### Alberta Seed Guide FALL 2012 seed.ab.ca

### NEW VARIETIES What to plant for 2013

**ACCESSING** INTERNATIONAL **MARKETS** 

How seed and market changes are opening doors

CEREAL RESEARCH

New projects and future funding

REGULATORY **MATTERS** 

Patents and policy

GIODAIOPPORTUNITIES

Across the prairies, DEKALB° brand 74-44 BL wins 71% of trials versus InVigor L Series.

# 74-44 BL CONSISTENTLY OUT PERFORMS



# 2012 YIELD COMPARISONS' L Series 40.6 74-44 BL 43.2 N = 55 2 YEAR YIELD COMPARISONS'' L Series 42.8 74-44 BL 44.9 N = 67

Even under the severe weather conditions of 2012, 74-44 BL consistently out yielded competitors.

While no one wins them all, in FACT $^{\text{M}}$  trials conducted by farmer co-operators, DEKALB won its fair share. Consistent yield performance under adverse conditions, that's the complete package.

THE COMPLETE PACKAGE



www.DEKALB.ca



\*Source: 2012 Monsanto Field Scale Trials as of October 3, 2012. \*\*2011-2012 Monsanto Field Scale Trials. DEKALB represented by 74-44 BL; InVigor by L150, L130 and L120. Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible. Always follow grain marketing and all other stewardship practices and pesticide label directions. Details of these requirements can be found in the Trait Stewardship Responsibilities Notice to Farmers printed in this publication. DEKALB® and Design and DEKALB® are registered trademarks of Monsanto Technology LLC. Used under license. InVigor\* is a registered trademark of Bayer. © 2012 Monsanto Company.



**THIS** upcoming January, the Association of Alberta Co-op Seed Cleaning Plants Ltd. will be celebrating its 60th anniversary. Some 60 years ago, the need for all farmers to have access to a source of weed-free seed was identified as a vital step in helping to control the spread of weeds in the province. Out of this need arose a plan that saw farmers, municipalities and the provincial government each contribute a third of the cost toward the building of state-of-the-art seed cleaning plants throughout the province. Today, this association of 69 Alberta plants, along with two plants from British Columbia, continues to fulfill its mandate of providing farmers with the cleanest seed possible.

That is not to say that there have not been challenges along the way. Some of these challenges have proven to be insurmountable, but most have not. As in all other walks of life, these obstacles have made the survivors stronger and eager to face the future.

Today the member plants of the Association of Alberta Co-op Seed Cleaning Plants Ltd. are indeed looking forward to the future. Many are undergoing serious upgrades to their infrastructure so as to accommodate the ever-increasing needs of their shareholders. More than a few are planning to rebuild their facilities from the ground up. Also, several of the plants are providing value-added services for their customers' benefit. Some are even exporting product all over the world.

The future looks bright for our seed cleaning plants. Yes, there will be challenges—there always are. These challenges should not be avoided, but instead viewed as opportunities to grow and flourish.

Thank you to those who, 60 years ago, had the foresight to start down this road. And thank you to those who continue to work together as farmers and staff of these cooperatives. Your contributions continue to make a positive difference in our communities

#### Steven Miller, President

Association of Alberta Co-op Seed Cleaning Plants Email: stevenmiller@mcsnet.ca





WELCOME to the Fall 2012 issue of the Alberta Seed Guide! Our theme is "Global Opportunities." Excellent growing conditions and harvest weather allowed us to put some good quality seed and grain away for marketing this winter. Never before have I been able to call up several Canadian and American buyers of winter wheat to negotiate and make as many product sales as I needed to ensure I had ample bin space right from the seat of the combine! A lot has happened this past year with regard to grain marketing here in Canada, and of course with change comes new opportunity. We have access to technology we didn't have only a short time ago, and this keeps changing and improving as well. The world is getting smaller in many respects. We now have better access to global weather information, world commodity and crop input supplies, utilization and pricing, freight costs, and energy values.

Marketing is very important and essential to all farm operations; however, one cannot overestimate the importance of research and development to ensuring Canada remains competitive in the global marketplace as a reliable supplier of high-quality product. Canada has done an amazing job with the limited funding available for genetic and varietal development. However, without an increase in resources in this area, we will fall behind. The Alberta Seed Growers' Association is leading a group of cereal industry grower organizations in an effort to explore various models for producer, public and private led research and development. An article on this topic, among others, can be found in this issue of the **Alberta Seed Guide**, exploring how we can become stronger working as a team through a spirit of partnership as we take advantage of these "Global Opportunities." Enjoy!

#### Ryan Mercer, President

Alberta Seed Growers' Association Email: rmercer@mercerseeds.ca







MINISTER OLSON

**AS** Minister of Agriculture and Rural Development, it is my pleasure to extend greetings to readers of the *Alberta Seed Guide*, and to thank the Alberta Seed Industry Partnership for its work educating and informing Alberta producers about seed issues.

The Seed Industry Partnership has been instrumental in promoting Alberta's seed industry. This edition of the seed guide offers a wide range of information on topics from research to international markets. It's important for each of us to understand the significance of our province's agriculture industry, its future, and how Albertans and people around the world will benefit.

In 2011, Alberta's exports of primary and processed agricultural and food products totalled \$8.1 billion. As the world's population has now surpassed seven billion people, the global market for exports

will continue to grow, particularly in developing countries where a blossoming middle class has increased demand for high-quality foods like Alberta pulses and canola.

Now more than ever, we must work to solidify Alberta's reputation as a preferred and reliable supplier. I am confident readers will come away with new ideas and useful information to grow their operations now and in the years to come.

I wish Alberta producers a productive and successful year. Once again, thank you to everyone at the **Alberta Seed Guide** for your efforts in continuing to put together such a dependable source of information.

#### Verlyn Olson, Q.C.

Minister of Agriculture and Rural Development



SHAWN BROOK

**We've** gone back to our roots! When you picked up your Fall 2012 issue of this very important decision-making tool, you might have noticed a different title on the front cover. Don't worry, it's all the same great information, but we're calling it like it is ... the **Alberta Seed Guide**.

Most of you had a wild ride this year, and while some of you are enjoying a fantastic harvest, some fields are still drying out and others are experiencing the famous snow/rain dance. One thing is certain: we are all actively looking toward next year and the decisions and excitement it will bring. There are many pressures on our industry, and staying focused on starting with great seed is an important insurance policy for the coming year as we continue to fight both weather and pest pressures.

Gone are the days when if you built it they would buy it. We are in a new marketing era, and understanding the global market, although slightly daunting, can bring success beyond your wildest dreams. Filling lucrative niches within any industry is a profitable approach to doing business, and agriculture is no different. We must continue to improve our understanding of global market forces and position ourselves to access these markets. Reach out with all of the power and effort you can to ensure you are part of the new marketing reality—and remember that there are many resources to help you get there, including the **Alberta Seed Guide**.

Finally, I must send out a huge thank you to all of Alberta's seed growers and seed cleaning plants for their commitment to offering Alberta farmers a solid foundation on which to build their businesses. Alberta farmers are poised for success, and we hope that you are able to capitalize on the many opportunities in 2013.

Shawn Brook, Publisher Alberta Seed Guide

Email: sbrook@issuesink.com





#### Alberta Seed Guide

#### Fall 2012

Seed Industry Partners





lorena.pahl, general manager Alberta Seed Industry Partnership 5030-50 Street Lacombe, AB T4L 1W8 Ph: (403) 782-8022 Fax: (403) 782-5514 Email: lorena.pahl@seed.ab.ca

#### PUBLISHED BY



403-313 Pacific Avenue Winnipeg, MB R3A 0M2 PRINTED IN CANADA (204) 453-1965 Email: issues@issuesink.com

#### PUBLISHER shawn.brook

#### **EDITORIAL**

kari.belanger, lindsay.hoffman, julienne.isaacs, shannon.schindle, iennifer.ewankiw

#### CONTRIBUTORS

teresa.falk, angela.lovell, julie.mcnabb, rosalie.tennison

wade.clisby, jeff.hiebert, lesley.nakonechny

#### MARKETING

craig.armstrong, paige.collette, hiten.shah

#### CIRCULATION

brad.gordon

The Alberta Seed Guide makes no expressed or implied warranties of merchantability or fitness for a particular purpose or otherwise, concerning the use of any product and assumes no liability for any injury or damage, direct or consequential, incurred from the use of such products or services therein. Federal, Provincial, and Municipal laws and regulations supersede the information contained herein.

> Return undeliverable Canadian addresses to the Winnipeg office: Issues Ink 403-313 Pacific Avenue Winnipeg, MB R3A 0M2 PRINTED IN CANADA

#### INTERESTED IN ADVERTISING?

Please direct all sales or distribution inquiries to paige.collette at (204) 453-1965 or via email at pcollette@issuesink.com

> Reproduction in whole, or in part, is prohibited without written permission from the publisher.

> > Publications Mail Agreement No. 40030841





Configure the screen with your favorites or most used functions. Select 3D or top down view angles that provide superior situational awareness.

#### **POWERFUL MAPPING ENGINE**

Farm with the greatest accuracy and most effectively by stacking up the 3 separate layers of data - prescription, imagery and as applied maps.

#### SIMPLIFIED CONNECTIVITY

Make the best farming decisions through Outback ConnX™, a webbased system that seamlessly interfaces and simplifies data transfer between the MAX terminal and office, vehicle tracking, advanced weather, and remote access to the terminal.

Outback MAX™ redefines simplicity in precision farming. The system works seamlessly with eDriveX™ with eTurns™ and features section and variable rate control within the rugged, highdefinition console. Full-featured section control, monitoring and guidance is possible through Outback MAX with video support for up to 4 monitoring cameras and an optional switch box and lightbar that conveniently attach to the console.



#### In this Issue

#### FEATURES

08 DOORS OPEN

Several successful international trade missions are opening doors and creating new trade opportunities for Canadian agricultural products.

10 TRADE TALK

The Alberta Seed Guide talks to AAFC about new international trade agreements and markets as well as current and future research initiatives.

14 CHINA AND CANADA COLLABORATE ON BLACKLEG RESEARCH

Joint research between China and Canada is part of an ongoing strategy to achieve a stable trading environment between the two countries.

- 18 opportunities, options and obstacles How will the new grain marketing era affect the Canadian seed industry and variety research?
- **24** EXPIRATION DATE

The expiration of Monsanto's original patent on Roundup Ready soybeans is raising some interesting questions for the agriculture industry.

**28** FALLING BEHIND Failure to comply with UPOV 1991 is putting Canadian breeding programs and growers at a disadvantage.

**32** CONTROLLING CLUBROOT Curb clubroot with these prevention and management strategies.

- **36** CLUBROOT BY THE NUMBERS Interesting facts about clubroot.
- 38 THE REAL VALUE OF FORAGE A new report tallies the direct and indirect value of forage crops in Alberta.
- **44** FOSTERING INNOVATION The state-of-the-art Greenhouse Research and Production Complex is at the leading edge of crop research and technology.
- 53 NEW VARIETIES New seed varieties to consider for your farm.
- **64** NEW VARIETIES, NEW OPPORTUNITIES Varieties supported for registration by the recommending committees at the 2012 Prairie Grain Development Committee meeting.

68 MADE IN CANADA

ASGA's new project aims to create a business model blueprint for cereal breeding in Western Canada.

**70** GROWER DIRECTORY Source all of your seed needs.

#### DEPARTMENTS

- PRESIDENTS' MESSAGES
- **GREETINGS**
- **18** SEED PLANT PROFILE
- **QQ** SEED GROWER AND SEED PLANT MAPS
- 100 ON THE EDGE









#### **DON'T MISS THE 2012**

#### CARBON CREDIT DEADLINE!

Time is almost up to register or renew your zero-till carbon credits for 2012. Contact us by **November 30th** to get started and trust the team that has processed and sold more carbon credits for farmers than any other company! No hassles, on-time payments and great customer service. Expect more with AGRI-TREND®.





Professional. Agricultural. Coaching.

1 877 276 7526

www. **AGRI-TREND**.com





### THE POWER

JOIN US TO LEARN MORE Nov 27th - Nov 29th, 2012 TCU Place - Saskatoon, SK

#### KEYNOTE SPEAKERS INCLUDE:



**David Chilton** Author of Canada's all-time bestselling book, The Wealthy Barber, one of the Dragons on Dragon Den and a mentor to many successful entrepreneurs, and will be speaking on

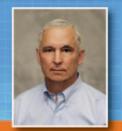
entrepreneuralism.



**Don Bell** One of the four founders of WestJet, is widely credited with helping to make the company one of the most successful airlines in North America.



The Director of the Christopher S. Bond Life Sciences Center in Missouri will share some remarkable breakthroughs on plant reactions to environmental stimuli that will impact your farm in the near future.



Dr. Danny Klinefelter "One of the 25 people in the world who will have the greatest influence on the future of American agriculture." -Top Producer magazine



Mike Dolinski One of industry's best, illuminating complex plant and insect interactions in a practical, fun, and hands on approach that farmers and agribusiness people from across Western Canada have come to appreciate.

REGISTER TODAY! 1.877.276.7526 TheFarmForumEvent.com

### **GET ONLINE!**

As you begin your planning for the 2013 cropping season, don't forget to visit seed.ab.ca—the website of the *Alberta Seed Guide*—to help you with your seed cleaning and planting decisions.

**AS** you settle in to read your Fall 2012 issue of the Alberta Seed Guide, don't forget about seed.ab.ca. This one-stop web portal offers you access to the decision-making information you require at the tips of your fingers. User-friendly search tools help you quickly source seed for sale and seed cleaning services, find updates on issues the industry is facing, connect to industry

resources, or check out new and past issues of the magazine online in an easy-to-navigate page-flip reader.

We know the importance of finding the right seed and services for your farm. That's why we've integrated the seed for sale, seed grower and seed processor search functions into our website. Depending on the variety or seed services you are seeking, simply

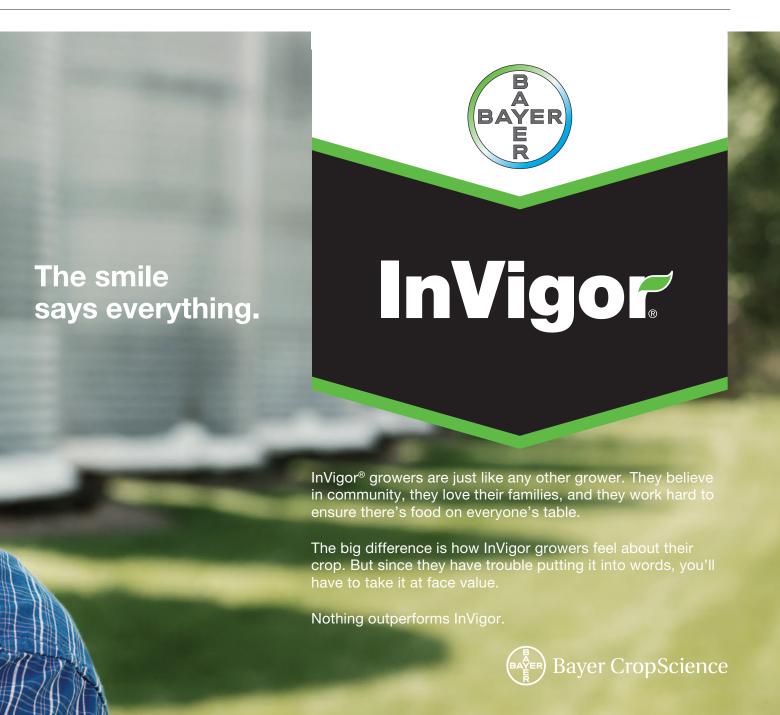




follow the links from the homepage and you'll be just a couple of clicks away from finding a specific variety or seed treating service.

This new package of information, combining print and digital content, will keep you informed and prepared to make all of your input decisions for the coming year. As the site continues to evolve and present more features, we also welcome your feedback on tools and information you'd like to see added online. Send your suggestions to Kari Belanger at kbelanger@issuesink.com or Lorena Pahl at lorena.pahl@seed.ab.ca.

Searching for seed and seed cleaning services has never been easier. Search by town or name, or just click on your area on the map to find seed growers and cleaners in your region.





### International markets are opening up to Canadian agricultural products after a recent flurry of trade missions, negotiations and agreements.

**TO** a country that exports almost half of its total agricultural production, Canada's access to international markets is crucial. Over the past two years, market access has been a priority of the Canadian government after its recognition of the role Canadian agriculture plays as a key driver of Canada's economy. Several successful international trade missions have expanded existing markets and created new trade opportunities for Canadian agricultural products, which is great news for the seed industry, says Canadian Seed Trade Association president, Stephen Denys.

"Overall, the CSTA views the extensive work that is being done on international trade agreements very positively," says Denys. "Every crop sector has opportunities coming from these agreements. It doesn't matter where you are in the country—there are some nuggets in there for everybody."

For example, a trade mission to China last February resulted in an increase of Canadian canola meal exports to the Chinese feed company Tongwei Co. Ltd.—up to \$300 million annually by 2015 and \$900 million over the next decade—as well as the signing of a Memorandum of Understanding on joint canola research between Canada and China.

"China is becoming a more consistent and larger market for canola," says Jim Everson, vice-president of corporate affairs for the Canola Council of Canada. "They are importing more oilseeds, and we are now consistently supplying them with volumes that are increasing regularly." He says a number of commodities, including canola, will benefit from China's increases in meat and milk production. "They need greater supplies of quality feed," says Everson.

Last March also marked the first Canadian commercial shipment of alfalfa hay to enter the Chinese market. The government is currently negotiating market access for timothy hay. According to an AAFC press release, the growing Chinese dairy industry is also increasing demand for alfalfa hay, opening up more opportunities for Canadian producers.

Negotiations for an Economic Partnership Agreement with Japan were launched in March for the betterment of the agriculture industries of both countries. Trade mission delegates met with Japanese beef, pork, grain and oilseed buyers in an effort to grow market opportunities. In partnership with the Canadian Wheat Board, the Canadian Grain Commission and the Grain Growers of Canada, Agriculture Minister Gerry Ritz also guaranteed the continued supply of Canadian wheat and barley to the Japanese grain industry. Minister Ritz then travelled to South Korea to restate Canada's support for increased agricultural trade between the two countries.

A trade mission to Morocco the following month resulted in discussions of a Canada-Morocco free trade agreement as well as the signing of an MOU on agricultural cooperation. Morocco is an important market for Canadian durum wheat and pulses. Minister Ritz travelled from Morocco to Saudi Arabia in an effort to deepen economic ties with the Middle East.

#### "We must take a leap forward to catch up with the rest of the world just so we can level the playing field."

- Stephen Denys

However, it is the Canada-European Union Comprehensive Economic and Trade Agreement and the Trans-Pacific Partnership Agreement negotiations that may most profoundly affect the seed sector.

#### **Negotiations**

Canada and the European Union have completed the ninth round of negotiations toward the CETA with the hope of concluding talks in 2012. The EU is a major market for the Canadian seed industry, says Denys, purchasing over \$81 million in seed exports from 2007 to 2008, forage markets worth more than \$10 million from 2006 to 2007, and \$3 million in timothy hay exports. "The seed trade believes there is potential to increase exports to the EU," he says. "We hope those markets will expand as we go forward."

Everson says a trade agreement with the EU could also help lift barriers to trade. "There are some tariffs in place on oil imports into the EU. Any reduction in tariffs usually leads to easier opportunities to enter the marketplace." He says the negotiation of trade agreements with countries of larger economies is also exciting.

