiles.

6. Diagnostic Exercise – A number of plots will be established with known production issues or concerns. Participants will be provided a short period of time to examine plants in the plots and arrive at explanations for symptoms observed. A discussion of symptoms will follow to assist participants in determining the proper diagnosis.

This year there will be one location with a choice of date. Each day will consist of the same exercises and demonstrations.

Swift Current, SK

July 26 or 27 or 28, 2016 (one day only)

Host: Wheatland Conservation Area

Location: Credit Union i-plex (2001 Chaplin Street East)

Accommodations: a list of local hotels is available at www.tourismswiftcurrent.ca

Time: 8:30 a.m. to 4:30 p.m., registration begins at 8 a.m.

Cost: \$140 per person (includes lunch)

Additional Details:

Sweep nets will be available at the event for purchase by cash or cheque only. Attendees should come prepared for weather (bring rain gear, rubber boots, sunscreen, hat, etc) as the event will happen rain or shine. This will be a great opportunity to take pictures, so bring your camera. Continuing Education Units (CEUs) are pending for Certified Crop Advisors and Certified Crop Science Consultants.

More information and directions are available at www.prairiecca.ca

Registration:

To register, please visit www.prairiecca.ca and follow the link under the Crop Diagnostic School 2016.

Space is limited so please register early to ensure your spot!

Cancellation Policy:

The event will be rain or shine and will proceed even if plots are inaccessible.

Friday, July 15 is the last day to cancel and receive a full refund (minus \$25 admin fee).

Wednesday, July 20 is the last day to cancel and receive a 50% refund (minus \$25 admin fee).

After July 20, no refund will be given.

Partners:



SASKATCHEWAN PULSE GROWERS BRING EXPERT KNOWLEDGE TO AG IN MOTION OUTDOOR FARM EXPO

Exhibits at the July 19-21 event include sprayer demonstrations and crop plots

Jane Caulfield



Attendees of the 2015 Ag in Motion show take in live demonstrations.

As an outdoor expo, Ag In Motion allows producers to see live equipment demonstrations, wander through sample crop plots and get first-hand experience with some of the latest agricultural technologies or methodologies. Unlike any other farm expo in Western Canada, it provides farmers with opportunities to interact with manufacturers, industry leaders, and associations on 320 acres of prime agricultural land — and Saskatchewan Pulse Growers (SPG) is proud to be a part of that.

“We want to make sure producers have an opportunity to access the information they need and want,” says Sherrilyn Phelps, Agronomy and Seed Program Manager at SPG.

SPG will be hosting a variety of interactive exhibits, including a field demonstration to showcase lentil seeding rates, desiccation of peas, and herbicide tolerance in lentils and chickpeas. They

will also have faba beans and soybeans available for growers curious to learn more about these particular crops.

The highlight will be spraying demonstrations from industry leader and co-founder of Sprayers101.com, Tom Wolf.

“Our focus this year is to give producers an opportunity to get all their questions answered regarding sprayer technology and application parameters, as well as see what pulse crops and agronomy options are best suited for their farm,” says Phelps.



Aerial shots of the 2015 Ag in Motion show.

AG IN MOTION



Participation in Ag in Motion is about gaining face-to-face time with producers and being available to answer any questions they may have.

According to Phelps, the goal is not to promote any single product but to provide support and knowledge to producers as they gear up for desiccation and harvest management. “Having agronomy expertise available at our site will also allow discussions on topics pertaining to growing pulses,” says Phelps.

Wolf, who is also the President of Agrimetrix Research & Training, echoes Phelps. He says participation is about gaining face-to-face time with producers and being available to answer any questions they may have.

“We want to reach out to growers to hear from them directly — their questions, their concerns — and respond to them,” says Wolf.

Wolf’s interactive demonstration will allow producers to spray water into pulse crop canopies that have been lined with paper to effectively show where the spray actually lands. By examining the spray pattern, producers will be able to learn new techniques to help them obtain better yields at harvest.

“Herbicide, fungicide, and insecticide sprays are important tools for protecting yield potential and to facilitate harvest efficiency,” says Wolf. “It is important to better understand how to get the spray deeper into the canopy so it can do a better job protecting the crop. A spray application can fail if it does not provide the minimum coverage required, and we want to show how to avoid that.”

The use of the outdoor space means the team of SPG, along with Wolf

and his team can engage directly with producers. They are set up to provide impartial information and discuss the pros and cons of different application methods with the people using them—a conversation, Wolf points out, that can be educational for all parties.

“We always try to reach as many producers as possible with the best information that we have,” says Wolf. “By doing that, we also learn a lot about how things really happen on the farm, what is possible, and what types of research might be required to provide better answers.”

For more information, please visit: aginmotion.ca.



Jane Caulfield is an experienced journalist and writer, and is the owner of Tin Box Digital Content

PULSE PROMOTER

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2016 INTERNATIONAL YEAR OF PULSES

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CANADA'S SEEDING INTENTIONS FOR 2016

Pulse acres show strongly in Saskatchewan

Brian Clancey

"Canada's seeding intentions are just plain wrong," a trader declared between mouthfuls of wine and fresh monk fish at the long bar in Barcelona's Botafumeiro. "Lentils are 20 per cent higher and chickpeas are double."

The comment was tinged with disappointment. Instead of being shocked by the fact Canadian farmers want to plant record areas of lentils and field peas this year, the trader was worried pulse production will not increase enough to tame prices.

Markets clearly shared that opinion in the days following the release of Statistics Canada's (StatCan) seeding intentions report. Prices remained at levels intended to attract land into pulses. At the same time, importers who rarely buy product in the spring were active, covering some of next winter's needs.

Two years of crop failures in India, the current drought in Africa, this year's failure of Mexico's chickpea crop, and problems elsewhere have left the world with tight supplies. More than once, demand overwhelmed supply, with the result that price records were set and reset many times during the past year for green and red lentils, yellow peas, and Desi chickpeas.

At the same time, average prices for grains and oilseeds fell. Month after month, average gross returns from pulses consistently outperformed grains and oilseeds. Dramatic headlines and excited chatter on coffee row convinced former growers and first timers to add pulses to their rotations.

When surveyed by StatCan, they declared they intended to boost lentil area from last year's record 3.35 million acres to an unprecedented 5.14 million, while lifting land in peas from 3.83 to 4.28 million acres, cutting chickpeas from 140,000 to just 112,000 acres.

