

Driving Grovth

Managing Insect and Disease Threats Approaching New Trade Barriers New Research Projects



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Chairman's Message

Shawn Buhr Chairman of the Board

Removing Uncertainties

As I write this report, seeding is

wrapping up with conditions being not so good in our area. Between drought and frost, our pulse crops are emerging very slowly. As a nice addition to the drought and frost, I have also seen grasshoppers showing up. Looking at the bright side, if it doesn't rain soon, they are going to soon starve.

Earlier this spring, I had the opportunity to take part in the Canadian Special Crops

Associations (CSCA) planning session. The CSCA represents the grain trade aspect of the pulse industry. This organization, along with the grower groups, is a partner in Pulse Canada. Our relationship with the CSCA over the last year has become even stronger. You may ask why is this important. To answer: for our industry to be the world's best, all facets need to cooperate.

During the CSCA planning session, a significant amount of time was devoted to discussion around a generic producer contract that would be offered by all

CSCA members. The CSCA is committed to this new contract that will be developed in consultation with both growers and the trade. The need for such a contract is plain and the value is immense. Many of you will recall the presentation made by Craig Zawada on contracting tips at Pulse Days 2004. Much was made of the need for contracts to be plainly written and to be equitable – that is, fair to both parties. This is exactly what the CSCA intends to deliver with their new producer contract. How will this improve our industry? As we strive to be the world's best, we need to remove uncertainties and reduce risks throughout the value chain. As risks are reduced, the premiums that accompany them also are reduced. This will make us stronger and better competitors in international grain trade. It is simply not enough for growers to strive to reduce the costs of production only at the farmgate. We must be diligent to reduce

costs at every level where we can have some influence, and this is clearly one area.

This is not to say that our industry is plagued by poor contracts and disputes but we have all (both the grain companies and producers) experienced situations where things did not turn out as expected. Did the original contract outline the remedies? Most often. no. Should it have? Yes. The idea behind the "generic contract" is to remove uncertainty and to be fair to both producers and grain companies. This will be beneficial to our industry. Our industry is a competitive one and the savings generated

will find their way to the farmgate. We are committed to working with the

CSCA to help develop the generic contract. We are also committed to further strengthening the relationship with the grain trade. The development of this strategic alliance is a key step in Saskatchewan becoming the world leaders of the pulse industry.

To close, I hope to see you in Swift Current on July 8th for Pulse Tour 2004, the Dryland Crops Field Day. I hope it turns out to be the "wetland" tour.



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Craig Zawada spoke on "The Ten Rules of Production Contracts" at Pulse Days 2004.



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Table of Contents

Pulse Point – June 2004

Driving Growth

Pulse producers will be scouting their fields this summer, looking for diseases and insects and other threats to growing a profitable crop. This *PulsePoint* probes the field for information on protecting your crop and your investment, global market issues, and new research that will help drive the growth of our industry.

5 Towards Ascochyta Blight Control in Chickpeas

The Chickpea Ascochyta Blight Response Team has developed new guidelines to help protect your chickpea crops.

9 Caution: Approaching New Trade Barriers

Gordon Bacon cautions challenging times ahead as food safety claims become the new global trade barrier.

23 Controlling Grasshoppers in Lentils

Scott Hartley offers some options to control grasshoppers in your lentil crops this season.

🚯 in this issue 🚯

- 8 *Grain and Seed Contracts for Farmers* Now Available Farmers and others in the industry can now access a new legal guide to grain and seed contracts.
- 11 Summer Field Day in Swift Current Join fellow producers and researchers at our annual spotlight on field research in Swift Current on July 8.
- 13 Harvest Time for Quality Pulses Ray McVicar provides a handy reference for harvesting your pulses at top quality.
- 16 New Pulse Research Underway Joelle Harris outlines eight research investments that will help add value to pulse crops.
- 22 Run For The SPG Board: Nomination Form Want to make a difference in Saskatchewan's pulse industry? Run for the 2005 Board of Directors.

🚱 departments 🚯

3 Chairman's Message

SPG is working with CSCA to develop generic producer contracts to help remove uncertainties when selling your crop.

- 19 On Point News items of interest about SPG and the pulse industry.
- 21 Cooking With Pulses
 - It's barbeque season and time to think about pulses at your next backyard cookout.
- 26 Market Muse: Solid Demand Shapes 2004-05 Outlook Greg Kostal explains what we can expect in demand and price for pulses this fall.
- 30 Closing Thoughts Garth Patterson talks about changes in agricultural extension in Saskatchewan.

driving growth by Penny Pearse

Toward Ascochyta Blight Control in Chickpea

😥 in brief

Take steps to protect your chickpea crop this summer.

Introduction

Chickpea production in Saskatchewan has experienced a roller coaster ride in recent years. Chickpea acreage started small in 1996 with 6,000 acres, increased rapidly to over 1.1 million acres in 2001, and declined again to 130,000 acres in 2003. The intended acres for the 2004 season are about 88 per cent of last year, at 115,000 acres. This instability in production can be attributed to lower market prices, problems with crop maturity, as well as the devastating disease ascochyta blight.

Since 2002, a group of pathologists, breeders and agronomists have been developing guidelines to help chickpea farmers make decisions about applying foliar fungicides to control ascochyta blight in their crops. This group, called the Chickpea Ascochyta Blight Response Team, has recently finished revisions to the 2004 version of the *Guidelines for Control of Ascochyta Blight in Chickpea in Saskatchewan.* The *Guidelines* are based on principles of integrated pest management, including field scouting and the judicious use of fungicides.

Research into ascochyta blight management and breeding efforts for improved genetic resistance has been underway for the past decade. However, it takes years of data and field experience to develop failsafe guidelines for disease control. At this time, highly dependable recommendations for ascochyta blight control in chickpea are not yet available. The 2004 *Guidelines* incorporate prelimi-



nary research results and field experiences to help farmers develop the best disease control programs for their situation.

Scouting for Ascochyta Blight symptoms in chickpea

When should I scout for ascochyta blight in my crop?

- Begin scouting your crops at the seedling stage (two to three weeks after planting), i.e. when the plants have emerged and seedling rows are becoming evident.
 - The length of time between scouting events is dependent on weather condi-

Early lesions on chickpea stem. In the field, you may need to use a hand lens to see these spots.

More Info

See the full 2004 Guidelines on the SAFRR website: www.agr.gov.sk.ca → Crops

➔ Pulses

- → Pest
 - Management



tions, previous disease risk and whether a fungicide has already been applied:

- If a fungicide application has been made, reassess disease risk by scouting your crop again within seven days.
- If no fungicide application was made, reassess disease risk by scouting your crop again within three to five days.
- Scouting frequency should be increased if there have been frequent rain events.
- Continue scouting until the late-pod stage (11-14 weeks after planting), i.e. the crop is drying down and the majority of seed has filled.

How do I scout for ascochyta blight?

- Be most diligent scouting crops at greater risk to ascochyta blight, including:
 - fields planted to ascochyta-infected seed (even if a seed treatment was used);
 - fields planted to a variety rated as having 'very poor' or 'poor' disease resistance;
 - fields that had chickpea in the crop rotation more often than one in four years;

- fields planted adjacent to the previous year's chickpea residue;
- areas of the crop that may be heavier seeded or have increased fertility, i.e. headlands;
- areas where moisture may have accumulated, i.e. hollows or near fence lines; and,
- areas where plants received damage from wind-blasting, drought, herbicide injury, frost, hail, or other stresses.
- Walk an "M" pattern throughout the crop. Look for discoloured plants and/or small discoloured spots on the leaves. Stop at specific sites and look down within the crop canopy to inspect individual plants.
 - If the field is less than 100 acres, check a minimum of 5 sites and if the field is greater than 100 acres, check a minimum of 10 sites.
- Use flags to mark specific areas for regular monitoring during the growing season. This allows you to return to a specific site to look for lesions developing on new plant growth and to determine the effectiveness



of your fungicide program. Try to alter the scouting path slightly each time you scout so that you are less likely to miss areas of infection.