"While Canada has a reputation for negotiating free trade agreements, in the past they have been with smaller economies. These are important to some sectors, but from an agricultural point of view and [particularly] canola, we're encouraged by negotiations with larger economies. Generally speaking, coming to agreements like this where the end result is a more predictable and liberalized trading environment—that's also encouraging to us," says Everson.

Meanwhile, in June, Canada was the eleventh country invited to participate in the TPP negotiations aimed at regional trade liberalization. "If you consider the countries involved, [they] account for 76 per cent of our seed exports. It's already a major market for us, but there's also a good opportunity for expansion if the agreement is put into place," says Denys.

Everson says Canada's invitation to the TPP negotiations is an interesting development. "Multilateral agreements are preferential to bilateral agreements because there are elements of international trade that are not easily resolved through bilateral agreements." He says a regional trade agreement involving a number of important nations may be another way of finding solutions to trade issues and could set a precedent for other trade arrangements. "The Asia-Pacific market is really important, so we're very pleased that Canada has been able to get a seat at the table, and we look forward to those negotiations," says Everson.

"Both of these agreements are tremendously important to the seed sector," says Denys. However, industry must continue to work closely with government to resolve tariff and non-tariff issues impeding trade, he says. "As part of the negotiations, we have to put a zero-based tariff environment in place across the board. We need synchronicity of approvals of biotechnology products and seed treatments, and progress in terms of low level presence policies for biotechnology traits."

Although progress has been made over the past few months at international meetings to move toward some sort of consistency in terms of LLP measurements, work continues to resolve this issue in order to reduce trade disruptions. "With the equipment we've got today, zero is not really an option," says Denys.

#### "A Leap Forward"

Another area in which progress must be made, says Denys, is attracting investment to the Canadian seed industry. "In crops such as cereal grains, forages and, especially, open-pollinated crops—pretty much any crop outside of canola, soybean and corn—we must strengthen our intellectual property protection laws so that companies want to invest in Canada," he says. While many nations are in agreement with the 1991 Act of the International Convention for the Protection of New Varieties of Plants, Canada's legislation does not comply with this most recent convention.

"We must take a leap forward to catch up with the rest of the world just so we can level the playing field," says Denys. "The reality is that in order for producers to succeed and be competitive globally, they need the best technologies. At the end of the day, the producer benefits—if the producer doesn't benefit you won't be able to sell anything on the market."

So far, the Canadian government has been a willing listener to the needs of the seed trade, says Denys, who wants the government to continue on its negotiating path, keeping the seed sector in mind. "At the end of the day, these agreements are not only positive for agriculture, but are positive for the seed industry," he says. "Most importantly, it's positive for our producers and that makes it good for the farm economy as a whole and for the country. I see Canada in a very good position going forward." Kari Belanger

### Trade Talk

#### The Alberta Seed Guide talks to Agriculture and Agri-Food Canada about new trade opportunities and research initiatives.

#### ASG: New international markets have opened up to Canadian products—what cropping and breeding trends will develop from these new markets?

AAFC: We anticipate that new markets will expand the specification requirements for our crops. New breeding trends will address these requirements in addition to agronomic research which will address the need for improved and higher yielding varieties with greater resistance to disease, pests and drought.

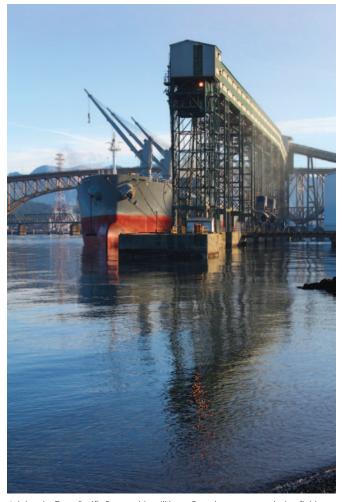
Some examples of new international market opportunities include:

- Forage market in China: recently received approval for alfalfa and working to gain access for timothy hay into a growing market for forages as China increases animal/dairy production.
- Pulses in China: resolved selenium restrictions on pulses going into China, opening up the opportunity to broaden applications and utilization of Canadian pulses in China.

Agriculture and Agri-Food Canada supports industry-led research to capitalize on the opportunities created when new markets open. One way we are doing this is through the Agri-Science Clusters—large research networks pulling in partners from across sectors, including industry, universities and governments. Part of what these networks do is to identify the priority research for their sectors to take advantage of market opportunities. This could involve substantiating their health benefits of crops or improving their appeal to foreign markets.

Some examples include:

- Pulse Cluster led by the Pulse Crops (Canada) Association. The Pulse Science Cluster aims to augment existing research investments, to advance sustainable production and to enhance profitability of the Canadian pulse industry. One of the three research themes is genetic improvement of pulse varieties to enhance the competitiveness and profitability of Canadian pulse crops. Research will focus on plant breeding and trait development for the creation of pulse varieties with improved adaptation to a changing climate, improved disease resistance and increased yield.
- Canola/Flax Agri-Science Cluster led by the Canola Council of Canada. The cluster brings together canola research in three



Joining the Trans Pacific Partnership will keep Canada on an even playing field with the United States, Australia, Chile and New Zealand in important export destinations.



POWERED BY FARM CREDIT CANADA

#### It's time to tell the real story

Canadian agriculture is a modern, vibrant and diverse industry, filled with forward-thinking people who love what they do. But for our industry to reach its full potential this has to be better understood by the general public and, most importantly, by our industry itself.

The story of Canadian agriculture is one of success, promise, challenge and determination. And the greatest storytellers are the 2.2 million Canadians who live it every day.

Be proud. Champion our industry.



areas: oil nutrition, meal nutrition and crop production. The oil research will focus on the associated health benefits of canola oil. The meal research will look to enhance the energy content in meal. The production research is intended to increase acreage, yield and grower profitability to meet 2015 targets in a sustainable manner. The flax research focuses on nutrition. The industry is investing in science to continue to demonstrate the health benefits of flax aimed at supporting health claims in its target markets.

#### ASG: How will this affect commodity demand?

AAFC: We are confident that our world-renowned reputation for high-quality commodities will be enhanced which will result in increased export demand.

#### ASG: Will demand created from new markets boost research spending?

AAFC: Producers and companies recognize the value of research and provide significant funding to develop new varieties and products. Farmers and industry will profit from new demand resulting from the opening up of new markets, and we expect that their research investments will change to reflect the opportunities available.

AAFC plays a role in funding, pulling together and collaborating with networks of partners, including associations, universities and industry in pooling resources and providing leadership in setting research priorities and coordinating research for their sectors. Many of these networks are doing research projects that position their sectors to take advantage of new trade opportunities.

AAFC's collaboration with other countries on mutually beneficial research can also help to open new markets. This collaboration can include scientist and student exchanges, joint research projects and demonstration farms. For example, a joint oats breeding program between Canada and China has brought together Chinese and Canadian expertise and created awareness of the quality of Canadian oats and a potential market for Canadian oats in China.

#### ASG: What new marketing opportunities do you see developing?

AAFC: We see new marketing opportunities for food-grade crops in oats and barley, malting barley varieties that meet brewing specifications, and pulses that are better suited to be milled into flour to enhance the nutritional value of food.

Many of the countries we are engaging with have less land and fewer water resources than Canada. Products, services, acumen and technologies that help deal with such resource constraints should find a ready market. Within those countries there is a growing need for crops which are drought tolerant and salt tolerant.

The AgriMarketing Program assists a wide range of agricultural sectors to develop and implement long-term international strategies which help these sectors identify and seize new opportunities. With respect to sectors such as grains, pulses and forage, the AgriMarketing Program has provided significant

support to seize opportunities in markets such as the United States, Japan, China, India, South Korea, Vietnam, Thailand, Turkey, United Arab Emirates, Europe, Mexico, Columbia and South Africa.

#### ASG: What will the Canada-European Union Comprehensive Economic and Trade Agreement mean to the seed industry and market access?

AAFC: Negotiations with the EU towards a Comprehensive Economic and Trade Agreement (CETA) are ongoing and well advanced. Both sides are committed to maintaining the rapid pace of negotiations to meet the objective of finalizing negotiations in 2012. In the negotiations, Canada is committed to an ambitious outcome on tariff liberalization, including for cereals, pulses and seeds. A future CETA would be expected to eliminate tariffs or make permanent current duty-free access into the EU for these products. Canada is also pursuing satisfactory treatment for a number of sanitary and phytosanitary issues

"We see new marketing opportunities for food-grade crops in oats and barley, malting barley varieties that meet brewing specifications, and pulses that are better suited to be milled into flour to enhance the nutritional value of food."

and technical barriers to trade, including issues related to biotechnology, which will be key to ensure real and effective gains in market access.

#### ASG: What will Canada's participation in the Trans Pacific Partnership mean for the industry and market access?

AAFC: Our interest in joining the TPP negotiations is to broaden and deepen our trading relationships in the Asia-Pacific region. The nine current members of the TPP represent a market of 510 million people and a GDP of nearly \$18 trillion. With Canada and Mexico, TPP market potential grows to more than 658 million people with a combined GDP of \$20.5 trillion.

Joining the agreement would keep Canada on an even playing field with the United States, Australia, Chile and New Zealand in important export destinations, especially in Malaysia and Vietnam, two of the fastest-growing agri-food importers in Asia. Kari Belanger



### TIME TO THE PROFIT.

Sign your Nexera<sup>™</sup> canola production contract for a minimum of 500 acres before November 29th, 2012 - and get a



Call your crusher or retailer to make today's most profitable hybrid canola decision. Field-to-field, growers are booking Nexera canola Roundup Ready® and Clearfield® hybrids. With leading agronomic performance and profitability, only Nexera canola hybrids help meet growing demand for heart-healthy Omega-9 Oils. Accomplish more at 1.800.667.3852 or healthierprofits.ca.









China has become a major importer of Canadian canola seed, meal and oil. Exports of Canadian canola products to China in 2011-12 were valued at \$1.6 billion.

"CHINA is an important and growing market," says Patti Miller, president of the Canadian Canola Council. "At the moment we have a significant amount of canola seed going to China, so we currently have access to the Chinese market, although it is limited to a number of crushing plants because of their concern about blackleg disease."

The Chinese have justifiable concerns about blackleg as they do not yet have any reports of the virulent strain Leptosphaeria maculans, which is common in some canola-growing areas of the world and has been found in all of the Prairie provinces in Canada in 2012. Most blackleg infections come from infected canola residue, and Canadian growers are being encouraged to lengthen rotations, plant resistant varieties and use certified seed in an effort to reduce the risk of blackleg infection.

In 2009, China imposed restrictions on Canadian canola imports due to concerns about the possible infection of Chinese rapeseed crops with blackleg. Exceptions were made to allow some crushing plants located far enough from Chinese rapeseedgrowing areas to import Canadian canola seed.

Despite the restrictions, exports to China have continued. China imported nearly 2.7 million tonnes of Canadian canola in

# CHOSEN TO PERFORM



#### DESTINED TO FINISH STRONG



BrettYoung and Elite® are launching the E Series grain corn lineup in Western Canada. With a focus on yield, maturity, drydown and standability, these hybrids are sure to deliver in your field.

New to the lineup are E44A02 R (2150 CHU) and E50G29 R (2400 CHU) hybrids. Both have fast emergence with great drydown and high bushel weight. E44A02 R comes with Genuity® VT Double PRO™ RIB Complete™ to deliver the best corn borer protection without the hassle of planting separate refuges. E50G29 R comes with Genuity® VT Triple PRO™ for above ground insects and E50G27 R (2350 CHU) is an excellent fit for growers who do not need corn borer protection.

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



2011–2112, nearly three times the previous year's purchases, and just behind a volume of almost 2.9 million tonnes in 2008–09, according to the Canadian Grain Commission.

In February 2012, Prime Minister Stephen Harper and Chinese Premier Wen Jiabao signed a Memorandum of Understanding to allow for joint research between Canada and China into blackleg disease as part of an ongoing strategy to achieve a stable trading environment with China.

The Canada-China Co-operative Research Plan for Blackleg Risk Mitigation consists of research projects that aim at better understanding the efficacy of current measures, and that explore the feasibility of potential new measures which could be implemented to help mitigate the risk of blackleg in the export of Canadian canola seed to China. The blackleg research plan is being coordinated by the CCC, with technical input from the Canadian Food Inspection Agency. The CFIA is responsible for collating the data and sharing updates of the results from the research projects to its counterpart in China.

"It's an ongoing, joint research project with China to learn more about the science of blackleg and how it is transmitted. After the research is done, we will be trying to determine ways of mitigating its transfer to Chinese crops," says Miller. The CCC is funding the research projects through Agri-Flexibility funds received from the Government of Canada.

There are many different research projects being conducted across Western Canada by researchers from Agriculture and Agri-Food Canada, Saskatchewan Agriculture, Alberta Innovates: Technology Futures, Alberta Agriculture and Rural Development, Simon Fraser University, and the Universities of Saskatchewan, Manitoba and Alberta.

One aspect of the China/Canada blackleg project is a three-year survey of canola crops across Western Canada to determine the amount and severity of blackleg. "A uniform protocol was decided on to survey canola fields and process the data collected," says Ralph Lange of AITF, the survey's national coordinator. Survey results are still being compiled for 2012, but in 2011, basal blackleg cankers were observed in 66 per cent of surveyed canola crops in Alberta, an increase of 12.6 per cent over 2010. The increase may be due to weather conditions conducive to disease development as well as improvements in the ability to identify the disease.

"The main purpose of the survey is to compile the information for CFIA, and they then take our survey data and results from their own DNA testing on field samples infected with Leptosphaeria maculans and share the results with the equivalent Chinese agency," says Lange. "It's one part of the trade restriction mitigation efforts, along with the many other projects being done at other research centres across Western Canada."

"I think what we have is a very robust, comprehensive research plan, and we are going to let ourselves be led by science and work with an important customer to ensure that we are taking care of their concerns and mitigating the transfer of blackleg to their crops," says Miller. "I am optimistic that we have a really good working relationship with the Chinese on tackling this problem together through the proper application of science." Angela Lovell

#### **Blackleg Research Projects**

Some of the prominent research projects of the Canada-China Blackleg Risk Mitigation Research Plan include:

Understanding the effect of commercial crushing conditions (heat and chemical solvent) on blackleg associated with canola seed for crushing.

Understanding the ability of blackleg-infected canola seeds to spread the disease.

A survey of the distribution of blackleg in Canada to determine the incidence of the pathogen.

Developing a cross-border transmission risk model. The model will also consider current management practices in China, such as flooding in paddy rice-rapeseed production, and blackleg resistance in Chinese rapeseed germplasm, which could mitigate the risk of blackleg on Chinese rapeseed production.

#### 20/20 Blackleg Quick Test

20/20 Seed Labs Inc. in Nisku, Alta., has recently developed a DNA canola seed quick test for blackleg in conjunction with Alberta Innovates: Technology Futures. The test reduces the amount of time to detect the virulent strain of blackleg *Leptosphaeria maculans* to only one to two working days. A traditional, microbial grow-out test can take two to three weeks. Although the relative costs of the two tests are comparable, the biggest challenge has been in determining the cut-off levels to compare infection rates using the DNA method to the traditional plate test, which is standard in the seed industry.

"DNA tests in general can be quite sensitive," says Kim Kenward, research manager at 20/20 Seed Labs. "It's a standard problem when you are trying to develop a molecular test that compares directly with a microbial grow-out test. DNA tests measure the total number of target fungus DNA present in an overall sample while a microbial test tells you how many infected seeds there are. Level of infection can vary between seeds but a plate test will not see that. We have put a lot of work into figuring out appropriate cut-off levels to relate the amount of blackleg fungus DNA present with what would come up as a 0.1 per cent infected seed result on a plate test."

Generally, certified seed retailers do not want to see an infection rate of even 0.1 per cent (which is 1 in 1,000 seeds). It's expected that the DNA quick test will eventually gain popularity among seed companies due to its rapid response time and the concern of important export markets, such as China, over possible blackleg contamination from imported canola seed.

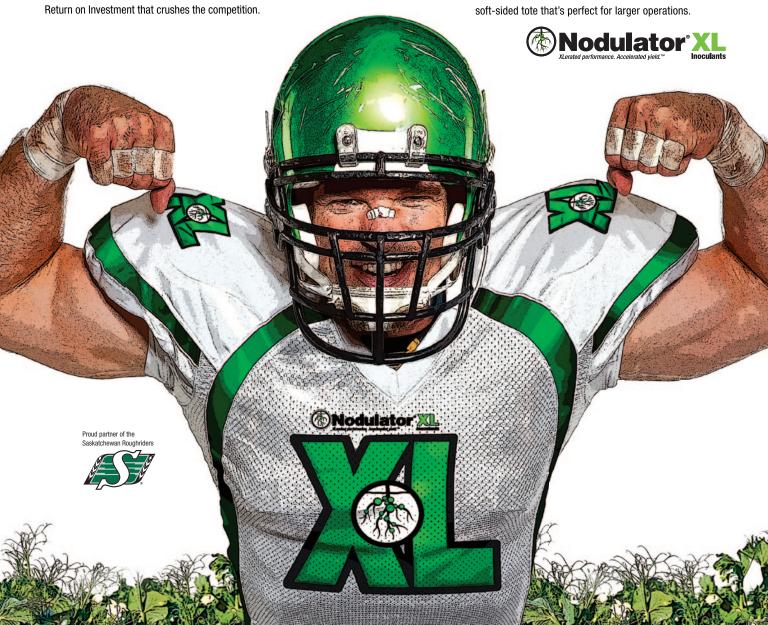
## Bigger yields, better profits, serious bragging rights.

Nodulator XL inoculant drives your pea and lentil yields straight into the big leagues – for a championship Return on Investment.

When you inoculate with Nodulator® XL, it unleashes a unique, more active strain of rhizobium for enhanced nitrogen-fixing within nodules and more vigorous plant growth. That means higher yields and a

Nodulator® XL is registered for both peas and lentils, with your choice of formulations: liquid, self-adhering peat or solid core granule. Want to go big?

Grab the Nodulator® XL Q-Pak — a convenient 364 kg (800 lb.)



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

www.nodulatorxl.com





August 1 marked the start of a new grain marketing era in Canada. What impact will this have on the seed industry in Canada and, specifically, on new variety research?

**AS** open marketing for western Canadian wheat and barley officially began on August 1, many farmers were already harvesting, and with most expecting bumper yields and decent prices, their thoughts have turned to where, when and how to sell that grain.

However, what effect will marketing freedom have at the other end of the agricultural cycle, as farmers prepare for another crop year and decide what seed varieties they will buy? What will new varieties look like and where will future breeding and research efforts be focused? What role will seed companies and agriretailers play in this new environment?

More communication throughout the value chain and much stronger market signals are two of the big changes that some industry experts are predicting. "There will be more direct communication between buyer and seller, and that should provide us with more information on what the end-user is looking for and how that can be gained through a specific wheat variety or class," says Peter Entz, assistant vice-president of seed and traits for Richardson International Ltd. "The market will provide a stronger signal as to what varieties farmers may want to grow in the future."

#### **New Varieties**

Seed companies and their retail partners will be at the forefront of developing new varieties that address the current and future needs of the market. "Companies like Richardson will be more active in terms of bringing varieties of wheat and malt barley to the market," says Entz. "Not that we will be doing the breeding or variety development work, but just focusing and expanding the work we do with our cereal seed partners today."