A return to average yields would see production rise faster than seeded area.

Lentil output could leap 44 per cent to 3.421 million tonnes, while peas jump 34 per cent to 4.29 million, and chickpeas only slip one per cent to 89,000 tonnes.

Canada is not alone in trying to boost output. Farmers in the United States are planting record areas to peas, lentils, and chickpeas. The country will harvest its first million tonne pea crop, around 450,000 tonnes of lentils, and 168,000 tonnes of Kabuli-type chickpeas.

These increases in net exporting countries come at the same time as India expects monsoon rainfall to return to be average or better, setting the stage for production to rebound from 17.33 to 19 million tonnes over the coming growing season. That will have a direct impact on demand for red lentils, yellow peas, and Desi chickpeas. Not this year. Next year.

Rising output in other net exporting countries will increase competition for access to markets on the Indian subcontinent. Even so, Canada's export campaign will get off to another strong start in 2016/17. The only worry is that if El Niño turns into a La Niña weather event, Canada could face a wet harvest. Any harvest delays could affect the ability of exporters to meet opening season sales commitments, and possibly make it harder to source the right quality.

The earlier this year's crop is planted, the better chance exporters have of meeting early season sales commitments. In turn, that makes it easier to deal with any potential problems with quality as they amass product for shipment in October and November. On average, half of Canada's pea and lentil crop is planted by the third week of May. On the other side, the harvest is normally half complete by the first week of September. Markets are betting the early start to seeding will see the harvest move forward as it did in 2007 and 2012 when half the crop was

PRICE INCOME FORECAST

Even if average prices paid for pulses in 2016/17 are down significantly from this season, they could still be at levels which prevent a big drop in seeded area in 2017. The only risk is whether farmers miss opportunities to sell by waiting too long for prices to make their season highs.

in the bin around the middle of August. That would make it easier to deal with a wet finish.

As it stands, exporters may need farmers to sell 40 per cent of the peas and lentils they harvest by the beginning of November. It is not certain that farmers will cooperate.

Many market participants believe first time growers will be eager to sell, putting downward pressure on grower bids. On the other hand, many lentil growers know that in the last four marketing years, prices were at their highest after February and March. For peas, that was true in three of the last four years. That could see a large proportion of product held back in hopes of getting paid more in 2017.

Growers selling after February will face a different kind of competition if this summer's monsoon is normal. A rebound in rabi or winter season pulse production on the Indian subcontinent will cool import demand. The country will remain the world's biggest buyer of pulses, but bigger domestic crops make it easier for importers to wait and see if world markets will go lower.

From their perspective, the stage is being set for pulse prices to fall back into a more normal relationship to grains and oilseeds. That includes massive pea and lentil crops in both Canada

and the United States, a bigger yellow pea crop in France, rising small calibre Kabuli chickpea production in Russia, and chances of a million tonne Desi chickpea crop in Australia.

“But, India could be short over three million additional tonnes of pulses from the last two crops,” mused another trader during dinner at Botafumeiro’s. “Does that mean eight million plus imports over the next 12 months?”

That seems highly unlikely, but it underscores the first concern of the night—will pulse production increase enough to tame prices? The answer may be only if there are no problems in important exporting or importing regions.

INTENSIONS VS. ACTUAL

More often than not seeding intentions for lentils have been lower the final seeded area. By contrast, they have been closer for peas. This may reflect the rapid growth seen in lentils, which have more than doubled in area since 2012, while pea area has been more stable.



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

Canada - Seeded Area (Acres)

Intentions	2009	2010	2011	2012	2013	2014	2015	2016
Lentils	1,970,000	2,875,000	2,700,000	2,460,000	2,063,000	2,860,000	3,350,000	5,140,000
Dry Peas	4,205,000	3,620,000	2,745,000	3,310,000	3,430,000	3,975,000	3,830,000	4,280,000
Edible Bean	291,000	318,000	260,000	285,000	205,000	293,000	273,000	230,000
Chickpeas	147,000	125,000	165,000	265,000	155,000	100,000	140,000	112,000
Actual	2009	2010	2011	2012	2013	2014	2015	2016
Lentils	2,405,000	3,445,000	2,557,775	2,515,000	2,720,000	3,120,000	3,950,000	N/A
Dry Peas	3,760,000	3,625,000	2,436,726	3,730,000	3,325,000	3,985,000	3,680,000	N/A
Edible Bean	301,100	331,100	197,881	305,000	240,000	305,000	260,000	N/A
Chickpeas	105,000	210,000	117,538	200,000	190,500	180,000	123,000	N/A
Variation	2009	2010	2011	2012	2013	2014	2015	2016
Lentils	22%	20%	-5%	2%	32%	9%	18%	20%
Dry Peas	-11%	0%	-11%	13%	-3%	0%	-4%	-2%
Edible Bean	3%	4%	-24%	7%	17%	4%	-5%	5%
Chickpeas	-29%	68%	-29%	-25%	23%	80%	-12%	30%

Source: Statistics Canada

UPCOMING PULSE AGRONOMY WEBINARS

June 8: 12-1 PM

Pulse Agronomy Webinar: Disease in Pulse Crops (Presenter Sabine Banniza, University of Saskatchewan)

- Learn about scouting for disease, how to evaluate risks, and know when to spray for disease

August 17: 12-1 PM

Pulse Agronomy Webinar: Handling & Storage of Pulse Crops (Presenter Prairie Agricultural Machinery Institute)

- Learn tips to combining your pulse crops and how to properly store them once harvested