- There is potential to spread disease by walking through a crop and this risk is greatest if the canopy is wet. Avoid scouting a field immediately after a rain or heavy dew.
- Scout the crops with less disease first. Thoroughly wash your boots and change your clothes after scouting a diseased crop.

Using Preventative Fungicides

Although scouting for disease symptoms is valuable, experience has shown that early control of ascochyta blight is essential. The goal for managing chickpea ascochyta blight is to **apply the first fungicide prior to the first major rain event after the crop has emerged; or, by six weeks after planting**.

Consider a preventative fungicide if you are uncertain about your disease risk and are inexperienced at identifying symptoms. This is especially important if you are growing a large kabuli with a 'very poor' to 'poor' resistance rating. Preliminary research conducted by the University of Saskatchewan has shown that an early fungicide application by six weeks after planting was beneficial to delay the onset of disease. Subsequent applications should be based on disease risk in your crop and the weather forecast.

If you need assistance with field scouting, consult an Agrologist or an industry representative.

This is an excerpt from Saskatchewan Agriculture, Food & Rural Revitalization's (SAFRR) *Guidelines for Control of Ascochyta Blight in Chickpea in Saskatchewan.* For the complete document, see www.agr.gov.sk.ca. SAFRR has produced an interactive CD-ROM on ascochyta blight in chickpea. The CD contains numerous colour photos and information on how to scout for and identify ascochyta blight, the disease cycle and infection process, and management techniques. To order a CD, contact Penny Pearse at (306) 787-4671 or ppearse@agr.gov.sk.ca. Penny Pearse is the Provincial Plant Disease Specialist with SAFRR.

More Info

The full guide includes answers to questions such as:

- How do I identify ascochyta blight symptoms?
- How do I determine disease risk in my crop?
- Which foliar fungicide should I use?
- When is the best time to apply fungicides?

from Farm & Food Report

😥 in brief

A new legal guide to grain and seed contracts is now available.

Grain and Seed Contracts For Farmers Now Available

The second in a series of legal

guides for farmers – *Grain and Seed Contracts for Farmers* – is now available for downloading at www.sccd.sk.ca/aims/. Those without Internet access may obtain a print copy by phoning the Agriculture Institute of Management in Saskatchewan (AIMS) at (306) 975-8928 in Saskatoon.

"As we continue the shift from commodities to more profitable crop- and livestockbased products, a solid understanding of contracts is essential," says Brian Sim, Soils and Crops Specialist with Saskatchewan Agriculture, Food and Rural Revitalization in Saskatoon. "*Grain and Seed Contracts for Farmers* is aimed at helping farmers and marketers achieve that understanding through a discussion on fair standards of accepting and allocating risk."

keters achieve that understanding through discussion on fair standards of accepting a allocating risk." *Grain and Seed Contracts for Farmers* offers five sample contracts (precedents), each with a page or two of commentary or

offers five sample contracts (precedents), each with a page or two of commentary on each type of contract in the grains and seeds industries.

"These sample contracts could be used by farmers, but they are meant as a guide in providing a starting point with context and ideas," says Sim. "A cookie-cutter approach to contracts can be dangerous, as a small change can make a contract term inapplicable. Each sample contract was prepared by a Saskatoon lawyer who specializes in patents and contracts, with the standard disclaimer that all contracts should be prepared by a lawyer."

As the conclusion in *Grain and Seed Contracts for Farmers* states, it is impossible to create a one-size-fits-all agreement for something as complex as agriculture law. However, the samples in this publication can be particularly useful "as a comparison to other documents that are typically presented to producers. Without a point of comparison, normal standard forms look harmless. It is only when a more producer-friendly precedent is reviewed that one can see the effects that small changes can have... Precedent contracts give context, a starting point, and provide ideas."

The five sample contracts and their commentaries address delivery contracts, production contracts, basis contracts, technology agreement, and generic agreement of purchase and sale after harvest. They are based on Saskatchewan law as of March 31, 2004.

Grain and Seed Contracts for Farmers also explains several basics about contracts, such as the fact that every contract balances risk and reward: "gaining a contract advantage in one area usually requires getting less in another... be tough when bargaining – but be fair." It also cautions against thinking that contracts are sacred documents that can always be protected through a lawsuit, stating, "This is dangerous thinking."

Sim says the idea of preparing publications that make contracts more easily understood began a few years ago with a volunteer group of farmers and farm organizations. The first result was *A Farmer's Guide to Production Contracts in Saskatchewan*, a 28-page booklet that translates the legal jargon in production contracts into plain language. It is also available from the AIMS website.

The next in the series will address the development of standards in dealing with liabilities. Sim says it will likely be available in the spring of 2005.

This article first appeared the *Farm & Food Report* – May 2004, by Saskatchewan Agriculture, Food & Rural Revitalization. For more information, see "Reports" on www.agr.gov.sk.ca.

More Info

Download your copy of *Grain and Seed Contracts for Farmers* at www.sccd.sk.ca/aims or call the Agriculture Institute of Management in Saskatchewan (AIMS): (306) 975-8928.

🚱 pul se canada report 🚱

by Gordon Bacon

Caution: Approaching New Trade Barriers

📴 in brief

Food safety claims have become the new global trade barrier.

As a highly trade dependent nation, Canadian agriculture is a bit like the canary in the coal mine of international trade issues. Some people are starting to think that Canada's trade canary looks a bit choked up right now. Is something amiss deep down in the seams of free trade of agricultural products?

Canadian agriculture, perhaps with the exception of supply-managed dairy and feather industries, is a strong proponent of global free trade in agriculture. Although the long-promised gains from unfettered agricultural trade under the Uruguay Round, and now the Doha Round of World Trade Organization (WTO) discussions are hardly measurable (perhaps just enough to keep the canary alive?), progress *has* been made in limiting the types of trade-distorting programs that can be used by the USA, EU and other trade-sensitive nations. However as tax, tariff and production/export subsidies are forced down, there is a strong temptation to have new barriers take their place.

Why? It is hard to call free trade a shortterm win-win scenario when you are on the winning side that will most closely resemble a loser. Would, for example, US sugar or cotton producers/land owners feel like winners if there was free trade in third world sugar and cotton? Protectionist policies for these commodities in the USA suggests that "vulnerable" might be a better adjective than "winner" for these farmers residing in what they feel is the last bastion of free trade. An alternative phrase, 'winners and workers with new opportunities' might be a better slogan for free trade in some products.

While it can be painful, let's throw in another cliché: "No pain, no gain." Free trade in agricultural products is essential for Canadian agriculture and in the long-run, freetrade policies will build sustainable



economies that allow countries to compete in markets around the world. However, there is no long run in politics and protectionist industries and governments have found a new angle to stymie agricultural free trade proponents like the Canadian grain sector. Increasingly, capitalizing on the concern over food safety has become the haute trade barrier of 2004.