As the market has increasing influence on what farmers decide to plant, seed companies are sure to put their research dollars into developing new varieties that have more disease resistance, higher yields and are adapted to Canadian prairie growing conditions. "Seed companies are going to have more influence on what happens in Canada now and they are going to be able

More communication throughout the value chain and much stronger market signals are two of the big changes that some industry experts are predicting.

to put their shoulder behind the research and marketing," says Dennis Squair, president of Agri-Trend Marketing Inc. "You can have seed companies developing what the millers are looking for and that's a semi-hard wheat. That will build up enough demand for wheat varieties that fit that need and will develop the wheat



market faster and bring a lot more profitability to the producer."

That could mean more acres of red winter wheat or semihard wheat to serve the international bread market, as well as specialty soft white wheat for the ethanol industry, says Squair. "We have had a lot of hard Canadian Western Red Spring wheat in Western Canada and it's a specialized market," he says. "I think we are going to see more high-yielding, lower quality wheat in Western Canada because those types of wheat are more profitable."

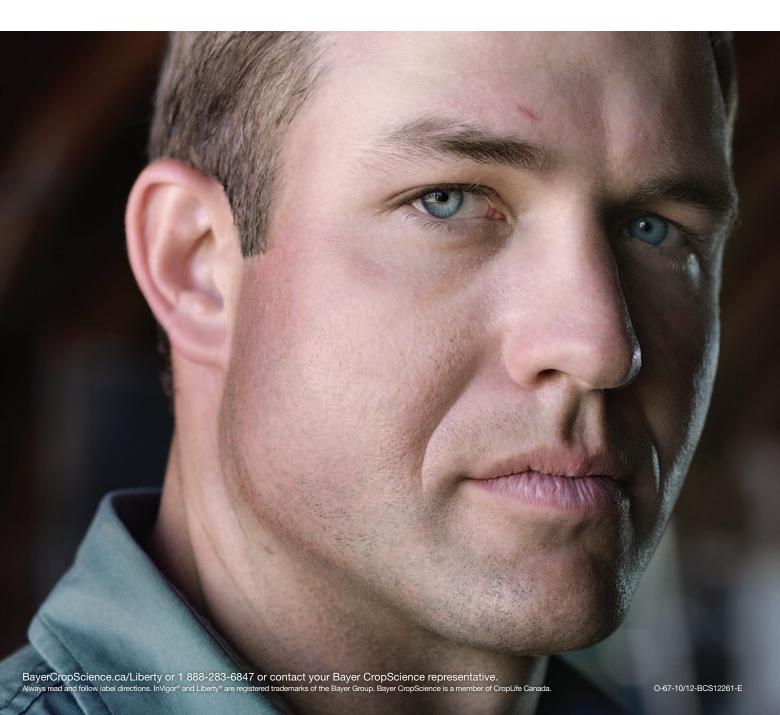
While the first push may well be to develop more varieties for the larger wheat programs, some see that eventually a demand for less generic, specialty varieties could develop. "I think we will see more niche opportunities like identity-preserved programs," says Mark Lepp, co-owner and business manager at FarmLink Marketing Solutions. "Under the old system there were a lot of

buyers worldwide who couldn't buy Canadian wheat because they were too small and didn't have the minimum requirement of tonnes to participate. So I see markets like that opening up initially in the United States and then globally that are smaller in scale but more valuable to the farmer and the seed companies."

Squair also thinks there may be some Roundup Ready wheat varieties introduced in the future. "I think more development of semi-hard red wheat in Canada will include some Roundup Ready varieties as well," he says.

#### **Additional Benefits**

The open market should also be a catalyst for some needed changes in the registration process, says Entz. "There needs to be an adjustment made to the registration process to allow for broader germplasm to enter the western Canadian system," he



says. "There are good reasons to keep classes like the CWRS as is, but there is definitely a need to broaden out some other classes to attract high-yielding, semi-dwarf milling wheats with midquality attributes."

There will probably be a lot more players in the wheat and barley breeding business, says Lepp. "In the past most of the wheat breeders in Canada were public and we probably had three or four groups focusing on wheat and barley varietal development. Now you are going to have 20 or 25 different groups, which will help the genetics and the opportunities for the seed companies, seed retailers and farmers," he says.

#### **Marketing Help**

One thing's certain: whether farmers want to market their grain with or without the CWB, there will be plenty of people to assist

them. "Those with access to markets, infrastructure to handle their grain, and day-to-day knowledge and understanding of the markets will be good partners for farmers wishing to market their grain," says Entz.

But that doesn't mean that wheat and barley growers are going to be willing to limit their newfound marketing freedom by committing to any one company or its products. "I think some of the seed companies may try to do some technical use agreements or production contracts if they are going to have a fair bit of money invested, similar to what we have seen with Roundup Ready canola," says Squair. "But I think producers are going to push back on that, maybe not as much with TUA's because they understand that there needs to be money to launch that research, but I think producers are going to want to have flexibility, and the grain and seed companies are going to want to try and tie them in."



Respected not praised, they believe in the team's success over their personal fame. With their versatility and unique set of tools, the unsung hero is a consistent performer who rises to any challenge.

Backing every number one yielding InVigor® hybrid canola since 1996, Liberty® herbicide knows exactly what it's like to play that role.



Wheat marketing is a complex business, with so many different classes, proteins and grades, and represents a big learning curve for many farmers, which makes Lepp surmise that many will rely at first on the larger line companies to help them market their grain, but as time goes on he thinks many will dip a toe in the water of marketing it themselves.

He predicts that many new players will join the grain marketing business as well as some long-established ones that can finally put their knowledge of the system to better use on behalf of their clients.

"I think it will take the growers a couple of years to get used to all these different programs and figure out what works best for them," he says. Angela Lovell

#### **Continued Investment in Wheat and Barley Breeding**

Effective August 1, 2012, voluntary producer wheat and barley check-offs, which were previously collected and administered by the Canadian Wheat Board, will be collected at point of sale at grain handling operations licensed by the Canadian Grain Commission. Deduction coverage is limited to licensed grain handling operations and deductions will not be collected on imports, producer to producer sales, feed and exports not delivered through licensed operations.

This interim program provides a check-off that will enable farmers to continue to fund the Western Grains Research Foundation, the Canadian International Grains Institute and the Canadian Malt Barley Technical Centre at a level equal to the funding they received from the CWB prior to August 1, 2012.

Initially, the ABC will administer this program on a cost recovery basis to enable the program to get started, but it's expected that provincial commissions will eventually be established to assume responsibility for the check-offs. "The ABC took on this role because we think that farmers see the value in the recipient organizations," says Lisa Skierka, ABC's general manager. "At the time we were the only existing provincial barley or wheat commission in Western Canada. As a grassroots farmer organization we think it makes sense for farmers to control their own check-off dollars and we are happy to administer it, on a temporary basis, until other provincial farmer organizations evolve."

For farmers the biggest change will be that their cash purchase tickets will list a levy deduction for the check-off amount. "Licensees will deduct the check-off at the point when cash purchase tickets are issued to a producer instead of from a producer's final CWB payment," explains Melanie Gustafson, policy economist at the CGC. "Producers will be able to request a refund of the amount deducted on an annual basis. This is similar to the existing structure that is being replaced whereby the funding for the WGRF is automatically deducted unless producers request otherwise.

At the end of each month, licensees will submit the check-off monies collected, along with a report detailing the amounts collected from each producer's deliveries of wheat and barley to the ABC for disbursement.

The new check-off rates will be 48c/tonne on wheat (up from the previous 30c/tonne) and 56c/tonne on barley (up from the previous 50c/tonne). The increase of 18c/tonne for the

check-off rate on wheat reflects a 3c/tonne administrative charge and a 15c/tonne amount now going directly to CIGI that was previously channelled through the CWB. "What it means is that CIGI's activities in terms of market development and customer support will be funded directly by farmers," says Heather Johnson, director of communications and branding for CIGI, "which really creates a new relationship between our organization and the farmers across Western Canada."

The additional 6c/tonne added to the barely check-off will also include 3c/tonne for administrative costs and a 3c/tonne levy going direct to the CMBTC, which provides technical support, promotion and market development services for the Canadian malt barley industry. "In the past, producer support for the CMBTC has come through the CWB, so this [new check-off system] brings us closer to the producer. The funding is more transparent to them, so they will be able to see more clearly the value that we bring to them," says Rob McCaig, managing director of CMBTC.

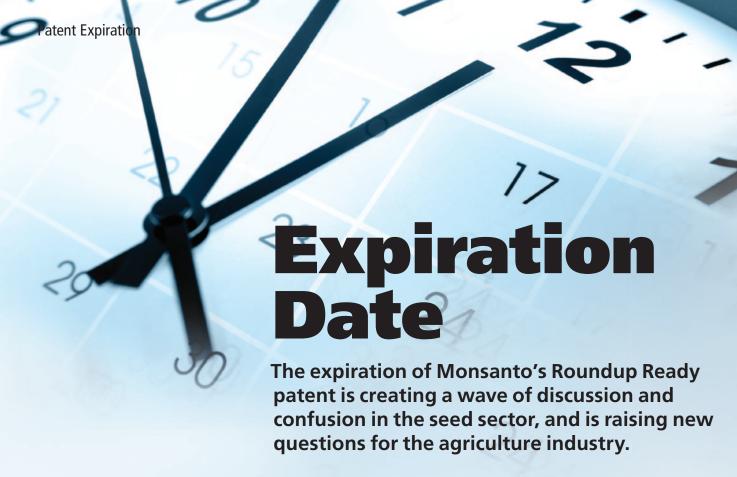
In Alberta the check-off for barley under this program is 4c/tonne as the ABC already funds research and market development in the province in other ways.

According to a WGRF spring survey, prairie farmers remain committed to the check-offs, which are used by the recipient organizations to fund ongoing wheat and barley breeding and agronomy research. "Farmers have been extremely willing to invest in wheat production when they get a pay back on that investment," says Peter Entz, assistant vice-president of seed and traits for Richardson International Ltd. "I don't see that slowing up soon."

The reality is that there are many priorities for public research dollars and farmers understand that, says Garth Patterson, WGRF executive director. "When you look at the global picture, Canada has been lagging other countries in our investment in wheat research for a long time," he adds. "There is a need here for farmers to keep investing in variety development and we also have to be willing to continue working with private industry partners."

It's estimated that the United States spends over \$600 million a year on corn variety development and around \$300 million annually on soybean breeding. Australia spends \$80 million a year on wheat variety development. Canada invests only \$23 million on wheat research. Angela Lovell





IN August 2011, Monsanto's original patent on Roundup Ready soybeans expired in Canada. The effects will be fully realized in 2013, when farmers can plant original Roundup Ready soybeans from saved seed for the first time. In the United States, this same trait technology remains under U.S. patent protection until 2014.

During the term of these patents, Monsanto has had the exclusive right to exclude others from making, using, offering for sale or selling the protected technology. Once these patents have expired, in theory, Monsanto will no longer have the right to exclude others from the protected technology. However, the regulatory mechanisms that must be maintained for the commercialization of the Roundup Ready traits may make it difficult for others to make, use or sell products incorporating the protected technology after the patents have expired.

The agriculture industry has tackled a variety of issues over the years, but no issue has produced as much discussion and confusion as the expiration of Monsanto's various trait-based patents in the next couple of years.

The expiration of Monsanto's Roundup Ready or glyphosate patents creates interesting new questions for the industry.

- What happens between 2011 and 2013? What are the opportunities and obligations?
- What does the future hold for soybean production in Canada with Roundup Ready and other production technologies?
- Will the expiration of the Roundup Ready patents lead to generic Roundup Ready seed in the Canadian and U.S.
- Who will pay for the maintenance of the regulatory approval in Canada, the United States and worldwide?
- How will the expiration of the Roundup Ready and other

trait-based patents affect the import and export of seed into the North American marketplace?

#### **Impact on Farmers**

Monsanto launched an awareness campaign in January 2011 to provide Canadian farmers with information about their rights and responsibilities when the patent on original Roundup Ready soybeans expired.

In 2011, growers who used this technology were still doing so during the life of the patent; therefore, they had to follow the patent law associated with this technology. However, in 2012, "farmers could have decided to buy the original Canadian Roundup Ready (OR1) soybean technology certified seed from a company holding a valid licence for OR1 soybeans, without any contractual obligations or royalty payment to Monsanto. A farmer may decide to save seed from the 2012 harvest for replanting in 2013, as long as the seed company from which they purchased the seed, for 2012 planting, does not have any contractual obligations preventing them from doing so," according to the Monsanto website. And in 2013, "a Canadian farmer may decide to plant OR1 soybeans saved from his own seed."

It is also important to note that the next-generation Roundup Ready soybean technology (Genuity Roundup Ready 2 Yield soybeans) is protected by a different patent than the firstgeneration Roundup Ready trait. As such, the changes that affect the use of the OR1 trait technology, now that its patent has expired, do not apply to Genuity Roundup Ready 2 Yield soybeans.

"The vast majority of Canadian farmers respect patent law and continue to honour the terms and conditions of the Technology



On 60,000 farms and 20 million acres across Canada, the name SeCan is trusted for exceptional seed value.

SeCan
Canada's Seed Portner

www.secan.com

Canadian farmers plant SeCan genetics on more acres than any other seed brand. SeCan is not a seed company. As "Canada's Seed Partner", we're a not-for-profit member association that has returned more than 70 million dollars to Canadian plant breeders. This land is *your* land. And these are *your* genetics.

Call your SeCan seed retailer for genes that fit your farm.

SeCan. Genes that fit your farm.

Genes that fit your farm® is a registered trademark of SeCan.

Stewardship Agreements they have signed," states Monsanto's website. "As it has done every year since the introduction of Roundup Ready soybean technology in Canada, Monsanto will continue to operate its Technology Protection Field Check Program as a way to help maintain a level playing field for all farmers using and benefitting from this technology. Ongoing compliance with the terms and conditions of the Technology Stewardship Agreement is an important part of ensuring that farmers continue to have access to new products and technologies. It also helps keep farming fair for everyone."

#### The Future

Canada and the United States have solid regulatory systems most of the traits that are incorporated into GM crops are required to be regulated in Canada by the Canadian Food Inspection Agency and the Health Canada Pest Management Regulatory Agency and in the United States by the United States Department of Agriculture, the Environmental Protection Agency, and the Food and Drug Administration.

These regulatory bodies regulate the development, transportation, testing and disposal of plant material as an agriculture product. The PMRA and EPA will then regulate a GM product if there is a pesticide substance incorporated into the plant, such as the Bt gene.

During the life of the Roundup Ready patents, Monsanto has maintained the regulatory requirements of each agency for the introduction and commercialization of the Roundup Ready traits, including all of the data, in order to use these traits in Canada, the United States and international markets.

According to the article entitled Roundup Ready Soybean Post-Patent Regulatory Commitment Extended through 2021 on the company's website, Monsanto estimates that it spends approximately \$1 to \$1.5 million per year for the maintenance of regulatory approvals for a product. With the expiration of the last of the Monsanto Roundup Ready patents, Monsanto has stated

that it will maintain the Roundup Ready regulatory approval globally through 2021.

Based on this statement, it appears that Roundup Ready seed will still be available until 2021. Nevertheless, it is still unclear whether other seed companies will be able to produce and sell generic versions after this point.

Patent expiration is a complex issue, and as the seed industry transitions from patented to generic biotech events, many questions have been and will be raised. While it remains mostly an industry responsibility to address the questions, farmers need to be aware of the discussions and always ask seed retailers for all patent implications when purchasing any seed.

Barbara Campbell, James M. Weatherly and Julie McNabb

Editor's Note: Barbara Campbell and James M. Weatherly are attorneys in the Intellectual Property, Technology and Media Department of Holme Roberts & Owen LLP in Denver, Colo. Campbell and Weatherly have over 11 years of combined experience in prosecuting agriculture and biotechnology-based patents, plant patents, plant breeders' rights and trademarks throughout the world.

#### WHERE ON THE WEB

More information about the opportunities and obligations available to Canadian soybean farmers is available at SOYBEANS.COM, a website dedicated to patent expiration that Monsanto launched in 2010.

#### **SeC**an Our genes only come in blue.

When you purchase SeCan certified seed you're getting the promise and performance of SeCan genetics. And with certified seed, you're investing in the future of plant breeding and new varieties that contribute to your bottom line.

Make the comfortable choice. Choose SeCan certified seed.



For genes that fit your farm<sup>®</sup>, visit www.secan.com

Genes that fit your farm® is a registered trademark of SeCan.



# AWAKEN ST

puts nutrients where they count:

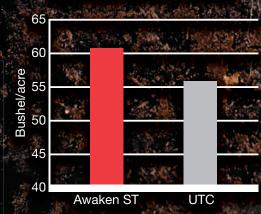
Awaken ST® is a new nutrition loaded, growth enhancing seed treatment.

#### Benefits of Awaken ST:

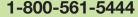
- Promotes quicker seedling emergence
- Provides a larger, more extensive root system
- Improves overall plant health and vigour
- Increases potential yields and ROI

Awaken ST, Nutrition that Grows Results.

#### Awaken ST on HRS Wheat



Source: Dr. Joel Ranson NDSU 2009



www.uap.ca



ON THE SEED



### **FALLING BEHIND**

Canada's failure to comply with the most recent plant breeders' rights legislation is having a negative effect on innovation—putting breeding programs and growers across the country at a disadvantage when compared with other countries.

**WITH** new traits and opportunities on the horizon, the Canadian seed industry is still struggling with its biggest challenge—generating a return on investment through intellectual property protection. Canada is a member of the International Union for the Protection of New Varieties of Plants (UPOV), which provides an effective system of plant variety protection, but is one of the only developed countries in the world in which plant breeders' rights legislation doesn't comply with the most recent international convention, UPOV 1991.

PBR is one of the intellectual property protection mechanisms companies use to protect their inventions of new plant varieties and generate the revenue they need to reinvest in the development of new varieties, explains Patty Townsend, executive vice-president of the Canadian Seed Trade Association.

The World Trade Organization's Intellectual Property Agreement requires that all countries have forms of intellectual property protection in place. Canada implemented its Plant Breeders' Rights Act in 1990, and the legislation complied with UPOV 1978. That legislation was revised in 1991, and despite the fact that Canada has signed UPOV 1991, signalling its intention to ratify the agreement by amending its PBR legislation, those amendments have still not been made.

#### **Hindering Innovation**

A recent survey completed by the CSTA of its members revealed that the private sector collectively invests 27 per cent of its combined operating budget in plant breeding and research, says Townsend, noting this investment is larger than that of almost any other sector in Canada.



UPOV 1991 promotes further breeding by making it compulsory for breeders to share their protected material for the development of new varieties.

**Moving to UPOV 1991 will** promote further investment in plant breeding, while failure to make the move puts Canadian breeders, and ultimately Canadian growers, at a disadvantage ...

- Don McClure

This investment has been climbing every year for crops such as canola, corn and soybeans, but not in cereals, says Townsend, and consequently fewer new varieties of cereals are appearing on the market.

Don McClure, a soybean breeder with Syngenta Seeds Canada, says moving to UPOV 1991 will promote further investment in plant breeding, while failure to make the move puts Canadian breeders, and ultimately Canadian growers, at a disadvantage with respect to their counterparts in other countries, particularly the United States. The United States has ratified UPOV 1991 and has different rules under its Plant Variety Protection Act that allow breeders more freedom than we have in Canada, he savs.

Lorne Hadley, executive director of the Canadian Plant Technology Agency, agrees. He says Canada is part of an international market for varieties, and if a company has a good variety but can't get adequate intellectual property protection in this country, it may choose not to market the variety here, and Canadian farmers lose out.