For more information on these webinars, and to register visit the Webinars page at

saskpulse.com

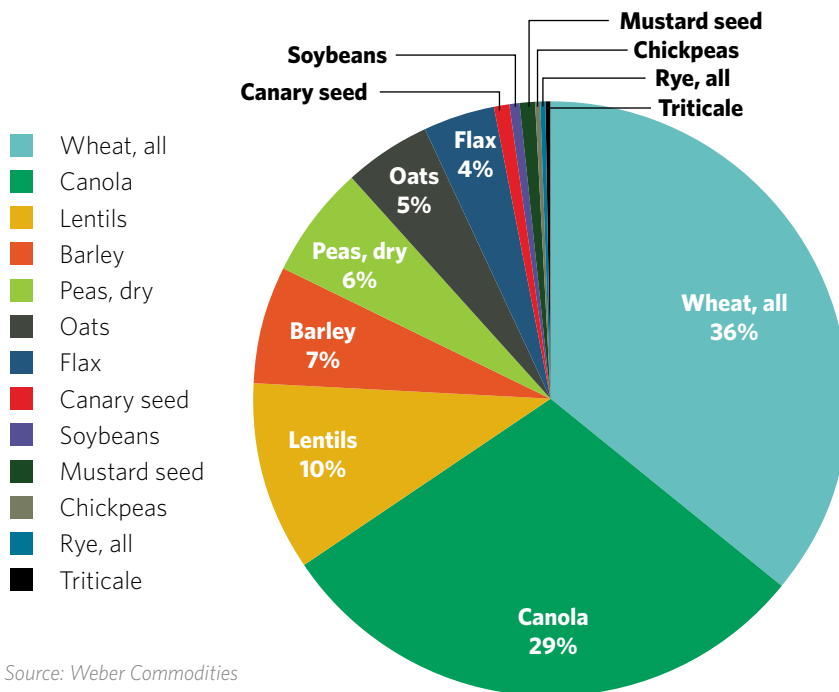
CANADIAN LENTILS

A success story

Larry Weber

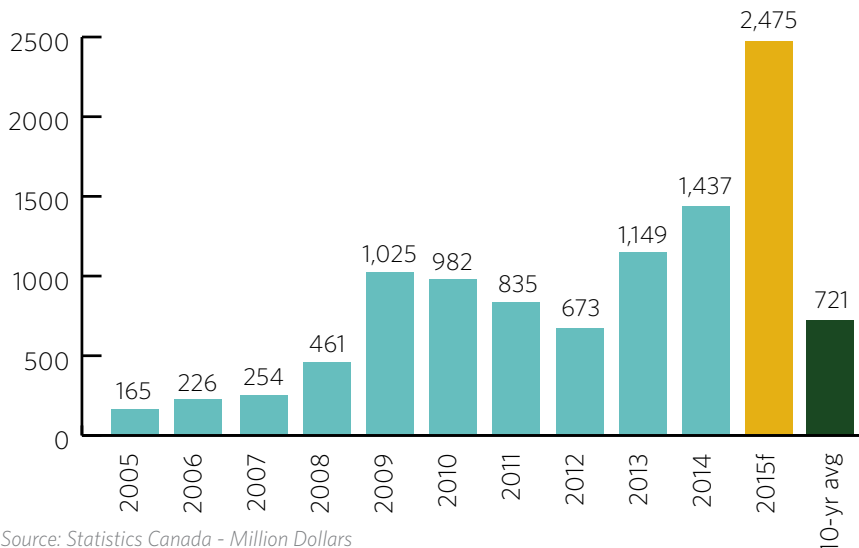
Without continual growth and progress, such words as improvement, achievement, and success have no meaning.
-Benjamin Franklin (1706 - 1790)

Saskatchewan: 2015 Acres Distribution



Source: Weber Commodities

Saskatchewan Lentil Exports: 2005-2015



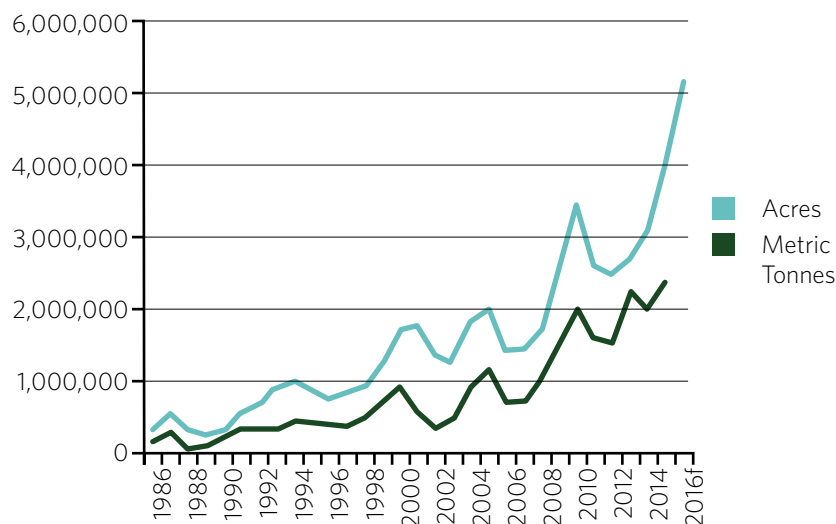
Source: Statistics Canada - Million Dollars

I have been in the grain industry in some form for over 35 years. I have seen some impressive changes, watched canola blossom into an economic force in Western Canada, and pulses become a staple in seeding intentions because of their profit. In the mid-1980s, any mention of a pulse crop within the confines of a grain company would be met with raised eyebrows to outright disdain. A steady increase in pulse acres across Western Canada led to the formation of a feed pea contract that was listed on the Winnipeg Commodity Exchange on September 28, 1995. At the time, two million acres was thought to be the threshold for a contract to ensure it was functional. The contract failed. It failed because few wanted transparency, however, it never diminished the will of a few pioneers who made sure pulses were front and centre of farmers, if for anything else, but for good agronomy.

Throughout my career, I have often heard farmers relay that if it were not for lentils, they would not be farming today. In this, the International Year of Pulses, it is incumbent to look back and chart the progress of lentil acres and exports because it truly is a Saskatchewan success story.

Thirty years ago, there were just 323,000 acres of lentils seeded in Western Canada with approximately 85 per cent in Saskatchewan. In 2016, over 5.1 million acres have been estimated by Statistics Canada as potential lentil acres, a jump of 1.19 million acres from the 2015/16 crop year. The primary advancements of lentil acres really arrived with the announcement of Clearfield® lentils in late 2006. I had the privilege of attending seven small farm meetings in Saskatchewan in the winter of 2007, prior to BASF's commercial launch of Clearfield® lentils. The meetings were well attended in southern Saskatchewan to sparsely attended

Canada Lentil Acres and Production: 1989-2016



Source: Statistics Canada

north of Eston, SK. The primary question from the floor from farmers was: "What colour lentils would you grow?" Red was my answer. Why? Because there was someone that would stand in the market and bid for them every single day.