The use of food safety concerns as a trade barrier has been nurtured in fertile ground. B.S.E., foot and mouth in the UK, dioxin-contaminated animal feed in Europe, E. coli in meat, contaminated water and now bird flu have all increased consumer awareness and concerns about food safety issues. Some food safety issues are actually real, which makes claims of food safety issues – whether real or concocted – the perfect trade barrier. No one will accept their government compromising food safety, so the barriers go up until the 'all's clear' signal can be given. Even a remote India is an important market for Canadian pulses. threat of a food safety concern is grounds for action, as the concept of "zero risk" in food safety takes hold and 'zero tolerance' becomes standard operating practice.

The regulations that shape grain and pulse production in Canada also give Canadians the ability to rightfully claim that they have the cleanest grain and pulses in the world. Canada's climate and storage/handling system makes field and stored grain pests a non-issue compared to other nations. Canada's climate, crop rotation, sophisticated storage and strict registration policy have resulted in the lowest residues of crop protection products found in the world. While the facts speak for themselves, Canadian grain and pulse exports have not been spared from the "zero tolerance" wave even when common sense should have prevailed.

What is the likelihood of DDT being found in Canadian grain? Given that DDT hasn't been used in Canada for forty years, the chances would be "Slim to none", and "Slim just left town". How about a CAUTION fungicide to control a disease in elm trees found on pulses? You don't need to knock on AHEAD wood to know the answer is likely zero. A product to control mites not found in grain growing regions of Canada would likely not be found. The reality is that each of these products have been claimed to have been detected on Canadian crops by an importing country, resulting in a temporary disruption of trade. Re-testing showed that, as would be expected, none of these products were present. But that comes as small comfort to the companies who had to return product to Canada, ship it to another destination, or wait until the lab had time to do a second analysis.

> Policies of zero tolerance for crop protection product residues are also taking hold in many countries, including Canada. If a product is not registered for use on a crop, some countries will ban imports if any level of residue is detected. If Canada's registration system has determined that 2 parts per million of residue is completely safe, but the same product is not registered for use in the EU – thus having a zero tolerance, does the Canadian product present an unacceptable

risk for EU consumers? This is a moot point, since EU regulations will ban the product from the market.

By some descriptions, free trade agreements have been an exercise in mathematics. Percentage reductions, calculations of access quota and dollars of support have been at the forefront of discussions. While WTO agreements have mentioned a move towards the use of international standards, the body of evidence shows that the move is to strict national standards that often bear no resemblance to international standards that are already in place. While strict food safety standards are needed, the world doesn't need 146 countries that each has their own standards. If the mathematics of trade have been difficult, imagine the hue and cry that will ensue when people claim that their food safety is being compromised. Even with a goal of a common policy, not a compromised policy, it will be a difficult but necessary policy direction if agricultural trade is to be protected from rogue claims of food safety violations.

Pulse Direction

Non-tax and tariff trade barriers have become a bigger part of Pulse Canada's activities. India has a new law that requires Canadian pulses to be both certified free from pests, and then fumigated to control the nonexistent pests. Bogus claims of pesticide residues in Europe combined with changes to European chemical residue laws take time to address and to monitor. Taiwan and Japan are also introducing new residue laws. Groups within the USA are also using differences in chemical registrations with Canada to impede trade. Each new barrier has to be addressed with trade officials in the Government of Canada and at the source of the problem.

For pulse crop growers, it is following label recommendations, using only registered products and finding out from marketers if there are any other limitations to be aware of that are the best policies. When trade disruptors are at work, and governments are under pressure to assure that food is safe, everyone is looking for something that will help them meet their goal and prove that they are on the job. No wonder the canary is looking a bit choked.

Gordon Bacon is CEO of Pulse Canada in Winnipeg. For more information, see www.pulsecanada.com or call (204) 925-4453.



PULSE TOUR 2004

Dryland Crops Field Day

Thursday, July 8, 2004 Swift Current, SK



Hosted by:

- Agriculture & Agri-Food Canada
- Wheatland Conservation Area
- Saskatchewan Pulse Growers
- Saskatchewan Agriculture, Food & Rural Revitalization

Location:

Swift Current Exhibition Grounds (on the south side of the city)

Coffee & Registration: 8 AM Tour Begins: 9 AM

FEATURING:

- Pulse variety comparisons
- Pulse seed treatment/inoculation
- Weed control practices in pulses
- Crop sequences vs. water use, nutrient cycle and soil microbes
- Crop rotations
- New oilseed opportunities
- Nitrogen split-application vs. crop yield and gas emission
- · Best options for chickpea ascochyta management

Admission is only \$15 and includes lunch, refreshments, tour booklet and a shot at the door prizes!

For more information, or to pre-register, call (306) 778-8285.

FIELD DAYS ACROSS SASKATCHEWAN

Wednesday, July 7	Thursday, July 8	Thursday, July 8	Monday, July 19	Tuesday, July 20	Thursday, July 22	Thursday, August 5
Annual Field Day	Pulse Tour 2004/	Canola Field Day	Pancake Breakfast &	Zero Till Field Day	East Central Field Day	Canola/Barley
AAFC Research Farm	Dryland Crops Field Day	Seager Wheeler Farm	Field Day	AAFC/IHARF Farm	ECRF Station	Field Demo
Scott, SK	Exhibition Grounds	Rosthern, SK	AAFC Research Station	Indian Head, SK	Canora, SK	Seager Wheeler Farm
(306) 247-2011	Swift Current, SK	(306) 232-5959	Melfort, SK	(306) 695-4200	(306) 563-5551	Rosthern, SK
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Independent testing performed by Alberta Farm Machinery Research Centre confirmed that the capacity of the conveyor was in excess of 6000 Bu/hr when conveying wheat with a moisture content of 11.3% and a conveyor angle of 25 degrees. Capacity of the conveyor was in excess of 7500 Bu/hr when conveying soybeans with a moisture content of 11.2% and a conveyor angle of 25 degrees. Capacities will vary depending on commodity moisture content and angle of incline.

Harvest Time For Quality Pulses

😥 in brief

Improve your pulse crop by paying attention to the details at harvest time.

Over the years, Canadian

companies and growers have been very successful selling large volumes of pulses into the world market because our quality has met market needs. The last few years have been challenging because drought has slashed production and we have encountered some very poor harvest conditions. In 2003, harvest conditions were excellent with much of our pulse crop taken off in #1 condition.

Environment

Environmental conditions at harvest time can really take quality control out of the hands of growers. Prolonged periods of wet weather when the crops are nearing maturity can increase disease discolouration, seed coat bleaching, contamination with immature seed, and grade loss. Pulses are prone to a number of foliar diseases that can cause losses to yield and quality. Needless to say, staying on top of these diseases by carefully monitoring your crop throughout the growing season can greatly improve seed yield, colour and quality.

Equipment/Storage

Combine unloading augers should be operated full and at low speeds. New rub bars and concaves should be "worn in" on other crops before tackling pulses. The clean grain, return and unloading augers should be properly adjusted to reduce sharp edges. Clipped and chipped seeds are downgraded and can be avoided by fine-tuning the combine. Seed damage like this can quickly cause the loss of a grade.

Pulse crop processing plants use beltbased conveyors to more gently move the crop. Some growers are investing in belt systems too. Of course, the decision to invest in a conveyor can not be made lightly, but if you are in the need of a new auger, take the time to compare the cost of moving to a belt system. Pulse growers using long-term storage to help with their 10-12 month marketing plan can especially make good use of a belt conveyor. Large seeded crops like chickpea and pea probably need to be given a rotation in the bin to prevent spoilage, and the use of a conveyor can accomplish this with very little seed damage.