"The base standard for IP protection in the world is UPOV 1991, so that's where we need to be if we want to have the best varieties," he says.

Canadian producers are missing out on new plant varieties that could increase productivity and competitiveness, says Townsend. "As our member companies look for new germplasm





Canadian producers may be missing out on new plant varieties that could increase productivity and competitiveness.



to bring into Canada, they're finding that developers in other countries are refusing to send their germplasm to Canada because it can't be protected here the way it can be protected in other countries," she says.

#### **Producers' Concerns**

Throughout recent years, farmer groups such as the National Farmers Union have resisted moving toward UPOV 1991. In one factsheet, NFU states, "seed transnationals such as Syngenta and Monsanto, along with supportive industry groups, are pushing for changes to Canada's seed and plant breeding systems. One proposed change is to tighten Canada's rules governing seeds and the protection of 'intellectual property rights' over those seeds ... Seed companies, industry supporters, and the Seed Sector Review recommend replacing our 'UPOV 1978' framework with the much more restrictive—for farmers—UPOV 1991 framework."

However, Townsend says there are many areas of misinformation out there when it comes to the impact UPOV 1991 would have on farmers, such as royalties. Producers believe the new convention will allow breeders to collect royalties on both seed and harvested material, but this is not the case. "A breeder cannot collect royalties on both the seed and the harvested material. It's only when they have not had the opportunity to collect on the seed that they can collect on the harvested material," she explains.

Townsend also notes that UPOV 1991 promotes further breeding by making it compulsory for breeders to share their protected material for the development of new varieties. UPOV 1978 does not include this provision.

However, the major concern producers have with respect to UPOV 1991 is about farm-saved seed, she says. "They're concerned that this ability will be taken away from them, but this is not the case. UPOV 1978 makes no mention of farmers' ability to save production and use it as seed; whereas UPOV 1991 contains specific language permitting countries to allow farmers to save production for use as seed on their own farms," says Townsend.

Townsend believes some farm organizations and producers don't understand what is required to move to the new convention. "There's been a lot of misinformation in the public about the potential impacts [of UPOV 1991], so there's a lot of nervousness about making the change," she says, noting that through its website, fact sheets and other material, the CSTA has been trying to address this misinformation.

"We're not saying that farmers are going to lose the farm because we want plant breeders' rights," she says. "We're saying that if farmers want new varieties and innovation in the Canadian plant agriculture industry, there needs to be a mechanism where funds can be generated for reinvestment."

#### **Moving Forward**

The CSTA has been lobbying the government to comply with UPOV 1991. Along with other groups, the CSTA has taken the next step by developing amendments to the PBR Act. Townsend says they're now determining the best time to approach departmental officials and policymakers with the amendments.

To amend the act, a formal process has to be followed. A bill needs to be introduced, read in Parliament and debated in Parliament, and must receive royal assent by the Governor General. Alice D'Anjou, spokesperson for the Canadian Food Inspection Agency, says a bill amending the PBR Act to ratify UPOV 1991 provisions was introduced into Parliament in 1999. However, Parliament was prorogued that year and, consequently, the proposed amendments to the act were not passed.

From 2004 to 2005, the CFIA conducted a public consultation to verify that stakeholders continue to support any future changes to the PBR Act to reflect the UPOV 1991 provisions. Feedback confirmed that Canadian stakeholders generally support the amendments. Since that time, the CFIA has been working to assess the effect of ratifying UPOV 1991 on stakeholders.

However, the CFIA released a new regulatory renewal plan this past spring that places renewal of PBR legislation in a three- to five-year time frame. "This is not consistent with the government's innovation commitments," said the CSTA in a submission to the Senate Standing Committee on Agriculture and Forestry in March. "We submit that PBR is not a regulatory instrument, and should not be part of a regulatory reform process or schedule. It is an important tool to foster innovation and investment. Amending Canada's plant breeders' rights legislation should be a top priority and it should proceed on its own, expedited time lines." Teresa Falk and Julie McNabb

#### Producer Q & A with CFIA

#### ASG: Would amending the Canadian Plant Breeders' Rights Act to conform to the UPOV 1991 convention affect Canadian farmers?

CFIA: No. The amendments to have Canada's PBR Act conform to UPOV 1991 would not change what farmers are allowed to do with respect to protected plant varieties. The amendments contain new elements which are intended to facilitate a breeder's ability to enforce his/her rights on protected plant varieties.

#### ASG: Would amending Canada's PBR Act to conform to UPOV 1991 eliminate the farmers' privilege?

CFIA: No. The amendments brought forward by UPOV 1991 would make it possible for Canada to explicitly lay out in the PBR Act that farmers would be allowed to save seed produced from a protected plant variety, and use it for replanting on their own farms. This is known as the farmers' privilege" and is currently implicit in the PBR Act.

#### ASG: Would UPOV 1991 create more restrictions for farmers in buying and selling seed?

CFIA: No. Even with Canada's current PBR Act, a farmer is restricted from buying or selling either pedigreed or common seed, or any other type of propagating material of a protected variety, without the permission of the breeder.

#### ASG: Would UPOV 1991 change the responsibility for the burden of proof in infringement cases?

CFIA: No. As with Canada's current PBR Act, in an infringement case it is up to the breeder (the holder of the plant breeders' rights) to provide sufficient evidence to prove that someone has committed acts which constitute an infringement of the breeder's right.

#### ASG: Would UPOV 1991 place greater liability on farmers when harvesting grain from seed of protected varieties?

CFIA: No. If farmers are obtaining seed of a protected variety legitimately, then there will be no increase in liability. In other words, if a farmer purchases seed of a protected variety from someone authorized by the breeder to sell it, the breeder will not be able to exercise his/her rights on the grain. UPOV 1991 provides breeders the opportunity to exercise their rights on the grain only if there was no reasonable opportunity to exercise their rights on the initial seed.

#### ASG: Would UPOV 1991 create more liability for seed cleaners?

CFIA: UPOV 1991 extends the scope of the breeder's right to include the following with respect to a protected variety: importing, exporting, stocking and conditioning reproductive material (such as seed). This means that activities such as seed cleaning (conditioning) of a protected variety will require the permission of the breeder, unless the seed being cleaned is for planting on the grower's own land (that is, farm-saved seed). Where necessary, seed cleaners will need to be aware of which varieties have been granted rights, so that proper authorization has been obtained before cleaning seed of a protected variety.

### Controlling Clubroot

#### Prevention and Management Strategies for Canola Producers

**IF** you live in central Alberta and grow canola, it is critical that you are aware of clubroot disease. Studies show that major infestations of clubroot may result in reductions of canola yield by half, and in some cases, total crop loss.

Clubroot is a soil-borne disease which affects the roots of canola and mustard as well as cruciferous vegetables, such as arugula, broccoli, Brussels sprout, cabbage and cauliflower. Cruciferous weeds, such as stinkweed, shepherd's purse and wild mustard can also serve as hosts.

The origin of clubroot in Alberta is not known; however, it has been a major issue for producers since its introduction. Resting spores can be transported from field to field via contaminated soil on agricultural, petroleum and construction equipment. Clubroot surveys have indicated most new infestations begin near the field access. Other methods of transmission include movement of soil via water or wind and soil attached to seed. What makes clubroot even more serious is the fact that the spores are extremely long-lived with a half-life of four years, and may survive in soil for up to 20 years.

The wet conditions of May and June in 2011 made that year particularly bad for clubroot in Alberta. Despite record seeded acres of canola this year, the wet weather early in the spring and summer will also pose problems for producers, says Murray Hartman, oilseed specialist with Alberta Agriculture and Rural Development.

"Clubroot in Alberta is still in an exponential spread phase with record chances of getting established in 2012. Clubroot is likely going to be a disease in central Alberta from now on—I doubt if it will ever go away," he says.

Since 2003, clubroot has been found in 830 fields in Alberta, with 265 cases in 2011 alone—the largest infestation to date.

#### What to Look For

Roots of affected plants will have a club-like appearance, but this varies depending on growth stage. For example, at the seedling stage, infection can result in wilting, stunting and yellowing by the late rosette to early podding stage. Infection at a later growth stage may not present these symptoms; instead, plants ripen prematurely and seeds shrivel, reducing yield and quality.

#### **Curbing Clubroot**

Control of the disease is being addressed through continued research and regulations. Clubroot was added as a declared pest to the Agricultural Pests Act in 2007. In Alberta, the act



Figure 1. Severe clubroot on canola.



Figure 2. Severe clubroot galls or "clubs" on canola root.



Figure 3. Moderately infected canola root.

is administered through Alberta Agriculture and Food, with enforcement responsibility in the hands of local municipalities. Agriculture fieldmen or pest inspectors have the authority to enter land without permission to collect samples and inspect for pests. It is the ultimate responsibility of the landowner to ensure that management practices are put in place to assist with prevention and management of the disease. The creation of the Clubroot Risk Mitigation Initiative focuses research on pathology, breeding and disease management, utilizing approximately \$4 million of the Growing Forward fund.

#### **Prevention and Management**

Currently there are no seed treatments or fungicides available to control clubroot in canola. Brassica vegetable growers have fungicide products available to them; however, application of these products on canola is too expensive and intensive at this time.

With no disease control available, industry experts agree prevention through appropriate stewardship practices is crucial. According to Hartman, the three most important prevention practices are as follows:

- equipment cleaning between fields (especially from infested
- use of conservation tillage seeding methods to reduce soil erosion from wind and water; and
- growing of resistant varieties when clubroot has been found nearby or in the fields of a farm unit.

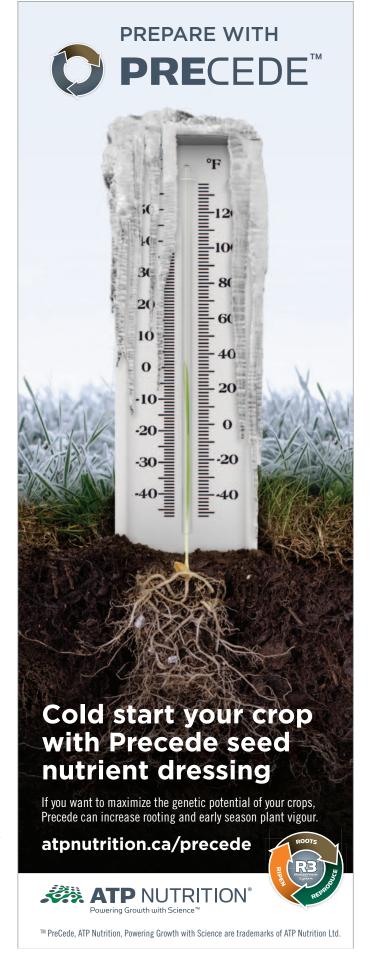
The success of growing resistant varieties also relies on appropriate crop rotations. Alberta Agriculture and Food and the Canola Council of Canada recommend a canola rotation of one in four years. Research conducted in Europe indicates a resistant variety loses its durability over time, thus making appropriate crop rotations key to the continued success of the technology developed to date. Once soil is infected, it is important to remember that management practices are more difficult and expensive to carry out, making prevention critical.

#### **Resistant Varieties Available to Date**

Seed companies are continuing to develop resistant varieties. For example, Pioneer, DuPont, Viterra, Monsanto, Canterra and Bayer CropScience all currently carry clubroot-resistant varieties, most of which have had full registration since 2010. Bayer CropScience recently rolled out a new InVigor hybrid. "InVigor L135C is resistant to all pathotypes of clubroot that have been found in infected areas. This hybrid is best suited to areas where the presence of clubroot has been confirmed," says Blaine Woycheshin, manager of oilseed crops, InVigor Seed for Bayer CropScience.

Chris Anderson, canola breeding lead for Monsanto, expects most companies will continue increasing their supplies of clubroot varieties in anticipation of high demand, considering the potential for more areas to be affected by clubroot. Monsanto currently has three commercially available varieties (73-67, 73-77, 74-47) and is working on the introduction of additional varieties each year.

"Awareness is the number one defense, it is essential for growers to make good choices with rotations and sanitation



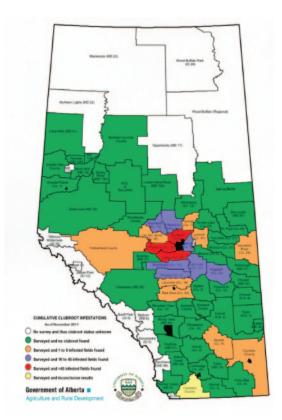


Figure 4. Spread of clubroot disease and main areas of major infestations in 2011. Source: Alberta Agriculture and Rural Development

practices. Some farmers don't believe it will happen to them and it is important for seed companies and researchers to grow awareness of good stewardship practices," says Anderson.

Clubroot resistance could become a built-in feature in all future canola varieties, says Anderson, especially when considering potential outbreaks in other provinces. Over the next few years, Monsanto will be working toward a secondary source of resistance, and hopes to develop a variety with two separate genes, which would be more durable.

Anderson and Woycheshin both stress the need for use of proper stewardship practices in combination with resistant variety usage. However, growing a resistant variety is not a preventative measure on its own. Use of these varieties may reduce spore levels, but will not control spores already present in the soil. In addition, a low number of plants will still present clubroot symptoms. These plants may be non-resistant volunteers from previous crops or off-types that do not possess the gene. The key is to manage the severity of the infestation in order to protect yield and quality of the crop. Therefore, the sanitation practices mentioned above and proper rotation are crucial to ensuring the success of these products.

Hartman says he does not see the need to grow resistant varieties in areas that are far (approximately 50 kilometres) from infestations unless there are energy related projects occurring on their farms that involve drilling rigs and machinery.

Jennifer Ewankiw

#### **Pest Prevention**

The Canola Council of Canada recommends the following management practices for clubroot disease prevention:

- Use long rotations—do not grow canola more than once every four years (e.g. three years out of canola).
- Planting clubroot-resistant varieties on fields with no history of this disease can be useful when clubroot is present nearby.
- Practice good sanitation to restrict the movement of potentially contaminated material.
- Use direct seeding and other soil conservation practices to reduce erosion.
- Scout canola fields regularly and carefully. Identify causes of wilting, stunting, yellowing and premature ripening—do not make assumptions.
- Avoid the use of straw bales and manure from infested or suspicious areas. Clubroot spores have been reported to survive through the digestive tracts of livestock.
- Avoid common untreated seed including canola, cereals and pulses.

#### Once soil is infested:

- Susceptible canola varieties should be avoided or not be seeded on infested land for five to seven years. Resistant varieties should not be seeded until after three years. Research indicates that the pathogen can survive in soil for up to 17 years; therefore, a break of five to seven years from canola will not eliminate the problem, but will keep the problem manageable.
- The extended rotation away from canola must also include diligent control of species susceptible to clubroot, including volunteer canola and weeds in the mustard family.
- Minimize soil erosion with zero or minimal tillage. Since clubroot is a soil-borne disease, the pathogen will move with wind or water-eroded soil.
- There is evidence that liming soils to pH 7 or higher will reduce the longevity of spores in the soil and/or disease severity.

#### WHERE ON THE WEB

For recommended guidelines for field entry activities, visit ARCHIVE.CANOLA-COUNCIL. ORG/CLUBROOT/DOCS/FIELD\_ENTRY\_1.PDF

For a clubroot field entry checklist, visit ARCHIVE.CANOLA-COUNCIL.ORG/ CLUBROOT/DOCS/FIELD\_ENTRY\_2.PDF

For a contact list of Alberta agricultural fieldmen, visit AAAF.AB.CA/IMAGES/STORIES/ AAAF\_MEMBERS\_COMPLETE.PDF



# Where research meets reality.

Farming is large-scale, and at DuPont Pioneer, we think seed trials should reflect real farming. That's why each year we test our seed products in more trials than any other seed company in Western Canada – over 1000 large-scale Proving Ground™ trials of canola, corn and soybeans.

Talk with your local Pioneer Hi-Bred sales rep about Proving Ground trials in your area.

www.pioneer.com

ALBERTA

SASKATCHEWAN

The DuPont Oval Logo is a registered trademark of DuPont.

©, TM, SM Trademarks and service marks licensed to Pioneer Hi-Bred Limited. © 2012, PHL. PR186\_PG Map Ad1 V3\_ASG\_AE

# Clubroot by the Numbers

Since taking hold in canola fields in 2003, this disease has been making its presence felt and impacting farmers' bottom lines.



**6 WEEKS** The time it takes from infection until full-blown symptoms develop in plants

1970s Clubroot was first found on cole vegetables in a few home gardens in Alberta

**830 +** The number of canola fields in which clubroot has been confirmed since 2003

162 The number of new cases found in Barrhead, Leduc, Parkland and Strathcona counties in 2011

**\$2,000,000,000** The value of Alberta's canola industry being threatened by clubroot

**3–5 YEARS** The recommended length of crop rotation between successive crops of canola, mustard and cruciferous vegetables

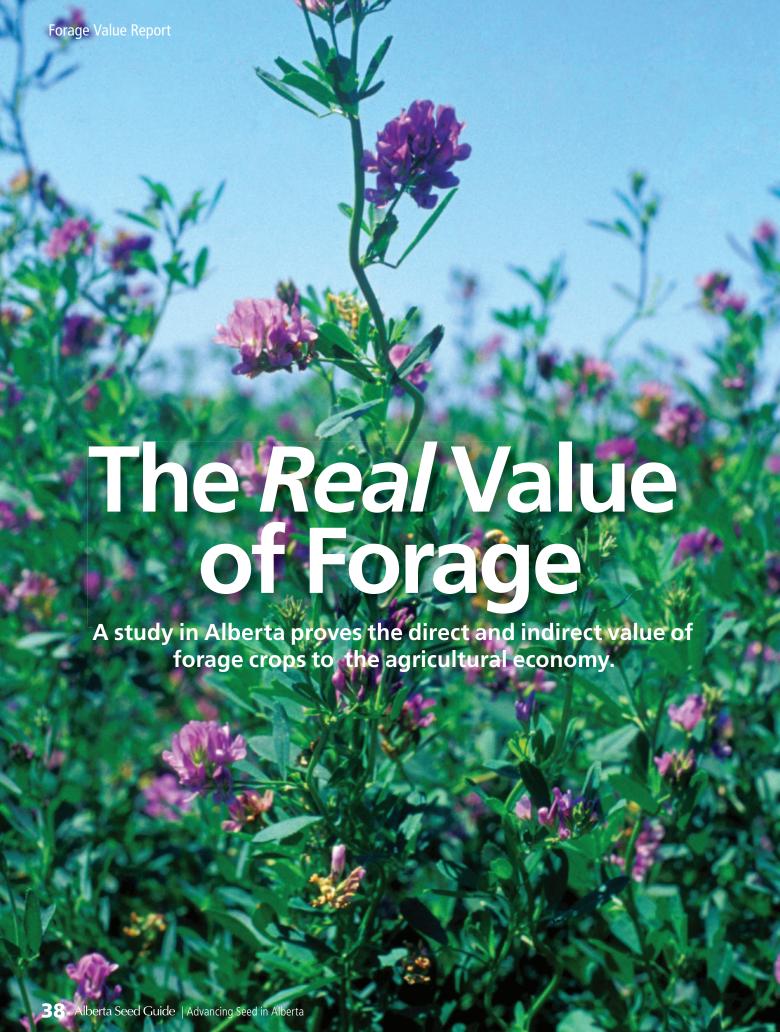
**50** The number of scientists and research technicians working in Western Canada to conduct research on clubroot



The Farm King grain vac is an efficient way to transport grain from bin to truck, bin to bin, storage shed to truck and basic bin cleanup. The high vacuum suction carries the crop on a pillow of air and aids in cleaning out trash particles as the crop goes through the grain vac. The versatility of the grain vac hoses and cleanup wands allow the operator to access hard-to-reach areas for superior cleaning. The optional self-contained hydraulics allow the grain vac to be fully operational without using the hydraulic ports of the tractor.