Clearfield® lentils have grown from the commercial launch in 2007, from 50,000 acres to just under three million acres. Clearfield® lentils are now estimated to be over 80 per cent of the total lentil production in

Western Canada. The growth impact from 2006 to 2016 is best described as phenomenal.

On January 1, 2006, red lentils were trading for 12 cents (¢) a pound and were seen as a lesser of all evils for seeding intentions, with canola trading at \$5.26 a bushel (bu), and yellow peas at \$3.20/bu. The total value of lentil exports in 2006 was \$273.57 million. Ten years later, at the end of 2015, red lentils finished the year at 57¢

per pound, greens at 70¢, and yearly exports hit \$2.479 billion dollars in the fiscal year.

When you are perusing the graphics in this article, take some time to remember where you were when lentils hit one, two, three (we skipped four), and five million acres, and remember your own reasons and personalities for your decision to grow them on your farm. Sooner or later, your grandchildren will appreciate the memories.

One of the best lines obtained for this article came from a farmer who shall remain anonymous. "We were a group of farmers, who had no clue what we were doing, selling into export markets that we never even heard of, wondering if we would get paid, and if we would survive another crop year to do it all over again." Through all the trials and tribulations over the past 30 years, the one constant has always been the Saskatchewan Pulse Crop Development Board.



Larry Weber operates Weber Commodities Ltd.
More information can be found at www.webercommodities.com.

Saskatchewan Pulse Growers CALL FOR DIRECTOR NOMINATIONS

SPG is now accepting nominations to fill three positions on the SPG Board of Directors.

To sit on the SPG Board, you must be a registered pulse grower (i.e. you have sold a pulse crop and paid levy within the last two years).



Nominations are being accepted until 12:00 PM CST on October 4, 2016

www.saskpulse.com

BE AWARE OF MARKET RISKS INVOLVED WITH CROP PROTECTION PRODUCTS THIS SEASON



Pulse growers are advised to be aware of possible marketing restrictions that may arise from using certain crop protection products this season. More than 85 per cent of Canada's pulse production is exported to feed the world. Market access is important to the Canadian pulse industry, and growers play a key role in keeping the doors open. Guidelines for specific products are available on the next page. Growers are encouraged to review all of the following information before proceeding with their pulse crop management plans.

What are the crop protection products to pay attention to this season?

For pulse crop production in Western Canada, these products include diquat (Reglone®), glyphosate (Roundup®), saflufenacil (Heat®), glufosinate (MPower®, Good Harvest®), flumioxazin (Valtera™), carfentrazone (Aim®, CleanStart®), benzovindiflupyr (Solatenol®, Elatus™), chlorantriliprole (Coragen®, Voliam

Xpress®), and chlorpyrifos (Lorsban® and other trade names).

What are the risks of using these products?

There is no need for caution if applied early in the season, but very late applications of fungicides, insecticides, or desiccants, and harvest management tools may result in residue levels found in the seed. As a result, growers must ensure that they take appropriate risk mitigation steps to assure product residue remains below maximum residue limits (MRLs) set by regulatory agencies.

What developments have there been on these issues since last year?

The Canadian pulse industry is working hard to eliminate market access risks. For the crop protection products referenced in this document, growers are advised to be aware of international regulations in order to make the best crop management decisions.

What can you do to mitigate risk?

Ensure product residues remain at trace levels or levels well below accepted maximums by following these simple steps:

1. **Do not exceed the product's labelled rate**
Regulations for individual pesticides are set to allow growers to properly use the product without fear of violating domestic MRLs. However, these guidelines assume that the labelled rate is not exceeded. If you exceed the labelled rate, you risk surpassing recognized MRLs and this can have serious consequences in terms of both domestic pesticide laws, and international acceptance of the crop.
2. **Time the application according to the label**
Labels are very specific in terms of crop staging. Follow label instructions and apply crop protection products only at the recommended crop stage, so that you do not risk exceeding the maximum residue limits making your crop difficult to market.
3. **Consult with your exporter/processor about which crop protection products are acceptable in international markets**
Exporters/processors have a good sense of which markets may be sensitive to specific products. They will likely ask you what was used in your crop and possibly for more information.
4. **Consult the chart on the following page indicating market considerations and statuses for specific products or visit www.keepingitclean.ca.**

Market Considerations for use of Pulse Crop Protection Products - June 2016 Update

CROP PROTECTION PRODUCTS	PEAS	LENTILS	CHICK-PEAS	BEANS	FABA BEANS	COMMENTS
A. Desiccant/Harvest Management Tools						
Glyphosate (e.g. Roundup®)	✓	✓	!	!	!	Consult with your exporter/processor before using the product for certain crops/destinations. MRLs are established in key markets, however MRLs are set at low levels (2 parts per million) for dry beans in the EU and Japan, as well as for chickpeas and faba beans at CODEX.
Diquat (e.g. Reglone®)	!	!	!	!	!	Consult with your exporter/processor on pulse crops destined for the US. MRLs are established in key markets but MRLs have not been established in the US.
Saflufenacil (e.g. Heat®)	✓	!	NR	✓	NR	Consult your exporter/processor before using the product on lentils destined for the EU. MRLs are established in key markets, but the EU MRL for lentils is set at a low level and is in the process of being increased. Saflufenacil is registered on red lentils but not on other lentil types. The product is currently unregistered for pre-harvest use on chickpeas, but a registration is in the final stages. Consult www.keepingitclean.ca to confirm that the registration is in place before applying the product on chickpeas.
Glufosinate (e.g. MPower® Good Harvest®)	NR	!	NR	NR	NR	Consult with your exporter/processor before using the product. MRLs are established in the EU and Japan, but not in the US or at CODEX.
Carfentrazone (e.g. CleanStart®, Aim®)	!	NR	!	!	!	Consult with your exporter/processor before using the product. MRLs are established in the EU, US, and Japan, but not at CODEX.
Flumioxazin (e.g. Valtera®)	NR	NR	NR	!	NR	Consult with your exporter/processor before using the product. MRLs are established in the EU, US, and Japan but not at CODEX.
B. Other Crop Protection Products						
Chlorantraniliprole Insecticide (e.g. Coragen®, Voliam Xpress®)	✓/!	✓/!	✓/!	✓/!	✓/!	If applied according to label rates early in the crop year at vegetative stage or during flowering, there is no need for caution. In cases of later-season application during pod development or seed fill to maturity (e.g. for late season grasshopper control), consult with your exporter/processor.
Chlorpyrifos Insecticide (e.g. Lorsban®, other trade names)	NR	✓/!	NR	NR	NR	If applied according to label rates early in the crop year at vegetative stage or during flowering, there is no need for caution. In cases of later-season application during pod development or seed fill to maturity (e.g. for late season grasshopper control), consult with your exporter/processor.
Benzovindiflupyr Fungicide (e.g. Elatus™, Solatenol®)	✓/!	✓/!	✓/!	✓/!	✓/!	If applied according to label rates early in the crop year (e.g. single application at 0-20% flowering), there is no need for caution. In cases of later-season application, consult with your exporter/processor before using the product.