When using an auger, the moisture content of the pulse crop being transferred can greatly impact the amount of damage that occurs. Less damage occurs if the sample is at about 16 percent moisture or higher. Some growers add a little water in the auger when moving the crop from the truck to the bin. In a study done by PAMI, the use of a simple garden hose trickling water into the auger was found to successfully reduce damage. The use of a "worn in" auger can also reduce seed damage. Damage can occur if the moisture content is lower than 14 percent. In this case, it may be best to rent or borrow a conveyor. Handling pulse crops in winter temperatures of -20°C or colder can increase chipping and peeling damage.

The use of aeration fans to reduce moisture and temperature will improve storage. The augers within a grain dryer can increase seed coat peeling and cracking, however, if supplemental heat drying is required, air temperatures should not exceed 45°C to preserve germination, and the sample should not be dried more than 4-5 percentage points per pass through the drier.

Desiccation

REGLONE DESICCANT® is registered for use on chickpea, pea, lentil, and dry bean. This treatment does not mature the crop but does allow for quicker dry down. Precautions for REGLONE DESICCANT:

- Avoid spray drift. Do not apply under dead calm or high wind conditions.
- Do not apply if rainfall is expected within 30 minutes. The higher rate will provide more consistent results under drought conditions.
- If a killing frost is expected, wait a few days to see if an application is still needed.
- Large weeds such as dense stands of kochia make it difficult to achieve acceptable coverage. Swathing may be a better choice in this situation.
- The presence of powdery mildew on pea may reduce the effectiveness of REGLONE DESICCANT.

LIBERTY® is registered for use on lentil. Do not apply if rainfall is expected within 4 hours. The pre-harvest interval is 9 days. Not for use on crops being used for planting seed.

Pre-Harvest Weed Control

Glyphosate products (such as ROUNDUP®, TOUCHDOWN iQ®, MAVERICK®,

CROP	Colour of Crop &/or Seed at Cutting Stage	Registered Desiccant
Dry Bean	Swath narrow-row or undercut row crops when 50–60% of pods turned from green to yellow and are still flexible (buckskin stage).About 50-60% natural leaf drop. Straight cut when leaves have fallen off and pods are mature and dry to touch and 75% of pods are hard and dry.	REGLONE: Apply when there is 80–90% natural leaf defoliation and 80% of pods are yellow.
Chickpea – Desi – Kabuli	Straight cut when vines and pods are mature and seeds are at approximately 18% moisture. Swath when majority of plants are yellow and most pods are mature. Upper part of plant may still be green.	REGLONE: Apply when plants are yellow, pods are mature, and the seeds have changed colour and are detached from pod. Application timing is different for desi and kabuli types.
Fababean	Swath when 25% of the plants in the field have the lowermost pods turning from green to black. Straight cutting is not an option.	
Lentil	Swath when lower 30% of pods are tan coloured and their seeds rattle when shaken. Middle pods may still be green. Upper part of plant may still be flowering. Straight cut when seeds and pods are fully mature.	REGLONE: Apply when the lowermost pods are tan coloured and rattle when shaken. (at time of swathing) LIBERTY: Apply when 40–60% of pods turn from yellow to brown.
Pea - Green	Swath when vines are yellow coloured and seed has good green colour. If straight cutting, waiting for full maturity without desiccating can increase risk of bleaching.	REGLONE: Apply when 75–90% of pods have turned to yellow colour. Vein pattern of uppermost pods easily recognized.
Pea - Yellow	Swath when bottom 30% of pods are ripe, middle 40% of pods and vines are yellow coloured, and upper 30% of pods are turning yellow. Straight cut when fully mature. Swath and combine when fully mature and immediately follow with combine to avoid wind damage.	REGLONE: Apply when 75–90% of the pods have turned yellow.
Pea – Feed	Swath when vines are yellow. Straight cut when fully mature.	REGLONE Apply when 75–90% of the pods have turned yellow.

CREDIT[®], RENEGADE[®], VANTAGE[®], FACTOR[®], and GLYFOS[®]) are registered for pre-harvest weed control in dry bean, lentil and pea. Glyphosate does not desiccate the crop. The benefit of drying down the crop is inconsistent and under cool, wet weather conditions, is unlikely to occur. Do not apply to pulse crops being grown for planting seed as irregular germination and plant development can occur. Application of glyphosate for pre-harvest weed control on unregistered crops such as chickpea should not be done. For more information on desiccation and pre-harvest weed control in pulse crops, consult the product label, the SAFRR publication 2004 Guide to Crop Protection or the Pulse Production Manual.

Let's look forward to a great harvest in 2004!

Ray McVicar is the Special Crops Specialist with Saskatchewan Agriculture, Food and Rural Revitalization in Regina. See www.agr.gov.sk.ca or call the Agriculture Knowledge Centre at 1-866-45-SAFRR (1-866-457-2377) for more information.

Quick Test for Proper Moisture Content at Combining	Storage Moisture Content	Comments
Seed is firm and difficult to penetrate with thumbnail. 18–22% seed moisture. On hot, dry days, pod moisture can decrease rapidly, leading to increased shattering. Too-high pod moisture can increase earth tag.	16% is dry 15% or lower for long-term storage. Aerate if required.	Weed control is critical for swathing and straight cutting dry bean. Tram lines or swathing reduce variation in crop maturity in narrow-row crops. Cylinders should be run only fast enough to thresh crop. Run as much material as possible through cylinder to minimize damage. Seed is easily damaged during harvest and handling.
Thresh when seed is firm and can no longer be penetrated with thumbnail. 18% moisture or drier. Avoid combining chickpea that is wet or immature.	14% or less for safe storage. Aerate if required.	Best to leave the crop stand until fully mature. Wind can damage swaths. Closely monitor crop stage as harvesting too early increases the chance for green seed in the sample. Will need to harvest and store immature areas of field separately. Seed is large, brittle, irregular shaped and is very susceptible to mechanical damage. May need to swath to stop re-growth.
Thresh when seed is firm and can no longer be penetrated with thumbnail. Seed is 20% or lower moisture content.	16% is dry and safe for storage.	Swath at high moisture content. Plants turn black as they ripen. A light (narrow) swath should be used to hasten dry-down. Over-dry seed will easily shatter.
Thresh when seed tests 18% moisture content or lower. Very dry lentil (8–10%) are hard and difficult to bite. Use slow cylinder or rotor speeds.	14% for safe storage.	Plants may still be green when pods are ripe and may mature in patches. Some shattering losses usually occur. Shattering can be reduced by swathing under conditions of higher humidity. Strong wind can damage swaths. Over-dry seed can suffer seed coat breakage and peeling during combining. Swathing in extreme heat may lead to seed discolouration in the swath.
Thresh when seeds are firm and can no longer be penetrated with thumbnail; 20% moisture content or lower.	16% is dry and safe for storage.	For top grades, the maximum allowed bleaching is 2%. Bleaching of seed is caused by high humidity, bright sunshine and warm temperatures. Bleaching can also be caused by rain near maturity or while in the swath. Over-dry seed can suffer seed coat breakage and peeling.
Thresh when seeds are firm and can no longer be penetrated with thumbnail. 20% moisture content or lower.	16% is dry and safe for storage.	Some shattering losses usually occur. Over-dry seed can suffer seed coat breakage and peeling during combining. Low cylinder speeds are used to reduce damage. Green weed seeds or foreign material should be cleaned quickly to reduce spoilage during storage.
Thresh when seeds are firm and can no longer be penetrated with thumbnail. 20% moisture content or lower.	16% is dry and safe for storage.	Bleached, split, cracked, earth-tagged seed is acceptable for feed. Combine settings and operation are not as critical as for the human consumption market.

research news

by Joelle Harris



😥 in brief

SPG is investing in new research projects to help add value to pulse crops.