# **Farm King**





**TRADITIONALLY,** forages have often been viewed as a restorative crop to prevent erosion, fatten cattle or to earn extra cash by selling the hay. It was sometimes viewed as a lowmaintenance crop requiring little or no fertility, weed control or pest management. Those seriously involved in the forage industry have always known better and they are now being supported by a report that proves the direct and indirect value of forage in Alberta to be in the \$2.1- to \$3.8-billion range.

Stephanie Kosinski, a forage specialist with Alberta Agriculture and Rural Development and the author of *The Value* of Alberta's Forage Industry: A Multi-Level Analysis, says the value of the forage industry in Alberta is formidable. Often overlooked, forage production rivals that of the other agricultural commodities produced in the province. Seldom are forage crops viewed as viable cash crops, but their indirect value, as demonstrated in the report, should make the industry pay attention.

"When forage is grown on-farm, the value stays on the farm because it is fed to animals," Kosinski says. "Cattle producers are

#### "The economic value of forage is huge because it starts at the farm gate and goes right through to the packers."

- Terry Scott

good stewards of the land, and they know in the backs of their minds that they are maintaining soil health, protecting water and preserving wildlife habitats. We used a similar report from Saskatchewan as a template, and now that we have a template for Alberta, the potential exists to update it periodically to show what the industry is doing."

According to the report, some 11.6 million hectares (28.6 million acres) of forage crops are grown in Alberta each year. The list includes native range, tame or seeded pasture, forage seed production, alfalfa and alfalfa mixtures, corn for silage, and other tame hay or fodder crops. Tame hay average production (tonnes) is almost twice that of barley grain, even though the average farm value for hay is roughly half that of barley. Hay has an average farm value of close to \$79/tonne and just over \$618,000,000 in production value compared to approximately \$145/tonne and \$716,000,000 respectively for barley. In the final analysis, the total estimated direct and indirect economic value of Alberta's forage crops, according to the report, is \$2.09 to \$3.85 million.

"The economic value of forage is huge because it starts at the farm gate and goes right through to the packers," says Terry

Table 1.1 Forage Acreage in Alberta

Forage Type	Acres	Hectares
Native Range*	16,135,646	6,529,886
Tame/Seeded Pasture	6,137,362	2,483,711
Forage Seed	244,615	98,993
Alfalfa and Alfalfa-mixtures**	3,935,022	1,592,452
All Other Tame Hay and Fodder Crops***	2,060,967	843,047
Corn for Silage	70,411	28,494
Total	28,584,023	11,576,583

Source: Statistics Canada, 2006.

Table 2.15 Estimated Total Direct Economic Value from Forages in Alberta

	Current Value ('000 000 per year)	Potential Value ('000 000 per year)
Forage Seed - domestic	\$23.8	
Forage Seed - export	\$36.0	
Leafcutter Bees	\$16.0	
Hay - domestic	\$620.5	
Hay - export	\$4.0	
Timothy Hay - export	\$78.0	
Processed Alfalfa - domestic	\$3.7	
Processed Alfalfa - export	\$21.0	
Greenfeed	\$91.5	
Silage - corn	\$25.9	
Silage - other annual crops	\$114.9	
Straw - feed	\$77.0	
Pasture/Grazing Land	\$349.8	
Sod	\$30.3	
Ag-Tourism	\$64.7 - \$108.5	
Carbon Sequestration and Offsets		\$14.8
Total	\$1,557.0 - \$1,600.8	\$14.8

Table 3.2 Estimated Total Indirect Economic Value from Forages in Alberta

	Value ('000 000 per year )
Erosion Control	\$2.7 - \$334.9
Water Quality	\$15.5 - \$107.9
Water Retention and Regulation	\$21.6 - \$118.6
Wildlife - consumptive use	\$5.0 - \$315.8
Wildlife - non-consumptive use	\$17.4 - \$621.7
Recreation Fishing	\$0.2 - \$35.9
Pollination Services	\$288.7
Honey Production	\$2.3
Carbon Sequestration	\$184.0 - \$419.9
Total	\$537.4 - \$2,245.7

Table 4.1 Total Estimated Direct and Indirect Economic Value of Alberta's Forages

	Value(Millions)
Direct	\$1,557.0 - \$1,600.8
Indirect	\$537.4 - \$2,245.7
Total	\$2,094.4 - \$3,846.5

<sup>\*</sup> Refers to "Natural Land for Pasture" census category. Includes areas that have not been cultivated and seeded, or drained, irrigated or fertilized. Includes native pasture/hay, rangeland, and grazeable

<sup>\*\*</sup> Includes alfalfa and alfalfa-mixtures used for hay, silage, greenfeed, dehydrated alfalfa, etc

<sup>\*\*\*</sup> Includes all other tame hay and fodder (perennial and annual crops in which the whole plant is used as feed) crops for hay or silage

Scott, Pickseed's director of sales for Western Canada. "For us in the seed industry, we are at the start of the chain. Because forage is often grown on marginal land, that land is now turned into something useful. We see this report as a good news story for the forage industry."

The recently-formed Alberta Forage Industry Network

"Tracking industry values is important because it helps to establish benchmarks and trends, and it identifies areas of opportunity."

- Harley Bell

encouraged the preparation of the report as one of its first initiatives. Don McLennan, AFIN's chair, says the report "helps those involved in the forage industry to recognize their own role in the agricultural economy," and also helps them explain that

role to other agricultural sectors.

"It's worth pointing out that in terms of acres, forage represents about 50 per cent of all production in this province," explains McLennan. "It's also a third of the total value of farm production. Forage is a significant part of the agricultural industry across Canada."

"The Value of Alberta's Forage Industry report consolidates a lot of the information and statistics about the Alberta forage industry," says Harley Bell, account and product manager at BrettYoung in Winnipeg. "Tracking industry values is important because it helps to establish benchmarks and trends, and it identifies areas of opportunity. For example, exports could be viewed as one of the opportunities, and worldwide reduction in forage seed production could increase the value for forage seed. Alberta is well positioned to take advantage of these kinds of opportunities."

Scott points out that the greatest value for forage is often indirect, and the report highlights how valuable that indirect connection is. "The value comes through the cattle and isn't quantified until the animal is sold," he explains. "The report identifies the value of the industry both directly and indirectly and shows how important it is to the economy. Those of us close to the forage industry have always known this, but now we have it in print!"

"The report can be used in a broader context," adds Kosinski.

## THIS GUY JUST PICKED **UP 44MT OF PERFECTLY TREATED WHEAT IN 38 MINUTES!**

Search "G40 Seed Treater" on You Tube and see for yourself. www.seedtreating.com



**Brian Ellis** Phone: 403-556-2846 Fax: 403-556-6604 gseed@telusplanet.net







Designed by LMC's leading team of researchers to provide

The **LMC Aspirator** offers 3 defining characteristics that no

- 2. **HEAVY DUTY,** 14-gauge carbon steel construction that
- **3. CUSTOMIZABLE** configurations that offer you the flexibility you need for your unique processing application

FREE Seed Assessment



"Agriculture and Agri-Food Canada, with The Canadian Forage and Grassland Association, a national forage organization, is now compiling the information from all the provincial forage reports." Nationally, the industry will now have proof of its value, which could translate into more cash for research, or public recognition that this area of agriculture has a farreaching positive impact in terms of environmental and wildlife stewardship—both areas that get a great deal of attention from the general public. In addition, the issue of carbon sequestration can be linked favourably to forage production, another hotbutton topic in the public's eye.

With this first edition of the report, the industry can also see where more information needs to be gathered. "We hope we can gather data more efficiently in the future because this report does show us where there are holes in the collection system," says McLennan. "Our ultimate goal is to get more recognition for the value of this industry to the economy."

"This report definitely shows the rapid decline of forage seed production in the Peace River region," says Bell. He adds that this information is useful for his company and others in terms of providing guidance on where their focus should be directed in order to meet the needs of the industry.

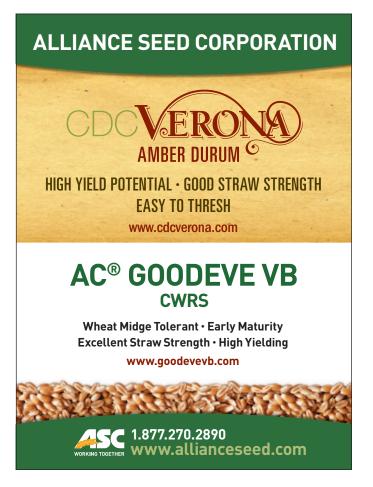
According to Scott, the report also highlights areas where growers could consider adding to their production plans. "Forage seed is a good cash crop for growers," he says. "Don't forget there are opportunities for honey production as well, because bees need clover."

Over all, the industry is pleased with the findings of the report, and is already considering how future versions can be improved, from the type of information that still needs to be gathered to how to highlight the values. The bottom line is that forage crops, even if they do not have the historical significance of wheat or the heroic health benefits of canola, are in fact significantly important to all sectors of society, from human health to environmental protection. Rosalie Tennison

## WHERE ON THE WEB

Where on the Web: To view the full report's findings, visit WWW1.AGRIC.GOV. AB.CA/\$DEPARTMENT/DEPTDOCS.NSF/ALL/ FOR13923/\$FILE/VALUE-ALBERTA-FORAGE. PDF.



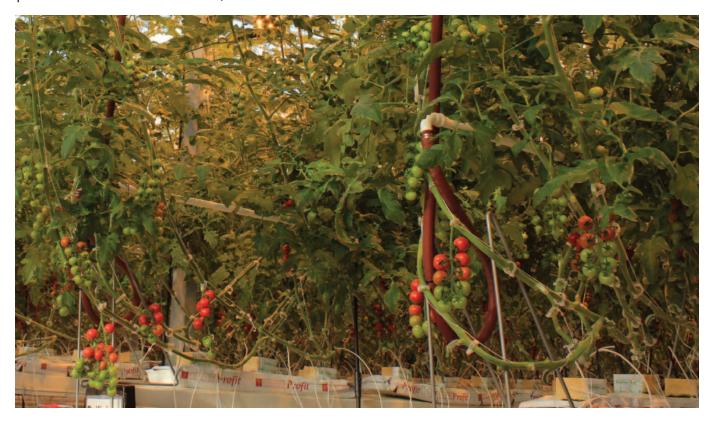


# DOES YOUR YIELD MEASURE UP?

101% of 5440 CANTERRA 1990 106% of L150\* SEE FOR YOURSELF

# Fostering Innovation

The new 60,000-square-foot Greenhouse Research and Production Complex near Brooks, Alta., has been opening more doors than its own to Alberta producers since March 1, 2012.



**THE** state-of-the-art Greenhouse Research and Production Complex at the Crop Diversification Centre South is an investment of more than \$17 million by the Alberta government, and the researchers working there are on the leading edge of crop research, technology and commercialization.

The current research projects at the facility are extensive, ranging from greenhouse tomato and pepper projects to determining whether a specific flax variety can create healthier omega-3 oils and a project on modifying camelina so that its oil may be used as a hydraulic fluid.

Integrated pest management manager Simone Dalpe is more than pleased with the wide variety of agricultural projects that the GRPC is currently undertaking, and she is looking forward to future projects at the facility.

"We're at full production scale in our greenhouses. There are four bays—two poly greenhouses and two glass greenhouses so it's really glass versus poly for comparison research," explains Dalpe. "All four bays contain state-of-the-art drip irrigations with feed-lines for every row of plants, which also helps to control plant nutrient as well as rain water capture capabilities within the facility."

According to Dalpe, it's this state-of-the-art technology that allows for important trials in both peppers and tomatoes within the commercial-size greenhouses located at GRPC. The facility is currently conducting tomato grafting projects where trials use seedlings that graft onto more vigorous rootstocks.

"Once research and data is taken from the trials held on registered vegetable plants, the results are available to the client and the public as well."

#### **Research Greenhouses**

There are 10 research greenhouses equaling over 11,000 square feet along with a level 2 bio-containment isolated unit. "This facility allows researchers to work on genetically modified products that are not yet in the marketplace," explains Dalpe. "The facility helps to keep any pollen contained within a segregated area. We also use the facility for easily spreadable diseases such as clubroot in canola."

The GRPC is not only conducting disinfectant trials for canola clubroot disease but is also working on lentil and soybean trials. The research greenhouses offer artificial and natural light, rolling benches, energy saving curtains and precise environmental controls. "Each of the 10 greenhouses offers a different environment which we can control," explains Dalpe. "This allows us to work on a wide range of research projects at the same time."

The environmental controls at the GRPC incorporate numerous technological advances throughout the complex. Researchers are able to control temperature, humidity, light and fertilization. The



State-of-the-art technology at the GRPC allows important trials to be conducted for both peppers and tomatoes.

system can regulate individual nutrients and, for the first time anywhere, can achieve complete randomization at a scale of up to one-quarter acre.

"We are able to assimilate data to estimate the ability of plants to produce yields under varying conditions," explains Dalpe. "The monitoring system allows us to manage water intake, growth of the plant and weight of the plant."

#### Leading-Edge Technology

The complex also has a new aeroponic system available in one greenhouse bay that allows researchers to grow plants in an air or mist environment without the use of soil. According to Dalpe, there is a current aeroponics seed potato growing project in the works which will use a misting system to transmit nutrients to

the plants. "We also see aeroponics being used for research in other crops such as lettuce in the future," says Dalpe.

The facility also has LEED Silver certification allowing the complex to produce commercial yields with fewer inputs of energy and water.

#### **Future Projects**

Dalpe stresses that while the complex is focused on helping all sectors of Alberta agriculture flourish, they are in contact with other facilities and researchers domestically and internationally. "We hope to continue to expand our research to other crops for both research and breeding projects," says Dalpe.

Current forward-looking projects at the complex include greenhouse best management programs, tomato grafting and propagation, a plant monitoring system, and flower programs. Industrial projects include lettuce and urban green-roof farming programs, combined heat-power, and water and waste heat management. Shannon Schindle

#### **GRPC Technology**

- Total area equals 60,000 square feet with a header house at 8,000 square feet. Research greenhouses have 11,800 square feet with 10 compartments including the level 2 bio-containment facility.
- All compartments are equipped with artificial lighting, a fog system, rolling benches, energy saving curtains, evaporative coolers, insect screens and drip irrigation systems.
- Many trials are ongoing which include biochar, tomato grafting and propagation, crop monitoring and pulse crops trials.
- A new aeroponic system for potato nuclear production has been installed in one research compartment.
- Production and greenhouse trials equal 39,800 square feet, including two glass and two poly greenhouses equipped with heating and cooling systems, hanging gutters, artificial lighting, a fog system, drip irrigation and recirculation systems.



#### Farmers love this.

Prairie wheat growers are turning to midge tolerant wheat for midge control and high yields. And everyone wants this to continue.

That's the point of the Stewardship Agreement. The Agreement limits the use of farm-saved seed to one generation past Certified seed. It's a simple step that keeps the interspersed refuge system at the desired level, preventing a build-up of resistant midge. Protect your yields and grade, and preserve this important tool for years to come. What's not to love about that?

Contact your retailer or visit www.midgetolerantwheat.ca to learn more about these new varieties and how the interspersed refuge system works.



# Seek Treatment

The treatment of JumpStart® on canola, that is.

For the love of canola, order your seed pre-treated with JumpStart to discover quicker emergence, improved vigour and higher yields.

When you start out right, the results are more rewarding.

Do the right thing: seek treatment at your local seed retailer and order your canola pre-treated with JumpStart today.

JumpStart<sup>®</sup>

For the love of canola

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

www.useJumpStart.ca |

1-888-744-5662



JumpStart'

is available on these select canola varieties:

## **InVigor**

InVigor L120 InVigor L159 InVigor L130 InVigor 5440 InVigor L150 InVigor L156H InVigor L154



#### B PIONEER.

45H29 RR 43E02 RR 45H31 RR 43E01 RR 45S54 RR 46H75 CL 46S53 RR 45H73 CL 45S52 RR



V12-1 v1050 v1040 v2045



VT 500 G VR 9560 CL VR 9559 G VR 9557 GS Red River 1861 RR



73-45 RR 73-75 RR 74-44 BL

## BrettYoung.

6060 RR 5525 CL 6040 RR 5535 CL 6050 RR



Canterra 1990



1012 RR

2012 CL

Scan here for the latest information.



# Keeping it Local

The Taber Seed Cleaning Co-op has proven it can rise to any challenge to keep its customers coming back.

**JOE** Hanson, manager of the Taber Seed Cleaning Co-op Association Ltd., knows it's not just the big challenges that make or break a company—it's the small ones, too.

"Every day has different challenges," he says. "You think everything's always going to be the same, but you know it's not. [Customers] have different problems, or something new comes along for you to try and clean. We've cleaned some pretty strange stuff through the years! The first time we cleaned catnip, it's a really small seed, and literally to clean it we had to cover our screens in wedding veil material," laughs Hanson. "But we got it clean! The challenges are nice, they give you something to look forward to. Especially, when it works it's great, and most of the time you can make it work."

The Taber Seed Cleaning Co-op has been in operation since 1957—not a bad record for any business. Since Hanson came on as manager 21 years ago, the plant has been completely rebuilt and several new pieces of equipment have been added. In 1994, the co-op invested in a gravity table. This summer, the company invested in a colour sorter, which Hanson and his staff anticipate will help improve their efficiency even further.

"Every day has different challenges you think everything's always going to be the same, but you know it's not ... We've cleaned some pretty strange stuff through the year."

- Joe Hanson

Technology is key to the plant's success, and it's one of the reasons Hanson is confident the business will continue to stay on top of its game. "Being able to change and adapt as agriculture has, keeps the business successful," he says. "As the farms have become bigger we've put in bigger equipment. We can clean a Super B in two and a half hours. We're cleaning 600 bushels an hour now."

Key to the idea of "keeping up," for the Taber Co-op, is the idea of "keeping it local"—because if the business wants to stay relevant to the community, it needs to stay on top of trends in the industry. "Our future goals are continuing to keep up with



Technology is central to Taber Seed Cleaning Co-op's success, and one of the reasons the business is on top of its game.

technology, to be a leader in the community, to supply what we can and to keep things local as much as we can—if people can clean their grain here rather than going someplace else with newer technology, we make sure we can get that technology," says Hanson.

Any business in rural Alberta faces shared problems, however, and Hanson is candid about the biggest issue that has arisen over the years—staffing. The Taber plant faces tight competition with the oil companies. Even though plant employees have the privilege of working close to home, Hanson says, the higher wages offered by oil companies are a big draw for potential employees. Although they keep plant wages as competitive as possible, finding capable staff can still be difficult.

The efficiency and reliability of the plant's current staff members provides Hanson reason enough to believe in the future success of the business. "It definitely makes it nice when you've got people that you can count on," he says. "Just knowing that you've got competent staff if something comes up, and that things are going to get done, gives us a lot to offer." **Julienne Isaacs** 



November 2012

To our valued customers,

Meridian is pleased to announce our merger with Sakundiak and Behlen, sister companies to Meridian under our parent company WGI Westman Group Inc. Effective January 1, 2013, all Behlen, Sakundiak and Meridian agriculture products will be marketed and sold under the Meridian brand.