✓ No marketing issues.

! Know your market. There is at least one market where MRLs are not established. Consult with your exporter/processor.

✓/! No marketing issues associated with early application. If late application during pod development or seed fill to maturity (e.g. for late season grasshopper control), consult with your exporter/processor.

NR Not registered. Only use registered product.

THE CANADIAN TRANSPORTATION ACT REPORT

Next steps to ensure farmers' profitability

Delaney Seiferling



Pulse Canada published a white paper in April addressing the sections of the CTA report dedicated to rail transport and the transportation of grain, proposing solutions that consider the pulse industry's interests.

In February of this year, the federal government tabled its Canada Transportation Act (CTA) report, the culmination of a year and a half review process commissioned by the Harper government and chaired by former federal cabinet minister David Emerson.

The report detailed several recommendations, but one in particular prompted a strong response from the agricultural community – the elimination of the maximum revenue entitlement (MRE) program within seven years.

In December 2014, Saskatchewan Pulse Growers (SPG), in partnership with other Saskatchewan farm organizations, submitted recommendations to the review panel including a commitment

that the maximum revenue cap would remain in place to protect Western Canadian farmers, and a call for a full and formal costing review, to ensure the maximum revenue cap was relevant to current transportation costs and volumes.

The CTA report also made a recommendation to not renew Bill C-30, the Fair Rail For Grain Farmers Act.

Pulse Industry Response

Pulse Canada, who leads work in the area of transportation on behalf of SPG and the Canadian pulse industry, responded immediately to report's recommendation to not renew Bill C-30, which is set to expire August 1, 2016.

"It is Pulse Canada's position that

the Act contains provisions that have proved beneficial to industry," says Greg Northey, Pulse Canada's Director of Industry Relations. "Because this was a time sensitive issue, Pulse Canada requested that the until the Government consulted on the report and put together an implementation plan, which could take six months or more, they must ensure that the pro-competitive provisions in the Fair Rail For Grain Farmers Act remain available to the industry."

Following this, Pulse Canada published a white paper in April addressing the sections of the CTA report dedicated to rail transport and the transportation of grain, proposing solutions that consider the pulse industry's interests.

The white paper suggests that the biggest problem with the report is its characterization of the market power imbalance between shippers and railways, and the impact that this has



on investment in the railway network and the level of service provided, Northey says.

“As the first and most important principle, Pulse Canada views a common understanding and appreciation of market power of Canada’s railways as central to any discussion regarding solutions that address users’ needs for rail capacity, and service in rail transport, and the transport of grain.”

Furthermore, Pulse Canada did not see the evidence to support the CTA

review report’s recommendation to end the MRE.

“The grain MRE has been in place for over 14 years,” Northey says. “Any changes that may be contemplated to this regime must be preceded by a thorough, transparent, and independent review of railway profitability on the movement of grain, network efficiency, and the impact, if any, of the MRE on railways’ investment in system capacity.”

The report contains some points the industry can build on as well, and

while it is important to move carefully on critical sections of the Act, there are starting points for discussions, Northey says. These include the need to reinforce shippers’ existing rights by improving the level of service provisions to better recognizing shippers’ needs, and proposals to ensure that shippers can be financially compensated for poor railway service through balanced and reciprocal service agreements. The report also contains some positive recommendations that can form the basis for short-term government action, including a recommendation to improve the effectiveness of the CTA, and to ensure that the freight rail system is subject to more comprehensive and timely performance monitoring.

Going Forward

Overall, it is important for farmers to remember that changes to the CTA are a work in progress, Northey says.

“Transport Canada has indicated the process to develop a ‘Transportation Vision’ is just getting started and will include the CTA report recommendations as well as the examination of evidence, performance measurement, and the views of Canadians.”

“It will be important for Pulse Canada and all agriculture groups to build on the positive elements of the CTA report and work with Government as they consult in the coming days, weeks, and months to develop practical and effective legislative and regulatory change that results in a more competitive and responsive rail transportation system for farmers, shippers, and the Canadian economy.”

Note: To view Pulse Canada’s complete white paper, visit the Transportation page at saskpulse.com.



Delaney Seiferling is a freelance ag writer. She can be reached at delaney@dseiferling.com



PROMOTING 2016 INTERNATIONAL YEAR OF PULSES IN SASKATCHEWAN

In honour of 2016 International Year of Pulses, Saskatchewan Pulse Growers is promoting pulses at different regional events throughout the province. Here is just a snapshot of some of the places where pulses have already been profiled.



Saskatchewan Pulse Growers Staff had samples of pulses to showcase to children who stopped by the booth at Agriculture and Agri-Food Canada's Ag in the City event.



The Ag in the City Event also featured cooking demonstrations on the main stage, where pulses were showcased in a zesty pulse salad with lentils, chickpeas, and black beans.



Guests who stopped by the Gardenscape Tradeshaw in Saskatoon got the chance to see live pea, lentil, and faba bean plants that were provided by the University of Saskatchewan.



University of Saskatchewan nutrition students were treated to a guest lecturer from nutrition expert Jim Painter, who highlighted the important role pulses play in healthy eating.



STARS IN THE MAKING

Canadian Lentils brand turns five Canadian bloggers into cooking show superstars

Saskatchewan Pulse Growers Staff

The foodie world is changing. When consumers are on the hunt for new trends in food, delicious new recipes, and even the latest kitchen hacks, more and more they are turning to their favourite bloggers and social media stars for help.

It was with this in mind that Canadian Lentils, Saskatchewan Pulse Growers' (SPG) lentil promotional brand, set out to turn some of consumers' most trusted bloggers into the stars of their very own lentil-themed cooking shows.