New Pulse Research Underway

Saskatchewan Pulse Growers is

pleased to report that is it providing over \$785,000 in funding for the following eight research projects. In all cases, Saskatchewan Pulse Growers was able to partner with other funding agencies in Saskatchewan and/or Alberta to share the cost of the projects.

TITLE: Adding Value to Lentils Through Improvement of Visual Quality Characteristics RESEARCHER: Dr. Kirstin Bett (Department of Plant Sciences, University of Saskatchewan) OBJECTIVE: To increase the per acre value of lentil crops by improving their appearance relative to those available from other exporters by: i) determining the basis for genetic control of colour retention in the seed coats of green lentil varieties ii) determining the basis for genetic control of round seed shape in red lentil, and iii) identifying markers for these two traits to assist in genetic improvement efforts to develop better quality lentil varieties.

BENEFITS TO AGRICULTURE: The researcher intends to use the results of this study to develop better lentil varieties to ensure Canada will become and remain the preferred global supplier of both green and red lentils. PROJECT LENGTH: Three years FUNDING PARTNERS: Saskatchewan Pulse Growers, the Agriculture Development Fund (ADF) of Saskatchewan Agriculture, Food and Rural Revitalization (SAFRR). TITLE: Evaluation and Development of Superior Feed Peas Using Chemical, NIR and Net Energy Evaluation

RESEARCHER: Dr. Vern Racz (Department of Animal and Poultry Science, University of Saskatchewan)

OBJECTIVE: The objective of this project is to develop a systematic means by which to rapidly evaluate field peas for chemical parameters and net energy for swine. The data can then be used to target breeding programs, and to facilitate commerce and value added processing, such as pea fractionation. **BENEFITS TO AGRICULTURE:** This project has direct application and supports the development of the livestock industry through feed resource development. The project also has the broad application of enhancing pea variety development, enhancing feed use of peas, and providing a basis for value added activity such as pea fractionation for a variety of feed, industrial and food uses.

PROJECT LENGTH: Four years FUNDING PARTNERS: SPG, SAFRR – ADF

TITLE: On-Farm Pulse Crop Germplasm Evaluation RESEARCHER: Dr. Tom Warkentin (Crop Development Centre, University of Saskatchewan) OBJECTIVE: To utilize on-farm environments in southeastern Saskatchewan, the Regina plains, the southern Parkland and the acid

🖻 research news 🚱



soils area, to evaluate pulse crop breeding lines; thereby reducing the per unit cost of breeding line evaluation to allow for more efficient screening of the many pulse market classes.

BENEFITS TO AGRICULTURE: The large-scale on-farm strategy will provide excellent data on pulse crop breeding lines in target environments using standard farm agronomy in a cost-effective manner. This data will accelerate the release of superior pulse crop varieties for wide release to producers. PROJECT LENGTH: Five years FUNDING PARTNERS: SPG, SAFRR – ADF

TITLE: Sources of Resistance/Tolerance to Mycosphaerella Blight of Pea RESEARCHER: Dr. Bruce Gossen (Agriculture and Agri-Food Canada-Saskatoon) OBJECTIVE: To improve the knowledge of types of resistance to mycosphaerella blight in field pea in order to develop successful breeding strategies, and to identify sources of resistance to mycosphaerella blight in close relatives of field pea.

BENEFITS TO AGRICULTURE: The development of field pea cultivars with new forms of resistance would reduce the prevalence of mycosphaerella blight in field pea crops, reduce producer dependence on fungicides, and improve seed quality. The long-term goal is to provide producers with improved cultivars.

PROJECT LENGTH: Four years FUNDING PARTNERS: SPG, SAFRR – ADF

TITLE: Development of Low Phytate Peas RESEARCHER: Dr. Tom Warkentin (Crop Development Centre, University of Saskatchewan)

OBJECTIVE: The objective of this project is to develop field pea lines in which the phosphorous is primarily stored in the inorganic form rather than the organic form (i.e. "low phytate peas").

BENEFITS TO AGRICULTURE: If the objectives of this project are met, there will be substantial benefits to pea growers, livestock feeders, and the western Canadian economy in general including:

i) Increased value of crop production: When normal peas are utilized in livestock

rations, the rations must be supplemented with inorganic phosphorous. Since inorganic phosphorous is one of the most expensive feed supplements, low phytate pea varieties would be more desirable for use in feed rations than normal pea varieties and would result in a higher value product for producers.

 ii) Increased livestock development: Monogastric animals are not able to digest phytate, thus feeds are supplemented with inorganic phosphorous and/or phytase enzyme. In addition, important nutrients such as iron and zinc bind to phytate and



are excreted, thus normal rations must also be supplemented with these minerals. Both of these costs would be reduced, or eliminated, in rations containing low phytate peas thus enhancing the profitability of the livestock industry.

iii) Enhanced environmental stewardship: Monogastric animals are not able to digest phytate, and as a result it is excreted in large quantities in the manure. Excreted phytate is a concern internationally, in terms of pollution to groundwater, rivers, and lakes. Use of low phytate peas would play a role in reducing the potential for phosphorus pollution.
PROJECT LENGTH: Two years

FUNDING PARTNERS: SPG, SAFRR – ADF

Dr. Bruce Gossen will be working to identify sources of resistance to mycosphaerella blight in peas.



TITLE: Improving Chickpea Maturity Through Management of the Indeterminate Growth Habit

RESEARCHER: Dr. Yantai Gan (Agriculture and Agri-Food Canada-Swift Current) OBJECTIVE: To develop crop management options to improve the terminating ability of the chickpea crop, advance its maturity, and enhance seed yield and quality. BENEFITS TO AGRICULTURE: Results of this project will provide producers with recommendations on best options in improving the

terminating ability to advance chickpea matu-



Dr. Yantai Gan is researching ways to improve chickpea maturity.

The ultimate goal is to reduce production risks, so that this high-value, natural N-fixer can be included in cropping systems in a sustainable manner. The data generated from this project will also be useful for scientific modelers to assess natural N-fixation versus use of synthetic nitrogen in chickpea production. PROJECT LENGTH: Three years FUNDING PARTNERS: SPG, SAFRR – ADF, Alberta Pulse Growers Commission (APGC)

TITLE: Impact on In-crop and Soil Residual Herbicides on Nodulation and Effective Nitrogen Fixation in Field Pea and Chickpea RESEARCHER: Dr. Fran Walley (Department of Soil Science, University of Saskatchewan) OBJECTIVE: The objectives of this project are:

- i) to assess the impact of in-crop and soil residual herbicides commonly used in pulse crop rotations on nodulation and subsequent N fixation in field pea and chickpea, and
- ii) to compare the use of inoculation strategies (granular soil implant versus seedapplied) on nitrogen fixation by pea and chickpea subject to herbicide stress.

BENEFITS TO AGRICULTURE: Given the introduction of new herbicides for both in-crop use and soil applied and/or soil residual herbicides, coupled with ongoing concerns regarding the impact of herbicide application on N fixation, there is a need to assess the impact of these herbicides on nodulation and subsequent N fixation in both field pea and chickpea. The information generated from this study will allow growers to make more informed management decisions to ensure optimum pea and chickpea production.