Behlen agriculture products offer a diverse product line of galvanized hopper bins and cost effective on-farm building solutions. Sakundiak compliments this product line with large flat bottom galvanized bins and industry leading grain augers.

The Meridian brand has become synonymous with excellence and customer satisfaction, and we continue to grow in both geographic reach as well as product offering. Our commitment to our customers is second to none, hence our pursuit of new technologies and innovations to meet customer needs.

We are pleased to tell you that the Meridian agricultural products now include: smooth-wall hopper bins, galvanized hopper and flat bottom bins, aeration, grain rings, bulk seed tenders, grain augers, auger movers, conveyors, arch-wall and on-farm buildings, fuel tanks and custom built hopper bins.

To better meet your on-farm storage and handling needs, we bring together these innovative products under one strong, trusted brand – MERIDIAN.

Behlen, Sakundiak and Meridian pride themselves on commitment to the highest quality and customer service that is unmatched in the industry; this will continue to be our key mandate. Our customers will continue to receive the same quality product and service they have come to expect from Meridian.

We look forward to serving you in the future and encourage you to visit your local dealer to learn more about Meridian's Storage and Handling products. Or visit our website at www.meridianmfg.com.

Sincerely,

Glenn Friesen Senior Vice President, Sales and Marketing

Meridian Manufacturing Group



**Bulk Seed Tenders** 



# SAKUNDIAK

#### 1947

Sakundiak opens its first plant to manufacture disc harrows in Saskatchewan. The first plant employed only 3 employees building disc harrows. Production soon changed to grain augers, and the first auger manufactured was only 24' long with a 6" diameter



#### 1969

Behlen releases their preengineered steel building systems. Behlen's steel building systems division would soon become the largest in Canada

#### 1974

Sakundiak's auger division moves to a new, larger location outside Regina, Saskatchewan. The added floor space helped meet the demand for increasingly larger augers



#### 1979

Wheatland Bins opens in Lethbridge, Alberta



#### 1965

Friesen launches its first, all-welded, smooth-wall steel hopper bin. The Friesen Bin soon became the preferred alternative to corrugated galvanized storage for seed, feed and fertilizer. Additional manufacturing space was soon added to meet the growing demand

#### 1965

Sakundiak develops an auger with a self leveling. The product is eventually patented for this unique feature



#### 1977

Belen launches their line of flat floor, galvanized grain silos. This style of silo has come to be depended upon by farmers world-wide

#### 1984

Wheatland opens an additional sales office in Camrose, Alberta

For all your storage and handling needs there is a Meridian product built for the job. From fuel to grain to fertilizer to seed we've designed our product lines with you in mind, so they work for your farm. To learn more, visit **www.MeridianMFG.com**.





#### 1989

The Friesen family launches a facility in Storm Lake, lowa. Their innovations with Seed Tenders revolutionized planting in the corn and soybean belt

#### 1998

Meridian's Lethbridge location designs and builds the world's first large scale powder bake oven

#### 2003

WGI and Meridian received Platinum Status as one of Canada's 50 Best Managed Companies

#### 2004

ian WGI completes num the acquisition with the purchase of the lowa facility

#### 2008

Meridian unifies their product line across North America under the Meridian brand bringing together Friesen, Wheatland, Stor King, Grain Max and Friesen USA



#### 2012

Meridian launches their line of belt conveyors to the North American market

#### 1997

Wheatland builds a new and expanded manufacturing plant and sales office in Camrose, Alberta.

#### 1997

Meridian establishes state of the art manufacturing facility in Winkler, Manitoba

#### ---

We: pur ind

#### 2002

Westman Group Inc purchases Meridian industries (Winkler, MB) and Wheatland bins (Camrose and Lethbridge, AB)

#### 2007

All operations come together and become known as Meridian Manufacturing Group

#### 2011

Meridian launches Meridian AirMax aeration



#### 2012

Meridian Manufacturing Group has over 600,000 square feet of production space and over 1000 employees with the merger.

January 2013 Behlen and Sakundiak

merged with and sold

Agricultural products are

under the Meridian Brand





We are truly grateful to you for choosing Meridian products for your storage and handling needs.

On behalf of the 900 staff at Meridian, we hope that you have benefited from the enhanced quality of our products and services. We will continue our efforts to meet your requirements and exceed expectations in the future.



Storage and Handling | Experience the **Advantages** 

#### The Alberta Seed Guide New Varieties List is your heads-up to what will soon be available in a field near you.

Some varieties may only be available in limited supply, so make sure you call your local representative for more information. The companies that were asked to supply information are responsible for any claims contained within the list. Always remember that variety performance may vary from region to region. Visit seed.ab.ca for company links.

#### **Abbreviations** PEST RESISTANCE:

R - Resistant

MR - Moderately Resistant

MS - Moderately Susceptible S - Susceptible

#### TRAITS:

Bt - ECB Resistant HXI - Herculex I

YGCB - YieldGard Corn Borer CL - Clearfield Production System **GENRR2Y-Genuity RR2 Yield** 

GT - Glyphosate Tolerant LL - Liberty Link

RR - Roundup Ready

RR2 - Roundup Ready 2

RR2Y - Roundup Ready 2 Yield PESTS:

CB - Corn Borer

RW - Corn Rootworm

ECB - European Corn Borer

FHB - Fusarium Head Blight PRR - Phytophthora Root Rot

SCN - Soybean Cyst Nematode

OTHER:

HU - Heat Units OP - Open Pollinated

SSZ - Short Season Zone MSZ - Mid Season Zone

LSZ - Long Season Zone

#### WHEAT:

CPS - Canada Prairie Spring CWAD - Canada Western

Amber Durum

CWRS - Canada Western Red Spring

# Company

Ph: 306-569-4411 Viterra.ca

Variety VR Total Alfalfa

**Crop Type** 

Maturity

Yield Standability

**Pest Resistance** 

**Specialty Features** A very hardy winter variety that can still yield with Elite 3-cut lines. Traffic tested.

Very good response to multi-cutmanagement systems (3 or 4 cut).

Strong disease resistance. Superior forage quality.

Company
<i>Se</i> <b>C</b> an
Canada's Seed Partner

Company

VITERRA

Ph: (800) 665-7333 SeCan.com

Variety

2012CL

2016CI

74-44 BL

napus

Hybrid

napus

Hybrid

CĹ

Variety **Crop Type CDC** Carter

2-Row Hulless

**Crop Type** 

Equal to AC Metcalfe

Maturity

Maturity

97% of AC Metcalfe

Vield

Yield

Good

Standability

Standability

I - FHB, stem rust R - Smut S - Scald

Pest Resistance

Pest Resistance

**Specialty Features** 

**Specialty Features** 

Smut resistant hulless barley. Excellent threshability and a solid disease package.

Makes a great fit for food or feed.

Bayer CropScience	Bayer CropScience Ph: (888) 283-6847 BayerCropScience.ca	InVigor Health L156H	<i>napus</i> Hybrid GM	Equal to 46A65 and Q2	138% of 46A65 and Q2	Excellent	R - Blackleg	InVigor L156H has all the yield potential of an "L Series" combined with a simple contract premium offering growers greater returns.
BrettYoung.	BrettYoung Ph: (800) 665-5015 BrettYoung.ca	6050 RR	napus GM RR	-1.0 days of 46A65 and Q2	124% of 46A65 and Q2	Very Good	R - Blackleg R - Fusarium Wilt	A new mid to early maturity hybrid. Excellent yield performance across the three canola production zones. It particularly well suited to the mid and short canola zones.
		6056 CR	<i>napus</i> GM RR	+1.8 days of 46A65 and Q2	134% of 46A65 and Q2	Excellent	R - Blackleg R - Fusarium Wilt R - Clubroot	New clubroot resistant hybrid with very good yield potential. Widely adapted with excellent standability for very good harvest.
CANTERRA SEEDS	Canterra Seeds Ph: (866) 744-4321 Canterra.com	CANTERRA 1999	<i>napus</i> Hybrid GM	-0.8 days of 45H29	103% of 45H29	Very Good	R - Blackleg R - Fusarium Wilt	Available in limited quantities. The Great One! Ranked #1 in Yield, Standability and Oil Content in 2011 FACT
<u>Nexera</u>	Dow AgroSciences Ph: (800) 667-3852 HealthierProfits.ca	1012RR	<i>napus</i> Hybrid RR	+4 days of 72-65 RR	101% of 72-65RR		R - Blackleg	Outstanding yield potential. Very good lodging resistance for easier swathing. \$48 more returns per acre than 72-65RR.
		1016CL	<i>napus</i> Hybrid BB	+2 days of 72-65 RR	96% of 72-65RR		R - Blackleg	Outstanding yield potential.  Very good lodging resistance for easier swathing. \$20 more returns per acre than 72-65BB



ě

Monsanto Canada Inc Ph: (800) 667-4944 DEKALB.ca

CĹ napus -1 days of 107% of Excellent Hybrid 45H29 45H29 GM

100% of

45P70

98% of

45P70

+2 days of

45P70

+1 day of

45P70

R - Blackleg, Multigenic Resistance R - Fusarium Wilt

MR - Blackleg

R - Blackleg

\$26 more returns per acre than 45P70 DEKALB 74-44 BL is the newest broad acre hybrid to be introduced to the DEKALB line up. It offers outstanding yield potential. Multi-genic blackleg resistance to pathogenic groups 2, 3, 4 and T.

Very good lodging resistance for easier swathing.

Very good lodging resistance for easier swathing.

\$39 more returns per acre than 45P70

Outstanding yield potential

Outstanding yield potential.

The excellent emergence and vigour of this hybrid combined with its ease of swathing make it an excellent option on farm.

Company		Variety	Crop Type	Maturity	Yield	Standability	Pest Resistance	Specialty Features
DEKALB	Monsanto Canada Inc Ph: (800) 667-4944 DEKALB.ca	74-47 CR	<i>napus</i> Hybrid GM	0.5 days of 45H29	103% of 45H29	Excellent	R - Blackleg R - Fusarium Wilt R - Clubroot	74-47 CR is the DEKALB brand's 2nd generation clubroot resistant hybrid for those growers at risk. It protects from pathotypes 2, 3, 5, 6, and 8. This hybrid provides good early season vigour. Outstanding standability and high yield potential.
& PIONEER.	Pioneer Hi-Bred Ltd. Ph: (800) 265-9435 Pioneer.com	45S54	<i>napus</i> Hybrid RR, SCL	Similar to 45H29	126% of 46A65/Q2		R -Blackleg R - Fusarium Wilt MR - Sclerotinia	New hybrid with built-in resistance to sclerotinia - Pioneer Protector Sclerotinia resistance trait. R for blackleg; very good standability. Available exclusively from Pioneer Hi-Bred sales reps.
		43E02	<i>napus</i> Hybrid RR	-0.8 days of 43E01	117% of 46A65 / Q2		MR -Blackleg R - Fusarium Wilt	New early hybrid with good performance. MR for blackleg; very good early growth. Available exclusively from Pioneer Hi-Bred sales reps.
		D3154S	napus Hybrid RR, SCL	+1 day of 45H29	126% of 46A65/Q2		R -Blackleg R - Fusarium Wilt MR - Sclerotinia	New hybrid with built-in resistance to sclerotinia - Pioneer Protector Sclerotinia resistance trait. R for blackleg; very good standability. Available exclusively from DuPont through select Independent and Co-Op retailers.
COF	RN	8 6			£, (	DE		
Company		Variety	Crop Type	Maturity	Yield	Standability	Pest Resistance	Specialty Features
BrettYoung	BrettYoung Ph: (800) 665-5015 BrettYoung.ca	Venza R	Silage Hybrid GM	2500 HU	Excellent			A new high yielding silage hybrid for the higher heat unit product areas.  Venza R has excellent early season development and produces a tall crop with excellent silage quality.
		E44A02 R	Feed Hybrid GM	2150 HU	Excellent			E44A02 provides fast emergence and early maturity paired with drydown and bushel weight. It provides the best corn borer protection without the need for planting a separate refuge.
		E50G29 R	Feed Hybrid GM	2400 HU	Excellent			E50G29R combines fast emergence, early drydown and yield for the major grain production areas with a complete pest resistant package. E50G29R requires 20% refuge.

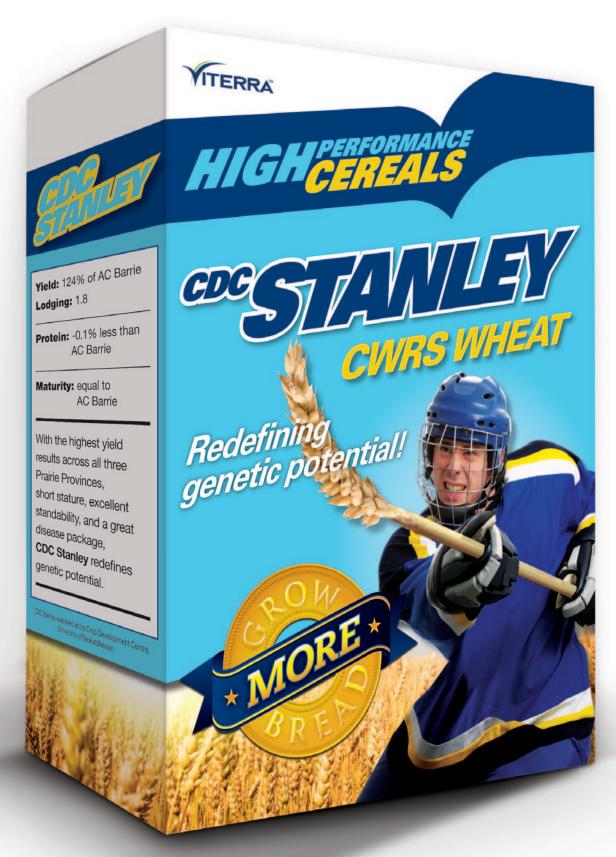


#### **Trait Stewardship Responsibilities Notice to Farmers**

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

#### ALWAYS READ AND FOLLOW PESTICIDE LABEL **DIRECTIONS.** Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup® brand agricultural herbicides will kill crops that are not tolerant to glyphosate. Genuity and Design®, Genuity Icons, Genuity®, Roundup Ready®, and Roundup® are trademarks of Monsanto Technology LLC. Used under license.

## Part of your well-balanced farm business.





Company		Variety	Crop Type	Maturity	Yield	Standability	Pest Resistance	Specialty Features							
BrettYoung	BrettYoung Ph: (800) 665-5015 BrettYoung.ca	Sorento R	Silage Hybrid GM	2300 HU	Excellent			Sorento R delivers superior yields in a package that includes corn borer protection and resistance to glyphosate and Liberty. For many silage and grazing areas of Western Canada.							
Hyland Seeds	Hyland Seeds Ph: (800) 265-7403 HylandSeeds.com	3093	Feed/Silage Hybrid GM	2350 HU	15-17 tons per acre	Very Good		Very good early vigour. Broadly adapted and delivers consistent performance across variable environments.							
		4093	Feed/Silage Hybrid GM	2350 HU	15-17 tons per acre	Very Good	R - ECB, CRW MR - NCLB	Excellent dual purpose hybrid. Responds to aggressive plant densities in suitable environments.							
				8	8105	Feed/Silage Hybrid GM	2400 HU	15-17 tons per acre	Very Good	R - ECB, CRW, WBC MR - NCLB	Consistent ear development with good ear length. Very good grain quality with fast dry down. Strong roots, very good fall health and late season plant integrity.				
		8166	Feed/Silage Hybrid GM	2525 HU	17-18 tons per acre	Excellent	R - ECB, CRW, WBC MR - Eyespot, Goss' Wilt	High yield potential in productive environments, good ear flex adapts well to variable plant densities. Above average root strength tolerates poorly drained soils, early grain setup with fast dry down. Good disease and stress tolerance.							
		HL 3085	Feed/Silage Hybrid GM	2275 HU	15-17 tons per acre	Very Good		Great late season eye appeal with good standability and stalk quality.  Excellent ear consistency with an attractive grain that delivers good test weight.							
									HLS 3120	Feed/Silage Hybrid GM	2450-2650 HU	17-18 tons per acre	Very Good		Medium plant with full canopy, excellent digestibility and starch scores.  Recommended for silage, earlage and high moisture corn use.  Glyphosate tolerant.
		HLS 3177	Feed/Silage Hybrid GM	2500 - 2800 HU	17-18 tons per acre	Excellent		Medium-tall plant with full canopy, good tonnage and quality, consistent ear fill and excellent husk coverage. Recommended for silage, earlage and high moisture corn use. Will respond to more increased plant populations.							



#### **SEED TESTING**

Cereals, Oil Seeds, and Pulse Crops

#### **GRAIN TESTING**

Protein, Falling Number, Malt Barley

#### **FORAGE TESTING**

**Animal Feed Quality** 

#### **AUTHORIZED CSI ASSESSOR**

Approved Conditioners, Bulk Storages, Seed Laboratories

#### ISO SYSTEMS IMPLEMENTATION

ISO 9000 & ISO 14000

For details visit our website at www.parklandlabs.com

**Cream of the Crop!** 

No matter where you farm, no matter what you grow, we have all your seed requirements. Visit your local CPS retail store and profit from our experience.

#### PLUS: earn 5%

on money you deposit in your PrePay Program account.



Company	Variety	Crop Type	Crop Type	Yield	Standability	Pest Resistance	Specialty Features
Monsanto Canada Inc Ph: (800) 667-4944 DEKALB.ca	DKC26-28RIB	Grain GM	2150 HU	Excellent			Excellent top-end yield potential. Excellent staygreen and plant health.
	DKC27-55RIB	Grain GM	2200 HU	Excellent			Excellent test weight with very good drydown. Excellent yield potential. Very good plant health and harvest appearance.
	DKC28-79RIB	Grain GM	2225 HU	Excellent			Very good top-end yield potential. Excellent dry down and intactness. Dual purpose grain and silage product.
	DKC30-07RIB	Grain GM	2325 HU	Excellent			Medium-tall hybrid with excellent harvest appearance. Exellent yield potential.
	DKC31-07	Grain GM	2375 HU	Excellent			This hybrid travels soil types well with excellent seedling vigour and late season intactness.  Very good stalk and root strength, with exceptional yield.  Well suited to early planting at medium high to high populations.
	DKC31-10RIB	Grain GM	2400 HU	Excellent			This hybrid travels soil types well with excellent seedling vigour and late season intactness.  Very good stalk and root strength, with exceptional yield.  Well suited to early planting at medium high to high populations.
Pioneer Hi-Bred Ltd. Ph: (800) 265-9435 Pioneer.com	P8193AM	Feed/Silage Hybrid GM	2400 HU	Excellent		R - ECB	Early hybrid with Optimum AcreMax single-bag integrated refuge. Good root and stalk strength. Solid agronomic package.
	P8210HR	Feed/Silage Hybrid GM	2500 HU	Excellent		R - ECB	Above average root and stalk strength. Excellent drought tolerance. Solid agronomics.
	P8651HR	Feed/Silage Hybrid GM	2550 HU	Excellent		R - ECB	Taller plant with excellent performance. Very good silage characteristics. Above average stalk strength.
PRIDE Seeds Ph: (800) 265-5280 PRIDE SEEDS PrideSeed.com	A4023BTRR	Feed/Silage Hybrid GM	2125 HU	Excellent		R - ECB	Very early flowering and finish, superior harvest intactness, excellent disease tolerance. Full dent grain with very good grain quality. Very suitable for early planting, cold soils and late harvest timing.
	A4176BTRR	Feed/Silage Hybrid GM	2150 HU	Excellent		R - ECB	Very high yield performance in very early zones, very early flowering and physiological maturity. Flintdent grain on a stout girthy ear with white cob. Outstanding emergence and spring vigour. Very suitable for early planting and cold soils.
	A4240RR	Feed/Silage Hybrid GM	2200 HU	Excellent			Excellent dual purpose choice for grain and silage. Very good early silage yield and quality. Tall hybrid that will work very well in all soil types. Very suitable for early planting and cold soils with fast emergence and vigour.
	A4705HMRR	Silage Hybrid GM	2175-2350 HU	Excellent			Unique stable genetics for the silage and high moisture corn grower with a wide harvest window. Unbeatable output year after year. Outstanding emergence and spring vigour. Stout girthy flint grain ear size and white cob and good starch levels providing excellent quality silage.
	A4914G2 RIB	Feed/Silage GM	2350 HU	Excellent		R - ECB R - Corn Earworm R - Fall Armyworm	New Genuity® VT Double PRO RIB Complete™ - 5% refuge in the bag. High yielding with excellent test weight. Attractive fall appearance, intactness and health. Solid agronomic package. Excellent drought tolerance.
	AS1046 EDF	Silage Hybrid Conven- tional	2200 - 2375 HU	Excellent			Big plant with a stout girthy flint grain ear and white cob. Huge potential in good growing conditions for the silage and high moisture grower. Effective digestible fibre hybrid with excellent silage characteristics and yield per acre.  Slow dry down from 30%, preserving feed quality if harvest is delayed. Outstanding emergence and visually attractive.