Working with Celebrity Chef and Canadian Lentils Ambassador Chef Michael Smith, along with the Food Bloggers of Canada, Canadian Lentils narrowed down over 50 different video

contest entries from social media favourites, to the chosen five Stars.

These five Stars were flown to Prince Edward Island, where they were given the royal treatment. Each star filmed their very own television-quality cooking show with assistance from Chef Michael Smith.

"Video is becoming an increasingly important tool on social media," says Amber Johnson, Manager of Market Promotion with SPG. "We wanted to provide these top five winners with the chance to create the ultimate cooking video, with top-of-the-line production value, and tips from seasoned cooking show veteran, Chef Michael Smith."

The goal of creating these videos was to develop premium quality content that the social media stars would want to share on their own social channels,

in addition to being shared on Canadian Lentils' online channels. "While each of the videos are about the personalities of each social influencer, and giving them their time to shine, the underlying message in each of these videos is the unique and interesting recipes they have developed utilizing lentils." It also helps that the subtle message about the versatility of lentils is being delivered by a source that has already established a level of trust with their audience. "These bloggers have worked long and hard to develop a relationship with their readers. SPG is leveraging that relationship and that trust by working with the bloggers to develop lentil-themed content for use on their blogs."

Each of the five videos, and their accompanying recipes, can also be found on lentils.ca.

THE STARS AND THEIR RECIPES

Koko Brill - Lentil Shepard's Pie - kokoskitchen.com

Adam Heard - Firecracker Chicken with Rice & Lentils - kookchannel.com

Trudy Stone - Coconut Lentil Blondies - eatliveandplay.com

Lalitha Taylor - Lentil Power Bites - Taylornutrition.ca

Samantha Turnbull - Lentil Tacos with Avocado Cilantro Sauce - itdoesnttastelikechicken.com

Behind the Scenes: The Stars and Their Recipes



A quick break allowed time for selfies with Chef Michael and Koko Brill from kokoskitchen.com



There were eight cameras on set capturing this one-on-one conversation between Chef Michael and Lalitha Taylor from taylornutrition.ca



There is always time for laughs on set while Chef Michael and Samantha Turnbull look over her lentil taco recipe.



Adam Heard from kookchannel.com takes notes from multi-cookbook author Chef Michael on developing his written recipe.



Chef Michael and Trudy Stone from Eatliveandplay.com style her Lentil Blondies for the camera beauty show.

nutritious SIMPLE versatile

BEET & LENTIL SLIDERS

12 SLIDERS | 1 HOUR, 30 MINUTES PREP TIME | 5 HOURS TOTAL TIME

INGREDIENTS

9 medium beets
2 Tbsp (30 mL) canola oil, divided
1 onion, diced small
3 garlic cloves, minced
2 Tbsp (30 mL) apple cider vinegar
2 ½ cups (625 mL) cooked green lentils, divided
2 cups (500 mL) cooked brown rice
½ cup (125 mL) whole prunes
¾ cup (175 mL) panko bread crumbs
2 tsp (10 mL) Dijon mustard
1 ½ tsp (7 mL) smoked paprika
1 tsp (5 mL) ground cumin
1 tsp (5 mL) ground coriander
½ tsp (2 mL) dried thyme
1 tsp (5 mL) salt
¼ tsp (2 mL) pepper
3 Tbsp (45 mL) canola oil, for frying


DIRECTIONS

- 1 Preheat oven to 400°F (200°C). Wash and scrub beets. Pat dry and place in a shallow roasting pan with 1 Tbsp (15 mL) of canola oil. Toss to coat. Cover with aluminum foil and roast for 50-60 minutes or until fork-tender. Remove from oven and let cool completely. Trim tops and bottoms off beets, then shred on a box grater.
- 2 Heat a medium frying pan over medium-high heat and add remaining 1 Tbsp (15 mL) canola oil. Stir in onion and sauté for 5-6 minutes, until onions are browned. Stir in garlic and cook 30 seconds. Stir in apple cider vinegar and scrape up all of the brown bits from the bottom of the pan. Remove from heat.
- 3 In the bowl of a food processor, add shredded beets, 2 cups (500 mL) lentils, rice, and prunes. Pulse just until the mixture is the consistency of ground beef. Be sure to leave some chunky bits for texture.
- 4 Add lentil mixture to a large bowl and stir in cooked onions, bread crumbs, mustard, paprika, cumin, coriander, thyme, remaining ½ cup (125 mL) lentils, salt, and pepper. Mix all together so everything is well incorporated. Cover and chill for at least 3 hours or overnight.
- 5 Heat a cast iron skillet over medium-high heat and add 1 Tbsp (15 mL) of canola oil. Scoop about ⅓ cup (75 mL) of burger mixture into your hand and press it into a patty about ¾ inch (2 cm) thick. Add patties, about four or five at a time, to the hot skillet and cook for 2 minutes per side, until they have a nice crust on the bottom. Cover and cook another 4 minutes until they are cooked through. Remove to a baking sheet, and keep warm in a 200°F (100°C) oven while you cook the remaining burgers.
- 6 Build your own sliders with mayo, mustard, ketchup, cheese, lettuce, tomatoes, etc.

NUTRITIONAL INFORMATION

SERVING SIZE 1 slider | Calories: 180, Total Fat: 6 g, Saturated Fat: 0.5 g, Cholesterol: 0 mg, Fibre: 5 g, Carbohydrates: 25 g, Sugars: 5 g, Protein: 6 g, Sodium: 250 mg, Potassium: 326 mg, Folate: 115 mcg





BLUEBERRY & LENTIL CLAFOUTIS

Servings: 4 Prep Time: 10 Minutes Total Time: 45 Minutes

INGREDIENTS

- 2 Tbsp (30 mL) butter
- 1 cup (250 mL) whole milk
- $\frac{3}{4}$ cup (175 mL) all-purpose flour
- $\frac{1}{2}$ cup + 2 Tbsp (155 mL) granulated sugar
- $\frac{1}{2}$ cup (125 mL) cooked split red lentils
- 3 large eggs
- 2 tsp (10 mL) vanilla
- $\frac{1}{2}$ tsp (2 mL) salt
- 1 cup (250 mL) fresh blueberries

DIRECTIONS

- 1 Preheat oven to 375°F (190°). Add butter to a 10 inch (25 cm) cast iron skillet or square baking dish and place in the oven to melt. Remove from oven and use a pastry brush to cover sides and bottom with melted butter.
- 2 Add milk, flour, $\frac{1}{2}$ cup (125 mL) sugar, lentils, eggs, vanilla, and salt to a blender and beat on high for 1 minute until smooth. Pour batter into the prepared pan and scatter blueberries on top. Sprinkle with remaining 2 Tbsp (30 mL) granulated sugar.
- 3 Bake for 35-40 minutes, until top is puffed and golden brown. Let cool on a wire rack for 5 minutes before serving.