PROJECT LENGTH: Three years FUNDING PARTNERS: SPG, APGC

TITLE: 2004 Pulse Crop Regional Variety Trials in Saskatchewan

RESEARCHER: Dr. Tom Warkentin (Crop Development Centre, University of Saskatchewan)

OBJECTIVE: The objective of this project is to implement a regional variety trial network for field pea, lentil, chickpea and dry bean in Saskatchewan.

BENEFITS TO AGRICULTURE: This project will effectively evaluate new pulse varieties in the key production areas of Saskatchewan. Results will be analyzed, summarized, and reported in a timely manner to facilitate decision making of commercial growers, seed growers, breeders and seed companies. These field trials will also be available for viewing during summer field tours and local extension events.

PROJECT LENGTH: One year FUNDING PARTNERS: SPG, SAFRR – ADF

Joelle Harris is the Research & Development Manager at Saskatchewan Pulse Growers. For more information, contact jharris@saskpulse.com. For more information about SPG activities, please call: (306) 668-5556 e-mail: pulse@saskpulse.com, or visit our Web site: www.saskpulse.com.

On Point

Pulse Production Resource Now Available Online

Pulse producers and others in the industry now have online access to one of the world's most comprehensive guides to pulse production. The Saskatchewan Pulse Growers' *Pulse Production Manual* is an essential handbook for everyone involved in production, research, and marketing in the pulse industry. It is a "farmer-friendly" guide to producing peas, lentils, chickpeas and beans in Saskatchewan.

The Pulse Production Manual has nine chapters: The History of Pulses, General Production, Variety Selection, Plant Nutrition, Weed Control, Pea Production, Lentil Production, Chickpea Production, and Dry Bean Production.

Coming Soon: A special addition to the online *Manual* is the Weed Control Search Engine, which will be exclusive to the web version. This will allow users to search data from the *2004 Guide to Crop Protection in Saskatchewan* to find out which crop protection products are registered for use on certain weeds and crops.

The entire manual is now available online at www.saskpulse.com .

Canadian pulse industry opposes ratification of biosafety protocol

A number of organizations, including the Grain Growers of Canada, the Canola Council of Canada and Pulse Canada are sending letters to the Government of Canada opposing ratification of the Biosafety Protocol.

The Biosafety Protocol is a treaty to regulate the transfer, handling and use of living modified organisms (LMOs) – such as genetically engineered plants, animals, and microbes – that cross international borders. The Biosafety Protocol establishes a procedure for ensuring that countries are provided with the information necessary to make informed decisions before agreeing to the import of such organisms into their territory.

A major concern to Pulse Canada over ratifying the agreement is the fact that some of Canada's competitors have not ratified the protocol and have indicated that they will not ratify. Ratification would obligate, under Canadian law, Canadian companies to meet the requirements of the Protocol.

Without a clear understanding of how foreign material (FM) would be handled in pulse shipments, without the technology to identify specific stacked genetic modification events in a shipment and without our competitors signing on to this agreement, considerable uncertainty about the future competitiveness of the pulse industry exists, as does the uncertainty for cereals, oilseeds and other Canadian crop exports.

Pulse Canada is urging the Canadian government to work toward international agreement on safe and responsible trade of LMOs but only ratify the agreement when these important issues have been addressed so that Canadians are in a position to meet obligations and not be disadvantaged by other exporting nations that have chosen not to ratify. *(Source: Pulse Canada)*

New Saskatchewan Ag Knowledge Centre Created

Saskatchewan Agriculture, Food & Rural Revitalization (SAFRR) is in the process of significant change after the provincial government released its annual budget this spring. The department consolidated its 31 Rural Service Centres into nine regional offices. Rural Service Centres closed April 30th.

SAFRR has created the Agriculture Knowledge Centre as a source of up-to-date answers on topics ranging from crops and livestock to nutrient management and the economic implications of management decisions. A toll free line is now available to contact resource agents and agricultural specialists: 1-866-45-SAFRR (1- 866- 457- 2377).

The nine new Agriculture Business Centres are located in Prince Albert, Saskatoon, Yorkton, Regina, Swift Current, Outlook, North Battleford, Tisdale and Weyburn. Specialists in agribusiness development, livestock, crops

💽 in brief

News from and about Saskatchewan Pulse Growers (SPG).





For more information about SPG activities, please call: (306) 668-5556 e-mail: pulse@saskpulse.com, or visit our Web site: www.saskpulse.com.

and forages at each office will focus on opportunities for agriculturally-based economic development in each region.

Producers can obtain on-site inspection advice from consulting agrologists in the private sector.

SPG has been meeting with senior SAFRR officials to understand the impact for the extension of pulse-related information. SPG will be working with SAFRR to ensure that the extension needs of pulse growers are met. *(see Closing Thoughts, p.30)*

Still looking for hosts for Aussie pulse producers If you would you like to host Australian visitors at your farm this summer, contact John Slatter with Pulse Australia in Toowoomba: slatts@bigpond.net.au

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COOKING WITH PULSES

It's Barbeque Season

📴 in brief

Try some pulses at your next barbeque or potluck gathering.

As we move into summer, your

thoughts have likely been on spring seeding, gardening or yardwork, or maybe you've been trying to get it all done at once. Another activity you've probably been enjoying now that the weather has warmed up is outdoor cooking. Even if I'm out grilling with a heavy sweater or coat on, nothing seems to taste better than that first hamburger or hotdog of the season. And what would a barbeque be without the customary serving of baked beans?

Whether you eat your beans cold and straight from the can, or you've spent the time to prepare your family's secret recipe, baked beans are a great pulse dish to serve as part of a nutritious, healthy meal. Here are some suggestions to serve at your next barbeque or potluck:



MEXICANOS Source: The Amazing Legume by Alice Jenner Broil or grill hamburgers. Place on buns or corn bread raw yegetables.	slices. Top with baked beans or chili. Garnish with pickles or	
CHILI DIP Source: www.pulsecanada.com Serve with crisp raw vegetables or corn chips for 1 tsp (5 mL) canola oil 1 clove garlic, minced 1 tsp (5 mL) ground cumin 1 cup light cream cheese (250 g package) 2 tsp (10 mL) red wine vinegar In a small nonstick skillet, heat oil over mediu translucent. Stir in chili powder and cumin; cro for about 2 minutes or until as smooth as m consistency. Season to taste with salt and purefrigerate for up to 5 days or freeze for up to 5	a snappy starter or snack. 1 small onion, chopped 1 ½ tsp (7 mL) chili powder 1 tbsp (15 mL) tomato paste 2 cups (500 mL) Red Kidney Beans OR Dutch Brown Beans, cooked Salt & freshly ground black pepper m heat; cook onion and garlic for about 4 minutes or until onion is pok for 1 minute. Stir in tomato paste and vinegar. In food processor d onion mixture. Process, scraping down sides of container occasionally, ayonnaise. If too thick, add hot water, a little at a time, until desired apper. Transfer to small bowl or pot. Serve immediately or cover and bowl or different scraption of the server with Saskatchewan	Contact Us Have a question or an experience cooking with pulses you would like to share? Send your comments to pulse@saskpulse.com.

Tasha Nett is Office Administrator with Saskatchewan Pulse Growers.

2005 Board of Directors **Nominations**

If you are a registered pulse producer, and would like to be instrumental in building Saskatchewan's pulse industry, fill in the nomination form below. It must be signed by three other registered growers.

Two positions are open for Directors on the Board of the Saskatchewan Pulse Growers. Nominations are being accepted until noon on FRIDAY, OCTOBER 15, 2004.