	OAT	5/-					MY		
	Company		Variety	Crop Type	Maturity	Yield	Standability	Pest Resistance	Specialty Features
	CANTERRA SEEDS	Canterra Seeds Ph: (866) 744-4321 Canterra.com	CDC Seabiscuit	Oat Spring	Equal to AC Morgan	108% of CDC Dancer	Good	MR - Smut MS - Stem Rust S - Crown Rust, BYDV	High grain and milling yield. Very plump kernels.
	Se@an Canada's Seed Partner	SeCan Ph: (800) 665-7333 SeCan.com	AC Bradley	White Hulled Milling	Equal to Ronald	106% of Ronald	Very Good	MS - Stem Rust, Crown Rust	High yielding, early maturing, white hulled variety. Currently under milling evaluation. Provides short strong straw and a reasonable disease package.
	SOY	BEAN	Variety	Crop Type	Maturity	Yield	Standability	Pest Resistance	Specialty Features
-	Company					ilelu	•		. ,
	Hyland Secrets	Hyland Seeds Ph: (800) 265-7403 HylandSeeds.com	HS 006RYS24	Black GM	2450 HU		Very Good	R - SCN, PRR MR - White Mould	Moves north well. Good plant standability. Good IDC tolerance.
			DAS007R3	Brown RR2Y	2475 HU		Very Good	MR - PRR	Early variety with excellent yield potential. Taller plant type with excellent standability. Good IDC tolerance.
	®. PIONEER.	Pioneer Hi-Bred Ltd. Ph: (800) 265-9435 Pioneer.com	90Y01	Tan GM	2500 HU	Excellent	Very Good	R - Phytophthora	Multi-race Phytophthora resistance via the Rps1k gene. New variety with excellent field emergence. Very good harvest standability.



<sup>\*</sup>Monsanto Field Scale trials conducted in 2010 and 2011. Always follow grain marketing and all other stewardship practices and pesticide label directions. Details of these requirements can be found in the Trait Stewardship Responsibilities Notice to Farmers printed in this publication. InVigor® and LibertyLink® are registered trademarks of Bayer. © 2012 Monsanto Canada, Inc.

# Reduce sclerotinia losses in canola with Pioneer Protector® hybrids



Sclerotinia disease infection on canola stems in a non-resistant hybrid (left) versus Pioneer® brand 45S52 (RR) with the Pioneer Protector Sclerotinia Resistance trait (right). 2012; Nanton, Alberta.



Sclerotinia can be a costly disease for canola growers. Lost revenues exceeded an estimated \$600 million in 2010, in a year when conditions were favourable for

development of the disease. While the numbers are not all tallied yet, for many areas of the Prairies incidence of sclerotinia in 2012 was higher than we have seen in quite a few years.

#### Management approach

- 1. Crop rotation
- 2. Final plant population of 6-10 plants per square foot
- 3. Sclerotinia resistant hybrids
- 4. Foliar fungicide

"In 2012 sclerotinia incidence was worse than 2010 and far worse than 2011. Southeast Saskatchewan experienced much higher incidence than the south-central parts of the province. Seeding date also had a huge effect on levels of incidence."

Dave Vanthuyne, DuPont Pioneer agronomist for central and southern Saskatchewan

Pioneer® brand hybrids with the Pioneer Protector® Sclerotinia Resistance trait

**45S54 45S52 46S53** 





Exclusively available from our Pioneer Hi-Bred sales representative



2012 Proving Ground™ trial in Simpson, Saskatchewan shows Pioneer® brand 45S54 (RR) with the Pioneer Protector Sclerotinia Resistance trait producing healthier stands of canola under significant sclerotinia pressure.

"As far as incidence and severity, 2012 has been the worst I have seen for sclerotinia since 2007. I saw ranges of incidence from less than 5% to as high as 60% in fields. Some of the fields were sprayed and still had levels in the 30% range."

Doug Moisey, DuPont Pioneer agronomist for central and northern Alberta

#### Sclerotinia resistant hybrids

DuPont Pioneer, a leader in canola genetics, provides the first and only canola hybrids with built-in sclerotinia resistance on the market. The Pioneer Protector® Sclerotinia Resistance trait is built right into the seed so the risk of sclerotinia infection is greatly reduced.

The Pioneer Protector® Sclerotinia Resistance trait provides these benefits to growers:

#### Reduction in incidence

Greater than 50% reduction in sclerotinia incidence.\*

#### Peace of mind

Increased flexibility and insurance when timing fungicide applications.

#### Convenience

Sclerotinia protection is planted with the seed.

#### Season-long control

An in-plant trait that provides coverage regardless of weather patterns throughout the entire growing season.

#### www.pioneer.com

Field results show that Pioneer Protector® Sclerotinia resistance can reduce the incidence of sclerotinia! in a canola crop by over 50%. Individual results may vary. Depending on environmental and agronomic conditions, growers planting Pioneer Protector Sclerotinia resistant hybrids may still require a fungicide application to manage sclerotinia in their crop.

Roundup Ready® is a registered trademark used under license from Monsanto Company.

The DuPont Oval Logo is a registered trademark of DuPont.

SM Trademarks and service marks licensed to Pioneer Hi-Bred Limited. © 2012, PHL PR383\_TechTorial\_ASG\_AE



								_
SeCan Canada's Seed Partner	SeCan Ph: (800) 665-7333 SeCan.com	Bishop R2	GM RR2Y	2450 HU	100% of NSC Por- tage RR	Very Good	S - IDC	High yield protential with excellent lodging resistance. Early maturity.
		Beurling R2	GM RR2Y	2500 HU	102% of NSC Por- tage RR	Very Good	MR - IDC	High yield potential with excellent lodging resistance. Performs well under higher moisture conditions.
		-	-	1 100	The same	100	100	

SUN	IFLOWE	ER			10000000000000000000000000000000000000			
Company		Variety	Crop Type	Maturity	Yield	Standability	Pest Resistance	Specialty Features
& PIONEER.	Pioneer Hi-Bred Ltd. Ph: (800) 265-9435 Pioneer.com	P63ME70	Sunflower Spring ExpressSun	Medium		Very Good		Outstanding yield potential with solid agronomics. Built-in tolerance to Express herbicide. NuSun, mid-oleic hybrid.
TIM	OTHY							
Company		Variety	Crop Type	Maturity	Yield	Standability	Pest Resistance	Specialty Features
VITERRA	Viterra Ph: 306-569-4411 Viterra.ca	Crest	Grass					New medium late maturing timothy (similar to Climax), selected for spring vigour and plant health. Very good forage quality. Good summer regrowth after cutting

# Why every Alberta farmer should bookmark www.seed.ab.ca...

#### Seed.ab.ca has farmer-focused information including:

- breaking news feeds
- user-friendly databases to reach growers and cleaning plants in your area
- comprehensive disease information as it affects your crops
- news and events calendar
- access to the magazine's content online

Alberta Seed Guide







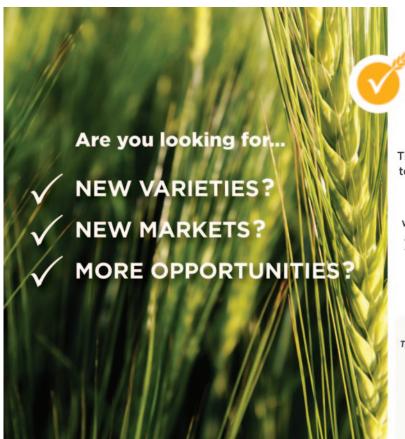
# IT'S ALL ABOUT THE SEED

You wouldn't consider using uncertain pedigree on multiplying your herd, so why would you use common seed as the basis for your crop?

Great producers recognize the value of good genetics when it comes to producing superior cattle; it's the same for a superior crop. What you put in is what you get out. Choose the best genetics to start your next crop.

**CHOOSE CERTIFIED BLUE TAG SEED.** 





wheat & barley check-off DELIVERING NEW VARIETIES & MARKET OPPORTUNITIES TO YOUR FARM

#### Support the Wheat & Barley Check-Off.

The check-off enables Western Canada's farmers to continue funding variety research and market development in the open market.

This voluntary check-off of \$0.48/tonne of wheat and \$0.56/tonne of barley will be shown as a Deduction of Levy on your Cash Purchase Ticket upon grain delivery at a Canadian Grain Commission licensed company.

wheat barley check off.com

These funds will be delivered to three important groups that work together to support your farm's future. Visit their websites to learn more:







westerngrains.com

The state of the s	WHEAT								
	Company		Variety	Crop Type	Maturity	Yield	Standability	Pest Resistance	Specialty Features
	FPGenetics.	FP Genetics Ph: (877) 791-1045 FPGenetics.ca	AC Transcend	CWAD Spring Milling Semolina	+2 days of AC Strong- field	101% of AC Strongfield	Fair	R - Stem Rust, Leaf Rust, Common Bunt, Leaf Spot MS - FHB	Best overall disease package and superior agronomics. High test weight and protein with low Cadmium.
	* MASTIN SEEDS *	Mastin Seeds Ph: (403) 556-2609 MastinSeeds.com	Pintail	Winter Feed	-1 day of Radiant	104% of all checks	Very Good	R - Stripe Rust MR - Leaf Spot, Pow- dery Mildew, Stem and Leaf Rust S - FHB	Very good winter hardiness. Awnless spike. High yield.
	SeCan Canada's Seed Partner	SeCan Ph: (800) 665-7333 SeCan.com	AC Whitehawk	CWHWS Spring Milling	-2 days of AC Barrie	103% of AC Barrie	Good	I - Stem Rust R - Leaf Rust MS - FHB	Improved quality hard white wheat with very early maturity. Identity preserved contracts required through Richardson Pioneer.
			AC Vesper VB	CWRS Spring - Midge Tolerant Milling	Equal to AC Barrie	120% of AC Barrie	Good	R - Wheat Midge, MR - Stem Rust R - Leaf Rust I - FHB, HS - Stripe Rust	Second generation midge tolerant wheat provides high yield potential. Large seed and high test weight. Ranked number one for yield in Saskatchewan and Manitoba seed guides.
	VITERRA	Viterra Ph: (306) 569-4411 Viterra.ca	5604HR CL	CWRS Spring Milling	-1.6 days of AC Barrie	109% of AC Barrie	Excellent	R - Stem Rust, Leaf Rust MS - Leaf Spot MR - FHB	5604HR CL offers high yield potential, short stature, great standability, and excellent disease package. Clearfield tolerance. Wheat producers can expect an early harvest, excellent yield and top grades.
	syngenta	Syngenta Canada Ph: 877-964-3682 SyngentaFarm.ca	SY985	Spring	-2 days of 5700PR	102% of 5700PR	Good	R - Stem Rust, Leaf Rust MS - Leaf Spot, FHB R - Loose smut	Good yield potential (higher than checks), short straw, heavier kernels, higher protein relative to the checks.  This cultivar has the desirable quality profile carried by the 5700 series controls.





# IT'S PAYDAY. **DID YOUR CROPS EAT THEIR FILL?**



Or go to SmartNitrogen.com





A look at the many end-user-focused recommendations from the 2012 Variety Recommending meetings.

**EACH** February, members of the Prairie Grain Development Committee and the Western Canada Canola/Rapeseed Recommending Committee meet to approve registration of new crop varieties developed by the federal government and private breeders. These newly-approved varieties give Canadian farmers more options when they make seeding decisions in the spring.

#### **Disease Concerns Drive Canola Development**

A total of 32 Roundup Ready, 16 Liberty Link and nine Clearfield canola cultivars were approved for full two-year registration by the WCC/RRC members, with seven Roundup Ready cultivars receiving interim recommendation. Thirteen of these were varieties with lower amounts of linoleic acid (Omega-6) developed by Dow AgroSciences Canada Inc. (8), Cargill Specialty Canola Oils (3) and Bayer CropScience (2).

Sclerotinia and clubroot remain top concerns for WCC/RCC members. A report was given on the outcome of the sclerotinia protocol evaluation program conducted in 2011, which indicated that there were significant differences in terms of resistance, and refinement and standardization of protocols is required. Committee members advocated for additional funding to support an additional year of testing.

Moreover, a requirement for clubroot testing at all public and private co-op sites was implemented—the site must test negative for the presence of clubroot before trials can be planted on the site. Further, it was noted that clubroot sanitation guidelines should be distributed to researchers and should be incorporated into the procedures once the guidelines have been finalized.

#### Improved End-Use Quality in Wheat

The Prairie Recommending Committee for Wheat, Rye and Triticale considered 26 candidates for registration recommendation. The 19 candidates include the following:

- four Canada Western Red Spring varieties;
- three Canada Western Hard White Wheat varieties;
- two Canada Prairie Spring Red varieties;
- four Canada Western Amber Durum varieties;
- one Canada Western Soft White Spring variety;
- three Canada Western General Purpose varieties—two spring and one winter;
- one Canada Western Red Winter milling cultivar; and
- one spring spelt line.

Highlights for the recommended cultivars included increased yield potential, improved quality, early maturity, improved disease resistance and resistance to the orange wheat blossom midge. The three CWHWS cultivars recommended represent

**Members of the Prairie Recommending Committee for** Oilseeds voted in support of three flax varieties: FP 2308, FP 2314 and FP 2325. All three varieties have strong agronomic packages.

significant improvements in end-use quality over varieties that are currently grown. One CWAD cultivar, DT818, is solidstemmed, the first durum wheat cultivar expressing this trait to be recommended. The solid-stemmed trait confers tolerance to wheat stem sawfly infestation, and is the first such durum variety to be registered since the release of Golden Ball. GP080, a spring CWGP, expresses a high level of resistance to Fusarium head blight. Meanwhile, PIG98027 is high in anti-oxidant (anthocyanin) content, and is purple-seeded.

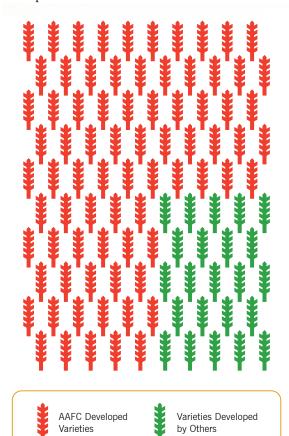
#### **Focus on Oat and Barley Growers and End-Users**

One six-row general purpose and two two-row malting barley cultivars, as well as three milling oat varieties, were accepted by the Prairie Recommending Committee for Oats and Barley. The three oat varieties focus simultaneously on the producer and the end-user. OT3054 is a milling oat with very good yield potential,

#### Variety Development

During the last five years, more than 75 per cent of the wheat planted in Western Canada was comprised of varieties developed by Agriculture and Agri-Food Canada.

The graphic shows a field of stylized wheat heads in red and green. The red wheat heads represent the varieties developed by AAFC, and the green ones represent those developed by others. The red wheat heads cover 75 per cent of the field: this provides a more dramatic graphic representation of the importance of AAFC in the development of wheat varieties.



Data Source: Canadian Wheat Board 2006 to 2010 Variety Surveys.

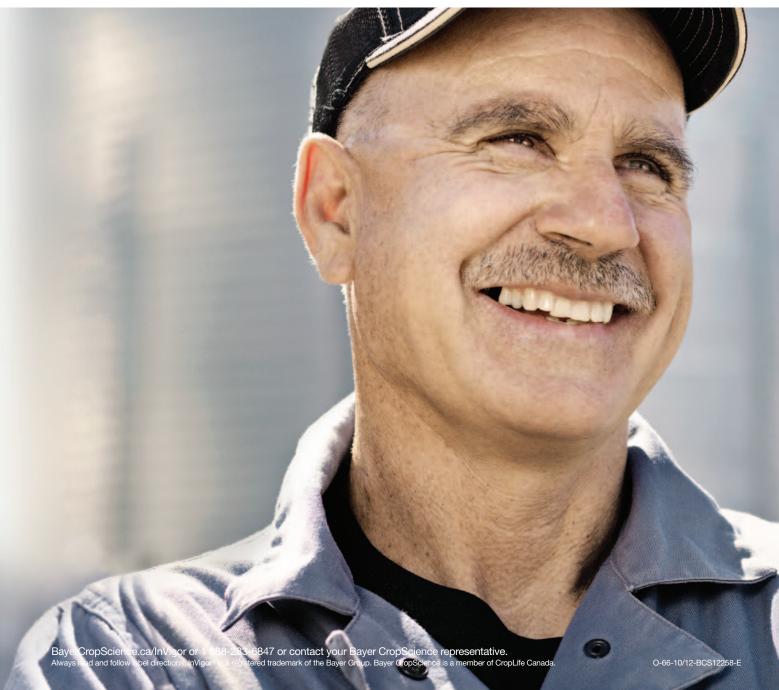


Highlights of the recommended cultivars include increased yield potential, improved quality, early maturity, improved disease resistance and resistance to the orange wheat blossom midge.

excellent milling yield, high thousand kernel weight and plumps, low thins, acceptable test weight and crown rust resistance similar to CDC Dancer. OT3056 is a milling oat with good yield potential, good milling yield, good straw strength, high thousand kernel weight and plumps, low thins, acceptable test weight and elevated beta-glucan content over CDC Dancer. Meanwhile, OT4001R is a high-yielding, shorter stature white hulled milling oat with excellent straw strength and above-average beta-glucan levels, making it of interest to both growers and end-users.

#### **Pulses and Special Crops Take Off**

Nineteen candidate lines were considered and approved for registration by members of the Pulses and Special Crops Recommending Committee. Eleven recommended field pea varieties include nine yellow cotyledon and two green. Highlights



of the pea lines include improved yield potential, resistance to powdery mildew, large seed size, longer vine length and improved lodging resistance.