NUTRITIONAL INFORMATION

SERVING SIZE 1 slice | **Calories:** 370, **Total Fat:** 11 g, **Saturated Fat:** 6 g, **Cholesterol:** 160 mg, **Fibre:** 4 g, **Carbohydrates:** 56 g, **Sugars:** 34 g, **Protein:** 11 g, **Sodium:** 370 mg, **Potassium:** 179 mg, **Folate:** 93 mcg



WILD RICE & LENTILS WITH FLAKED SALMON

6 SERVINGS | 5 MINUTES PREP TIME | 25 MINUTES

INGREDIENTS

- 2 Tbsp (30 mL) canola oil, divided
- $\frac{1}{2}$ cup (125 mL) finely sliced white onion
- 1 cup (250 mL) finely chopped red bell pepper
- $\frac{1}{2}$ cup (125 mL) halved pecans
- 2 cups (500 mL) cooked wild/brown rice blend
- 1 cup (250 mL) cooked green lentils
- $\frac{1}{2}$ cup (125 mL) vegetable stock
- 1 lemon, juice and zest
- 3 Tbsp (45 mL) chopped fresh dill
- $\frac{1}{2}$ cup (125 mL) dried cranberries
- to taste, salt and pepper

SALMON:

- 1 (6 oz/170 g) fillet of salmon, deboned, skin removed
- $\frac{1}{2}$ tsp (2 mL) paprika

DIRECTIONS

- 1 Heat 1 Tbsp (15 mL) oil in a large sauté pan, add onions and cook until lightly golden. Add pepper and pecans. Cook until peppers are tender and pecans lightly toasted, approximately 5 minutes.
- 2 Toss in rice, lentils, and stock and cook for 3-5 minutes until stock is absorbed and rice and lentils are hot.
- 3 Stir in lemon juice, dill, and cranberries. Season to taste with salt and pepper. Transfer to a serving bowl and reserve.
- 4 In a separate pan, heat remaining 1 Tbsp (15 mL) of oil. Season salmon with salt and pepper and sprinkle with paprika on both sides. Add to pan and cook for 2-3 minutes on each side until desired doneness. Remove from pan and allow to cool for 2-3 minutes. With two forks, flake the salmon into small bite-size pieces and toss on top of the prepared rice and lentils. Garnish with dill and serve.

NUTRITIONAL INFORMATION

SERVING SIZE 1 cup (250 mL) | **Calories:** 290, **Total Fat:** 13 g, **Saturated Fat:** 1.5 g, **Cholesterol:** 15 mg, **Fibre:** 6 g, **Carbohydrates:** 34 g, **Sugars:** 10 g, **Protein:** 12 g, **Sodium:** 140 mg, **Potassium:** 372 mg, **Folate:** 81 mcg

Saskatchewan Pulse Growers

CALL FOR DIRECTOR NOMINATIONS

SPG is now accepting nominations to fill three positions on the SPG Board of Directors.

To sit on the SPG Board, you must be a registered pulse grower (i.e. you have sold a pulse crop and paid levy within the last two years).

Responsibilities:

- Approximately seven Board meetings per year
- Conference calls as required
- Typical time commitment of a Director ranges from 21 to 53 days depending on the Director's involvement in other committees

Send in your completed nomination form to:

207-116 Research Dr., Saskatoon, SK, S7N 3R3

Ph: (306) 668-0590 **Fax:** (306) 651-3043

Email: sweber@saskpulse.com

**Nominations are being accepted until
12:00 PM CST on October 4, 2016**

www.saskpulse.com

SASKATCHEWAN
pulse
Growers 

2017 BOARD OF DIRECTORS NOMINATIONS

Saskatchewan Pulse Growers is now accepting nominations to fill three positions on the SPG Board of Directors. Nominations are being accepted until 12:00 PM Central Standard Time on Tuesday, October 4, 2016

RESPONSIBILITIES:

- Approximately seven Board meetings per year
- Conference calls as required
- Typical time commitment of a Director ranges from 21 to 53 days depending on the Director's involvement in other committees
- Terms are for three years, with the possibility of being re-elected twice, for a maximum of three consecutive full terms

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

* If you or one of your nominators sells pulses under a company name, you must also complete a designated representative form. See note at the bottom of this form.

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:

2015

2016

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

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

Registered Producer (signature)

Registered Producer (signature)

Registered Producer (signature)

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. levy) 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.

ON POINT

SPG Board of Directors Profile

Gerrid Gust, Director



Together with family, Gerrid manages and operates a fourth generation farm, at Davidson, SK. They run a straight

grain operation, where the focus is on producing high quality crops including peas, red lentils, durum, canola, and winter wheat, with pulses making up approximately 30-50 per cent of their rotation. Gerrid has been involved in farm policy for the past 10 years starting with the Western Canadian Wheat Growers, as Chair from 2009-2013. He also served on the Western Grains Research Foundation (WGRF) from 2007-2015. In 2012, Gerrid was asked by the provincial government to help set up the Saskatchewan Wheat Development Commission. He has served on the agriculture/agri-food subcommittee of Enterprise Saskatchewan, has represented Canadian farmers on a trade mission to North and West Africa (2015), and is also active with the Davidson Kinsmen club (2001 to present). Gerrid serves on SPG's Audit and Finance and Research and Development Committees, and is also SPG's representative on the Board of Farm and Food Care Saskatchewan.

Feed Benchmark Reports

Saskatchewan and Alberta Pulse Growers continue to pull together information and estimates for the feeding values of dry pea and faba bean in Western Canada. For the latest feed prices for Saskatchewan, Alberta, and Manitoba visit the Markets section of saskpulse.com.