Responsibilities:

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

	Nomination Fo	orm
In accordance with the Saskatchewan candidate for election to a s	Pulse Growers Regulations, I, seat on the Board of Directors	the undersigned hereby submit my name as a of the Saskatchewan Pulse Growers.
First Name	Last Na	ame
Address/Town		
Postal Code	E-Mail	
Telephone	Fax	
Signatu	re	
I have grown the following 20 pulse crops:	003	2004
I nominate the above pulse producer a	as a candidate for election as a	a director of the Saskatchewan Pulse Growers.
Name of Registered Producer (signature)	Name of Registered Producer (sign	ature) Name of Registered Producer (signature)
Name (please print)	Name (please print)	Name (please print)
Telephone	Telephone	Telephone
Fax	Fax	Fax
Saskatchewan Pulse Growe Telep	Please return this form ers, #104-411 Downey Road, S phone: 306-668-5556 Fax: 3	to: Saskatoon, Saskatchewan, S7N 4L8 06-668-5557

Note: Only registered producers can hold office, vote, or nominate others. If your dealings with the Saskatchewan Pulse Growers (e.g. levy submission) have been through your company name, rather than your own name, you may have to sign the "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) 668-5556 if you think this might apply to you.

Controlling Grasshoppers in Lentils

🖻 in brief

Grasshoppers pose a real threat to lentil crops this year.

The 2004 Grasshopper Forecast Map indicates the outbreak of the past few years could continue if spring conditions continue to be favourable for grasshopper egg hatching and grasshopper development. If conditions warrant, insecticides will be the most practical option in bringing the pests down to an acceptable level, where the actual grasshopper damage would be less than the cost of control operations. One hundred per cent reduction is not a realistic goal. The 2004 *Guide to Crop Protection* provides information on registered insecticide options, monitoring methods and economic thresholds for most crops grown in Saskatchewan.

Insect control decisions will depend on a number of factors, including: chemical and application costs; crop stage (susceptibility to damage); insect numbers and developmental stage; environmental conditions affecting plant growth; and ultimately the market value of the crop. It is difficult to include all factors for every situation, but these rules of thumb should assist in making control decisions. Keep in mind that not all thresholds are based on definitive research, but are still based on the best information currently available. The densities of grasshoppers listed as economic or risk thresholds should be considered as a guideline rather than as a precise measurement.

The higher the value of the commodity, the fewer the number of insects required to reach an economic threshold. Grasshoppers tend to devour most cereals but prefer wheat and rye with less preference for oats. Peas are also less preferred and research has shown



that grasshopper egg-laying is reduced when oats or peas are the primary food source.

Lentil crops are less tolerant to grasshopper feeding. Research conducted by Agriculture and Agri-Food Canada at Saskatoon indicates that two grasshoppers per square metre feeding on lentil flowers or pods will reduce yields enough to warrant insecticide application. Grasshoppers can be a threat to many crops from seedling emergence until the plants start to senesce near harvest. In lentil, grasshoppers pose the greatest threat from the bud stage through to pod development.

As grasshoppers do not readily consume lentil foliage, damage is usually not highly visible and the crop is at less risk to damage prior to flowering and pod development. But,





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- Dividends ranging from 5% to 23% were paid in six of the last 12 years.
- Losses of 85% or more are paid at 100%.
- Each year some farmers receive hail before purchasing insurance make sure it does not happen to you.

Please Call: (306) 522-8891 or See Your Local Co-op Hail Agent

Table 1: Field Scouting in Lentils: Grasshopper Management Chart					
Insecticide (and insecticide group)	Rate/Acre	Cost/Acre	Preharvest Interval	Application (A = aerial; G = ground)	LD ⁵⁰ (Mammalian Toxicity)
Decis Flowable (P)	0.032-0.048 L (ground) 0.048 L (air)	\$3.72-\$5.58	30	A or G	15000
Decis 5EC (P)	0.04–0.06 L (ground) 0.06 L (air)	\$3.57-\$5.36	30	A or G	395
Malathion 500 (OP)	0.68 L	\$8.57	30	A or G	4302
Malathion 500E (OP)	0.69 L	\$8.49	14	A or G	1375-2800
Lorsban/Nufos/Pyrinex/ Chlorpyrifos 480 EC (OP)	0.235-0.486 L	\$4.16-\$8.86	21-60	A or G	205-418

* ALWAYS CONSULT THE INSECTICIDE LABEL BEFORE APPLYING ANY INSECTICIDE.

¹ Insecticide Group: P=pyrethroids, OP=organophosphates

² LD50 values represent the relative toxicity of a pesticide. They represent the dose (in mg/kg of body weight) that will kill 50% of the test animals. Thus, the lower the number, the greater the toxicity. Values given are for oral LD50.

Source: 2004 Guide to Crop Protection in Saskatchewan, SAFRR

grasshoppers will consume flower buds and especially early developing pods of lentil plants. This can result in yield loss and a delay in maturity, due to delayed pod set. Slight damage to the pods may result in shattering, seed loss and can predispose the seeds to disease and staining. At harvest, grasshopper parts can contaminate lentil seed lots and reduce lentil quality.

Always Use Registered Products

by Garth Patterson, P.Ag.

Caution: These Products are NOT Registered for Control of Grasshoppers in Lentil

• Diazinon

• Ripcord

- Cygon/Lagon
- Dibrom
- Guthion/Sniper
 Methoxychlor
- MatadorMonitor
- Monitor
- Sevin XLR Plus

Caution: There are currently NO products registered for Control of Grasshoppers in pea and chickpea. An alternative is to treat the area around the outside of the crop with registered crop protection products.

Note: Eco Bran is currently the only product registered for Control of Grasshoppers in bean. An alternative is to treat the area around the outside of the crop with registered crop protection products. Lentil growers are encouraged to scout fields for the presence of grasshoppers from the early bud stage through to pod development. Often, grasshoppers will be observed to be more prevalent in field margins and a thick lentil crop will deter the insects from moving further into the field as they prefer more open and bare areas to accumulate heat. If grasshopper populations only exceed the economic threshold in the field margins, an edge treatment with an appropriate insecticide can save time and reduce costs, while providing adequate control. Efficient weed control is important, as weedy fields are attractive for egg-laying.

The SAFRR *Guide to Crop Protection 2004* provides information on scouting and insecticide selection. *(see table 1)* Always read the product label prior to applying a pesticide and follow the manufacturers recommendations. Also, be sure to observe the pre-harvest intervals associated with the application of insecticides. Pre-harvest restriction times for lentils can range from 14 to 60 days depending on the product and the crop.

More information on grasshoppers can be found in the *Grasshoppers Farm Fact* publication available on the SAFRR website and from the Agriculture Knowledge Centre (1-866-45-SAFRR or 1-866-457-2377).

Scott Hartley is the Provincial Insect/Pest Management Specialist with Saskatchewan Agriculture, Food & Rural Revitalization in Regina. Greg Kostal

in brief

What can we expect in demand and price for pulses this fall?

Solid Demand Shapes 2004-05 Outlook

The spring of 2004 was about the

transition from wrapping up old crop demand to understanding new crop supply. For peas, it was finding out that the growth in domestic consumption is for real, something that will permanently change the way peas are valued in the future. For lentils, it was realizing that stocks were upwards of 50,000t below expectations, due to a combination of better domestic processing and an overstated crop size. For chickpeas, it was about accepting that another crop cycle is needed to inject life into the desi, while large caliber kabuli chickpea fundamentals work towards gradual improvement. That's the prevailing psychology that takes us into the growing season, and the purpose of this article is to elaborate with price ideas into the fall.

Statistics Canada unveiled seeded acreage figures that showed continued strong interest in pulse crops. A remarkable statistic is that since 2000, Canadian pea area has only deviated by 300,000 acres. Lentil area is projected to rival the highs established in 2000. This is an affirmation of demand and the fact that pulses are a staple cash-flow crop. Superior alternative cropping options and high agronomic risks will keep chickpea area depressed while dry and coloured beans react to relatively poor price signals, a function of over-supply. (See figure 1 on page 27). At this time of year, yield and quality outcome is more important to the fundamental well-being than seeded acreage. Since this can readily change in coming months, it's best to focus on big-picture demand observations. As a supply starting point though, when normal yields are crossed with known seeded area estimates, the basic conclusion is that peas and lentils have a 10-20% supply cushion before some form of supply/demand imbalance would occur.

Lentils

A sharp jump in seeded acreage and normal yields would push Canadian lentil production towards 725,000t. Much of this increase is believed to be of the large green and red variety and to a lesser extent, mid/small green lentils. While still a large number, this isn't as bearish as it might have been five years ago as demand is more mature. The domestic lentil pipeline is empty and demand off the combine will be strong, likely parroting the trend of the past year.

Production in Turkey and Syria appears to be normal, down from consecutive aboveaverage crops and this should help create ongoing strong demand for red lentils all year at prices that needn't be below 15 cts/lb no matter how big the crop is. But unless produc-

Market Muse



tion adversity strikes, the 18 cts/lb area is high enough. Seasonal Ramadan demand will benefit large green lentils right off the combine, but with a lull and price slippage thereafter until Southern Hemisphere demand reignites itself in the second half of 2004/05. By then, the next Indian Subcontinent crop will influence price discovery.

Essentially, with a normal crop outcome, it will be an environment where good two-way trade exists all year, but in a crop year price range that's rather flat (like 3 cts/lb). Using those assumptions, a large green #1 lentil at 20 cts/lb is high enough, with 17 cts/lb or so being low enough. As relative supplies increase, mid-size green lentils ought to return to a 2 cts/lb discount to large green. Mid greens have gained strength from the US and its aggressive food aid program, which by default has enabled Canadian product to participate more competitively in markets that the US may have otherwise supplied. The Spanish green and CDC Richlea varieties have appeal in the Mediterranean.

Field Peas

An evolving fundamental issue with peas is domestic feeding, an area of continued growth expected in 2004-05. Users have had consistent economic incentive to alter rations, they have had success and now assume peas will be regularly available.

Peas are recognized for their energy and protein content, particularly in hog rations with a tendency to displace soymeal and highenergy grains. North American hog rations are typically formulated on the basis of digestible energy. Therefore, a good pricing-proxy that is apt to become a more transparent industry measuring stick is a one-third soymeal to twothirds corn or wheat mix, with use of the latter being a function of price. Figure 2 on page 28 plots this in comparison to peas (Saskatoon).

Note the frequency with which the soymeal-wheat/corn exceeds \$150/t. The \$175/t area is a long-term gravitational point. As the prairie domestic feed pea market matures, this price area is apt to emerge as a new threshold value (\$4 to 4.50/bu), which is different than a more generic market-clearing price of \$3.50/bu from recent years.

Five years ago, domestic demand was about one-third the tonnage exported offshore. Now at around 0.8 MMT, it is nearing 50%. Within five years or so, export and domestic consumption could be very similar. Offshore feed pea outlets exist in the EU-15 and are emerging elsewhere (Korea and China, for example), but they are lower-valued markets. Why pay vessel freight and rail on hog

Market Muse



food when hogs need to eat on the prairies? The point is that a structural change is underway, one that will change the way we have traditionally valued field peas. Traditional price spread valuation between feed and edible peas should narrow. With a larger, stable domestic demand base, peas would be more vulnerable to price volatility when threatened with yield adversity. These factors will be the catalyst forces for Canadian pea acreage to eventually swell to 4 million acres.

In 2004-05, the mix of offshore exports should change. European buying interest is expected to shrink, projected at 0.4 MMT, down 0.2 MMT or so as that country's production rebounds to a normal level. High ocean freight rates will challenge economics but feed peas are already in European rations. The weather in Ukraine and France and resultant competition into India is also worth monitoring in the coming months. The Indian subcontinent and neighbouring importers ought to return to provide a similar import offset, but this demand will only become transparent in the second half of 2004-05; concurrent with the next overseas production cycle.

Considering competing feed grain price prospects, and assuming ongoing growth in domestic demand, a \$4.50/bu generic Saskatchewan pea price should be frequently available. Should Canada produce a 2.5 MMT crop, a low \$4/bu will be needed at some point for execution of a 1.3 MMT export program. The \$5-5.50/bu area generic Saskatchewan is fundamentally high enough with a normal crop outcome.

Chickpeas

Large caliber chickpea fundamentals remain on strong footing. Described as a realizing-market, the world has yet to fully address the existing supply contraction phase with the higher prices eventually needed to boost acreage. While freshly harvested supply is available in Mexico and soon out of the US (events that stall momentum), the price trend is higher. The 7 mm caliber kabuli, as a kabuli chickpea, should partially benefit. Currency and ocean freight changes will be the main price-moving factors in the desi market, with a more significant fundamental change dependent on the next Indian subcontinent production cycle, some 6 months out. In this environment, it's hard to find a catalyst to elevate price beyond 15 cts/lb.

Greg Kostal is a private consultant and market analyst based in Winnipeg, MB. He also farms south of Winnipeg and spoke at Pulse Days 2004 in January. For more information, contact Greg at gkostal@mts.net.

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Extension Agrologists, or "ag reps,"

as they were previously known, have been a part of Saskatchewan's rural communities for decades. The success of SPG's communications program has been due in part to the tremendous support that we have received from the Extension Service of Saskatchewan Agriculture, Food & Rural Revitalization (SAFRR).

The end of the Extension Service, the closure of Rural Service Centres, and the establishment of Regional Business Centres along with an Agriculture Knowledge Centre has some growers wondering if they will continue to have access to the unbiased information they need to make informed business decisions.

SPG has not spoken out in favour or in opposition to these changes, but instead has viewed this as an opportunity to influence what pulse information is provided to producers. We have met with senior government officials to learn more about the changes, and to recommend the type of pulse information that growers will require.

Actions that we had initiated *prior* to the changes at SAFRR are:

- 1. A strategic review of our communications program to evaluate our target audiences and the information that we provide to them. You will hear more about this in future issues of *PulsePoint*.
- 2. Focus group meetings with producers to help us understand how they get pulse related information.
- 3. *The Pulse Production Manual* was made available on our website.

These are actions that we initiated *after* the changes at SAFRR:

1. We have provided SAFRR with suggestions for "Frequently Asked Questions" on



Saskatchewan Pulse Growers' Pulse Production Manual is now available online at www.saskpulse.com.

pulses that the Ag Knowledge Centre can expect.

- 2. We are learning how the western Canadian canola industry and the Alberta pulse industry are linking with private agrologists to share information of value to producers.
- 3. We are communicating with SAFRR in order to assess the impact of their changes on the quality and quantity of pulse related information being given to farmers.

I would appreciate hearing from you regarding your experiences (positive or negative) with the new extension system.

Saskatchewan Pulse Growers



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Growers Pulse Production Manual, 2000; Manitoba Agriculture, Food & Rural Initiatives, Pest Management Web site, January 2002.

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