Upcoming Events

International Year of Pulses Grower Celebration

June 16, 2016 Regina

In honour of the International Year of Pulses 2016, Saskatchewan Pulse Growers is hosting a recognition event for Saskatchewan pulse farmers on June 16, 2016 at the Queensbury Convention Centre in Regina, SK, during the Farm Progress Show. The event will bring together all parts of the pulse industry to recognize the contribution of Saskatchewan growers in developing a successful and profitable Saskatchewan pulse industry. To register, visit saskpulse.com.

Pulse and Special Crops Convention

July 6 - 8, 2016 Toronto

Registration is now open for the 2016 Pulse and Special Crops Convention being held in Toronto July 6 - 8. The whole world is taking notice of pulses and special crops in 2016 and this convention is a great opportunity to meet and network with industry leaders, make new business connections, and learn more about pulse and special crops markets around the world.

For more information or to register, visit specialcrops.mb.ca/convention/2016/

Crop Insurance Deadlines

June, 2016

Saskatchewan Crop Insurance Corporation (SCIC) reminds its customers of the following deadlines:

- June 21 – Yield Loss Coverage begins. Full yield-loss coverage begins on establishment spring and fall-seeded crops.
- June 25 – Seeded Acreage Reports due. If acres are too wet to seed, this is the deadline for Unseeded Acreage claims.
- June 25 – Deadline to report any stored grain, to avoid it being counted as new production in the event of a claim.

SCIC also reminds customers that, to be insurable, a crop is expected to reach a reasonable level of maturity before the final fall frost date in your area. If you are unsure about a crop or variety, please talk to a customer service office. Visit saskcropinsurance.com to learn more.

Field Days

There are a number of pulse-related field days happening across Saskatchewan this summer. Here are a few to take note of:

- Western Applied Research Corporation (WARC) Annual Field Day (July 13) – Scott, SK
- Canada-Saskatchewan Irrigation Diversification Centre (CSIDC) Annual Irrigation Field Day & Trade Show (July 14) – Outlook, SK
- Wheatland Conservation Area Field Day (July 14) – Swift Current, SK
- Indian Head Agriculture Research Foundation (IHARF) Crop Management Field Day (July 19) – Indian Head, SK
- South East Research Farm (SERF) Field Day (July 20) – Redvers, SK
- NARF/AAFC Field Day (July 20) – Melfort, SK
- 2016 Crop Diagnostic School (July 26, 27, or 28) – Swift Current, SK

For more information about the field days that Saskatchewan Pulse Growers funds across Saskatchewan, flip to page 8 and 9.

Canadian Pulse Research Workshop

October 26 - 28, 2016 Winnipeg

The Canadian Pulse Research Workshop is the biennial meeting of pulse researchers in Canada. Building on the success of the previous meetings, the 10th Canadian Pulse Research Workshop in Winnipeg, Manitoba will bring together pulse researchers from different disciplines to present their latest results within the areas of:

- Agronomy and Pathology
- Environment
- Genetics and Plant Breeding
- Nutrition and Food

Online registration for this event is now open, so for more information visit the Events section of saskpulse.com

SPG Board Election

If you or someone you know is interested in running for Saskatchewan Pulse Growers Board of Directors, see page 32 and 33 for more information and for a nomination form. The deadline for nominations is October 4, 2016.

For recent news on the pulse industry, visit the SPG website at saskpulse.com.



PULSE GROWER PROFILE

In recognition of the International Year of Pulses, SPG will be profiling past board members throughout 2016.

Germain Dauk, Naicam, Saskatchewan

How long were you a board member with Saskatchewan Pulse Growers?

I was a board member from the late 90s to the early 2000s. When I stepped down from the Saskatchewan Pulse Growers' board, I served as Chair on Pulse Canada's board, doing work in the areas of market development and market access. I found the work really interesting and exciting, for example once we met with the Taiwan's agriculture minister to try and reduce their tariff on peas. We learned through interpreter that their main industry was snow peas, and so once we could show him samples of Canadian green and yellow peas, the minister agreed to ease the tariffs over a five-year period.

What attracted you to become involved with the board?

I taught school for 20 years but I had always wanted to be a farmer. My father discouraged me from farming, but after he passed in 1983 I quit teaching and started farming in 1984. I did not know a thing about farming, but who do you learn about farming from? Other farmers. I joined every farm organization around

Naicam to learn more. As I spent time learning from farmers, a lot of them encouraged me to join the various crop boards and so I chaired a group involved in environmental farm planning and also chaired the Agriculture Institute of Management in Saskatchewan, as well as serving on the Saskatchewan Pulse Growers board. I am passionate about pulses and I was fortunate to be a part of the board, and later the Chair of the Special Crops Value Chain Roundtable.

When did you begin growing pulses?

I got interested in growing pulses when I learned that they produced their own nitrogen. I was one of the first farmers in the area to grow both yellow and green peas in the 1990s, and I was definitely the first farmer in the area to grow small yellow and red lentils. I retired from active farming six years ago, but I still help my sons farm. We have found that pulses fit well in our crop rotation with canola, wheat, barley, and oats. We farm about 3,300 acres and pulses make up approximately 20 per cent of our rotations.

What was the biggest challenge that you faced when you were on the Board?

I think a couple of things happened. We learned that the pulse industry cannot grow and prosper unless you do the research. Big companies spend 10 per cent of their income on research, so convincing farmers that Saskatchewan Pulse Growers needed to do more research was one part of the challenge. The other challenge came from trying to convince the federal government that they should partner with us on research projects.

Another challenge we faced as a board was trying to grow the industry domestically. Our efforts were not always successful and we realized that our efforts to try and change people's consumption habits were running into cultural challenges.

What opportunities are available to Saskatchewan pulse growers?

When I was on the board, I was keen on faba beans because they produce more nitrogen than any other pulse crop. I thought they would be a great fit for Saskatchewan, but it has been difficult for them to get a foothold in the province. Once we sort out faba bean markets, I think we can hit a critical mass to help promote and sell this crop.

Weather has constrained some of the pulse acreage in the province but I think a) as the danger of crop disease continues, people will start to grow more pulses in their crop rotations, and b) as nitrogen fertilizer prices increase, it will encourage people to grow more pulses.

I am still really excited for the industry and I think there is potential for the pulse acres to double. It will take some research, more investment in tolerant varieties, research into peas and tolerance to wet soil, and it will really rely on the market development of pulse crops as well. I am really excited to see what pulses will do in the future.

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