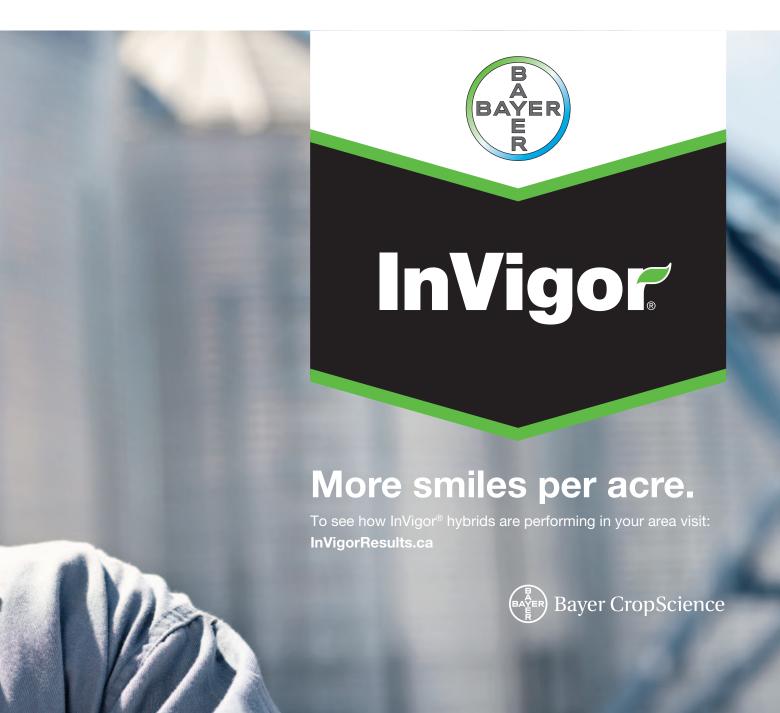
The one recommended lentil variety, 3305-7, is a high-yielding green lentil line which is similar to CDC LeMay, a French green lentil. 3305-7 has improved lodging tolerance and is taller than CDC LeMay, resulting in improved harvestability.

Seven dry bean varieties—one red, one great northern, two navy and three pinto—were also recommended by the committee. SR47-3-3, a high-yielding small red bean line with good seed quality, partially upright indeterminate growth habit and early maturity, and GN13-10-1, a high-yielding great northern bean line with upright indeterminate growth habit and good seed quality, are both adapted to the Red River Valley of Manitoba. OAC 05-1 is a navy bean line with excellent yield and maturity, while navy bean line 1190m-13 combines high

yield with early maturity and indeterminate growth habit, making it suitable for the irrigated regions of Saskatchewan as well as for dryland production in eastern Saskatchewan and western Manitoba

#### **Three Flax Varieties Shine**

Members of the Prairie Recommending Committee for Oilseeds voted in support of three flax varieties: FP 2308, FP 2314 and FP 2325. All three varieties have strong agronomic packages. FP 2314 is a "star" line with no weaknesses identified on the support documentation. The line is adapted for flax growers in all areas of Western Canada, with yield similar to CDC Bethune, and is significantly greater in seed weight, iodine value, linolenic acid content and oil yield than check CDC Flanders. **Julie McNabb** 





ASGA's new research project aims to develop a unique, home-grown strategy for boosting investment in western Canadian cereals.

**ASK** any savvy cereals producer about the future of cereals in Western Canada, and odds are you'll get the same answer: there is no future in cereals unless we make one for ourselves.

This is one of the mandates of the Alberta Seed Growers' Association—building a strong future for the sector in the midst of fluctuating, and increasingly competitive, global markets. It's also the reason why the ASGA has launched a new project entitled Investigation and Development of a New Cereal Plant Breeding Model for Western Canada. The project aims to do the following:

- Investigate global cereal breeding programs;
- Share results through broad-based stakeholder consultations and communications in Western Canada; and
- Define the preferred business model(s) for future cereal plant breeding in Canada.

A steering committee made up of growers from 10 different producer organizations will guide the project through various steps, beginning this fall and ending next July. The group will facilitate meetings with a wide range of stakeholders, including farmers, farm organizations, government representatives, public and private industry members, companies, consultants, and members of the public.

The result of the project will be a business model blueprint for cereal breeding in Western Canada—one which clearly delineates the roles that farmers, industry and government will play in strengthening the sector in the years to come.

#### **Falling Behind**

The rationale behind the project boils down to this: Canada is falling behind in cereals research and development. According to Alan Hall, new initiatives and project hunter with the Alberta Crop Industry Development Fund, one of several organizations

involved in the cereals project, investment in cereal research and breeding has dramatically increased around the world, but Canada has not seen comparable growth.

"In Australia, investment has doubled or tripled over the last few years. Here in Canada, we're probably running at about \$20 to \$30 million a year in wheat breeding," Hall explains.

"As other parts of the world [develop] better genetics, their investments are going to put us in a pretty tight spot. Farmers are asking—what role do we want to play in this? Do we want to

"Farmers are asking—what role do we want to play in this? Do we want to have an active role in investing in cereal breeding, or don't we?"

– Alan Hall

have an active role in investing in cereal breeding, or don't we? In Australia, farmers own about 60 per cent of the wheat breeding business. Will we move in that direction?"

Ryan Mercer, ASGA president and a seed grower himself, says it's an issue that has become increasingly pressing. "Over the past few years, but especially this last winter, with the changes in the way cereals are being marketed in Canada, and with the

lack of public funding going into plant breeding, I was hearing concerns that farmers were not going to be competitive globally," he says. "Lots of research was going into canola, corn and soybeans, but not so much into wheat and barley. So we thought we should come up with some solutions."

Key to the project's first stage will be the investigation of plant breeding models around the world, including Europe, the United States, Argentina, Brazil, Uruguay and Australia. "We want to look at models throughout the world but come up with a madein-Canada solution," says Mercer.

It wasn't simply the need for increased investment in the sector that prompted the project, Mercer says—the producers themselves wanted a stronger voice in how that investment would play out. "The producers wanted to maintain control and have a significant say in where producer and public dollars were spent in terms of plant breeding," he explains.

"Everyone on our steering committee is a producer. I think we see private industry and government more as advisors—although that might change. We need to figure out as producers where we're at, and then involve government and industry."

#### **Key Challenges**

The steering committee faces several challenges right from the start—key among them being the sheer scope of the project, which aims to be completed in less than a year. "Time to engage a broad array of people is going to be guite a challenge," says Hall. "A lot of meaningful conversations will have to happen over a fairly tight timeline."

Those "meaningful conversations" will form the core of the project's goal—to find a solution that works for all stakeholders, across the board. Mercer believes the biggest challenge the project is facing will be finding the right consultants. "That's going to be really instrumental in finding which are the most advantageous results—we want to choose the consultants who can see all sides of this," he says. "We don't want to discourage private industry in investing in these areas, but we'd like to be a partner with private industry. We want a consultant who's going to understand where the producers are coming from, and also understand where private investment is coming from."

The exact roles producers, government and companies will be assigned in the final report, which will be tabled next summer, remains to be seen. According to both Hall and Mercer, no part of that balance has been predetermined by the steering committee or the organizations involved. The solution, they hope, will emerge from fruitful discussions which reflect all sides of the issue.

Mercer is confident that the challenges the project is facing can be overcome. All stakeholders agree that investment in cereals must increase, or producers will be hurt in the long run. In light of that shared goal, the spirit of cooperation will be the key to finding a solution that works for everyone, with "producers, private and public [investors] coming together at the table and trying to figure out how to work together," Mercer says.

"We can accomplish a lot more by working together and not being divided. I think that is going to be a lasting outcome long after the study is complete." Julienne Isaacs

# EXPLORE WHAT **INDUSTRY LEADERS** ARF SAYING ABOUT THE **CHALLENGES** AND **OPPORTUNITIES IN** THE SEED SECTOR.



Germination.ca/GiantViews

The Giant Views of the Industry online video series covers a wide variety of timely topics such as:

WHAT'S COMING DOWN THE INDUSTRY PIPELINE

INFORMATION ON RESEARCH BREAKTHROUGHS

PRODUCT AND EQUIPMENT DEVELOPMENTS

TRENDS AFFECTING THE SEED INDUSTRY

View the interviews online today and sign up to have the interviews delivered directly to your email inbox with Germination's Giant View of the Week. germination.ca/giantviews



### **Alberta and British Columbia Pedigreed Seed Growers Directory of Varieties Produced in 2012**

Grower listings were prepared by the Canadian Seed Growers' Association for varieties eligible for sale in Canada and crops issued certificates at the time of publication. Breeding institution and distributor listings were prepared by the publisher. CSGA assumes no responsibility for errors or omissions in any listings. Pedigreed class code is listed after the grower's phone number. S=Select; F=Foundation; R=Registered; C=Certified; BI=Breeding Institution; Dist=Canadian Distributor(s)

DADLEW.				
BARLEY	S	F	R	C
ABI VOYAGER				
BI: Busch Ag. Res. Dist: Canterra Seeds				
Haney Farms (1985) Limited / Picture Butte / (403) 738-4517			R	
AC ALBRIGHT				
BI: AAFC (Lacombe), Dist: SeCan Members			D	
Wuthrich, David / Cecil Lake / (250) 781-3527  AC HARPER			R	
BI: AAFC (Lethbridge), Dist: SeCan Members				
Feenstra, Lloyd / Barons / (403) 757-3737				С
Witdouck, Dale & Calvin / Iron Springs / (403) 738-4395				С
AC LACOMBE				
BI: AAFC (Lacombe), Dist: SeCan Members Jones, Danny / Beaverlodge / (780) 354-8089			R	
AC METCALFE			11	
BI: AAFC (Brandon), Dist: SeCan Members				
Andersen, B.W. / Kitscoty / (780) 847-2022				С
Archer, Charles Darrel / Wetaskiwin / (780) 352-3179			_	С
Benci, Dennis / Carmangay / (403) 643-2294			R	_
Chin Ridge Seeds Ltd. / Taber / (403) 223-3900 Crop Production Services Canada / Didsbury / (403) 335-3055			R R	C C
Davidson, E. Daryl & Dean / Kitscoty / (780) 846-2456			n R	U
Dueck, Ralph E. & Brent / Olds / (403) 556-2602	S	F	R	
Eliason, Bruce W. / Wrentham / (403) 222-2258		ľ		С
Ellis, Brian / Olds / (403) 556-2890			R	С
Foster, Norman R. / Beaverlodge / (780) 354-2107				С
Freh, Herman R. / Colinton / (780) 675-4840				С
Goldstrom, David / Innisfail / (403) 227-2133				С
Hallett, Dale R. & Richard / Carstairs / (403) 337-2469				C
Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268				C
Holmen, Jonathan W. & Carson R. / Rosedale / (403) 823-9296 Kapitski, Lawrence / Andrew / (780) 365-2134				C C
Kaun, Mark L. / Penhold / (403) 886-4562				С
Kopjar, Gerald M. / Rowley / (403) 368-2409				С
Lefsrud, Kevin J. & Edmund J. / Viking / (780) 336-2500			R	C
Limoges, Marcel / McLennan / (780) 324-3024				С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240				С
Markert Seeds Ltd. / Vulcan / (403) 485-6708				С
Massey, Derwin / Stettler / (403) 883-2503				С
McDonald, Gerald / Grande Prairie / (780) 538-3868			D	C
M°Nelly, Bevin / Clyde / (780) 348-5749 Miller, Gordon J. / Milk River / (403) 642-2424			R	C C
Miller, Kenneth F. / Milk River / (403) 647-2127				С
Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595			R	Ü
Murray, Bruce / Lethbridge / (403) 327-9389			R	С
Nemetz, Charlie, Jerritt, Lewis & B. / Stettler / (403) 742-0436				С
Niemela, Terrance & Tracy / Sylvan Lake / (403) 746-2645				С
Oatway, Grant / Lacombe / (403) 784-3418				С
Penner, Larry / Three Hills / (403) 443-7212			R	С
Peters, Edward W. / Didsbury / (403) 335-4506			R	_
Pizzey, J. David / Canmore / (403) 609-3588			D	С
Rasmuson, Dennis G. & Cory Dean / Gwynne / (780) 361-3813 Strain, Arthur George / Foremost / (403) 867-2227			R	С
Svean, Alan Carl & Scott / Rivercourse / (780) 745-2578			R	С
Thomas, Earl J. / Warner / (403) 642-2253			-11	C
Wagner, Terry & Loree / Lacombe / (403) 782-2107			R	
Weigum, Garry / Three Hills / (403) 443-2476				С
Welsh, Donald Alan / Milk River / (403) 647-2228			R	С
Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928				С
AC RANGER				
BI: AAFC (Brandon), Dist: FP Genetics				^
Airth, Jock & Linda / Brooks / (403) 362-4372				С

BENTLEY				
BI: AAFRD, Dist: Canterra Seeds			D	C
Cameron, Danny / Millet / (780) 387-5313 Kaun, David E. / Penhold / (403) 886-4562			R R	C C
BRETON			11	U
BI: AAFRD, Dist: Canterra Seeds				
Laliberte, Adam & Vos, Henry / Fairview / (780) 835-5286	S			
BUSBY				
BI: AAFRD, Dist; Mastin Seeds				_
Anderson, Ken & Evelyn / Barrhead / (780) 674-5670				С
Feenstra, Lloyd / Barons / (403) 757-3737				C
Freh, Herman R. / Colinton / (780) 675-4840 Gibson, Donald / Sangudo / (780) 785-2214				C C
Jones, Greg Thomas / Ponoka / (403) 783-6495				С
Mastin, Robert B. / Sundre / (403) 556-2609			R	C
Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595				C
Schultz, Jason / Bashaw / (780) 372-2286			R	С
Smith, Gary W. / Eckville / (403) 746-5878				С
Vanruskenveld, Gerald L. / Westlock / (780) 349-2466				С
CDC AUSTENSON				
BI: CDC, Dist: SeCan Members				_
Airth, Jock & Linda / Brooks / (403) 362-4372				С
Benci, Dennis / Carmangay / (403) 643-2294 Card, Gordon B. / Magrath / (403) 758-3444				C C
Card, Gordon B. / Magratii / (403) / 36-3444 Chin Ridge Seeds Ltd. / Taber / (403) 223-3900				C
Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151				С
Crop Production Services Canada / Didsbury / (403) 335-3055			R	C
Dallas, Bradley C. / Bowden / (403) 224-2162				C
Dyck, Heinz W. & Colin & Alan / Rosemary / (403) 378-3321	S	F		
Ellis, Brian / Olds / (403) 556-2890			R	
Freh, Herman R. / Colinton / (780) 675-4840			R	
Galloway, James D. & Peter / Fort Saskatchewan / (780) 998-3036			R	
Hadland, Edward / Baldonnel / (250) 789-3646			R	_
Hallett, Dale R. & Richard / Carstairs / (403) 337-2469				C
Haney Farms (1985) Limited / Picture Butte / (403) 738-4517 Hoff, Peter Edward / Gleichen / (403) 734-2140				C C
Huvenaars, Carl / Hays / (403) 725-2213				С
Kemp, Richard L. / Innisfail / (403) 227-4836			R	0
King, Harold F. / Three Hills / (403) 443-7330				С
Klassen, Ken / Rosemary / (403) 378-4408				С
Kopjar, Gerald M. / Rowley / (403) 368-2409				С
Kotowich, Paul & Dennis / St.Paul / (780) 645-2535				С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240			R	_
Markert Seeds Ltd. / Vulcan / (403) 485-6708			R	С
Massey, Derwin / Stettler / (403) 883-2503 McDonald, Gerald / Grande Prairie / (780) 538-3868				C C
M°Nelly, Bevin / Clyde / (780) 348-5749			R	U
Metzger, Don / Three Hills / (403) 572-3284			11	С
Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595	S	F	R	C
Niemela, Terrance & Tracy / Sylvan Lake / (403) 746-2645	S	F	R	С
Oatway, Lori / Lacombe / (403) 784-3418	S	F	R	С
Persely, Edward & Shirley / Bonnyville / (780) 826-2992			R	
Peters, Edward W. / Didsbury / (403) 335-4506			R	
Selte, Donald / Vermilion / (780) 853-2484			R	С
Sendziak, Don P. & Stephen / Edmonton / (780) 434-1322			R	0
Shultz, Shawn / Didsbury / (403) 335-3694 Sim. Darwin & Derek / Ponoka / (780) 372-2111			R	С
Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358			R R	
Stamp, Richard, M., Greg & Nathan / Enchant / (403) 739-2233			-11	С
Templeton, Brant / Lethbridge / (403) 345-4124				C
Trueblood, Brian G. / Dapp / (780) 954-3745			R	
Victoor, Rene & Jamie / Sturgeon County / (780) 459-3253			R	
Warkentin, Harold K. & Errol / Tofield / (780) 662-2617	S	F		С





# Canola Rewards Program

Visit canolarewards.com or see your nearest Parrish and Heimbecker dealer for details. P.O. Box 97 Bow Island, Alberta T0K 0G0 Tel. 1-403-545-2748 | Fax.1-403-545-2753

355 Kipling Street S.E. Medicine Hat, Alberta T1A 1Y5 Tel. 1-403-526-2831 | Fax. 1-403-527-3186

P.O. Box 671 Milk River, Alberta TOK 1M0 Tel. 1-403-647-3633 | Fax. 1-403-647-3904 P.O. Box 59 Mossleigh, Alberta T0L1P0 Tel. 1-403-534-3961 | Fax. 1-403-534-3962

P.O. Box 54 Vulcan, Alberta T0L 2B0 Tel. 1-403-485-2727 | Fax.1-403-485-6315

R.R.#8 - Site 14 - Compound 11 Lethbridge, Alberta T1J 4P4 Tel. 1-403-381-8710 | Fax. 1-403-381-8772

Webber, Curtis / Stony Plain / (780) 963-6897				С
Weigum, Garry / Three Hills / (403) 443-2476				С
Welsh, Donald Alan / Milk River / (403) 647-2228				С
Witdouck, Dale & Calvin / Iron Springs / (403) 738-4395				С
CDC BATTLEFORD				
BI: CDC, Dist: SeCan Members				
Wagner, Terry & Loree / Lacombe / (403) 782-2107	S		R	
CDC COALITION				
BI: CDC, Dist: Canterra Seeds				
Cameron, Danny / Millet / (780) 387-5313			R	С
Cross, Douglas / Westlock / (780) 349-2587			R	
Cyre, Clifford & Greg / Barrhead / (780) 349-4775			R	
Galloway, James D. & Peter / Fort Saskatchewan / (780) 998-3036				С
Kaun, Mark L. / Penhold / (403) 886-4562				С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240				С
Plante, Jacques / St. Paul / (780) 645-4604				С
Wuthrich, David / Cecil Lake / (250) 781-3527			R	
CDC COPELAND				
BI: CDC, Dist: SeCan Members				
Chin Ridge Seeds Ltd. / Taber / (403) 223-3900				С
Clark, Todd / Edmonton / (780) 472-6308				С
Crop Production Services Canada / Didsbury / (403) 335-3055				С
Dallas, Bradley C. / Bowden / (403) 224-2162			R	
Dueck, Ralph E. & Brent / Olds / (403) 556-2602	S	F	R	
Eliason, Bruce W. / Wrentham / (403) 222-2258				С
Goldstrom, David / Innisfail / (403) 227-2133			R	
Hadway, W. Tom & Carol / Didsbury / (403) 335-4929				С
Hallett, Dale R. & Richard / Carstairs / (403) 337-2469				С
Kemp, Richard L. / Innisfail / (403) 227-4836				С
King, Harold F. / Three Hills / (403) 443-7330				С
Kittle, James W. & Andrew / Viking / (780) 336-2583		F		С
Kopjar, Gerald M. / Rowley / (403) 368-2409			R	C
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240			R	
Markert Seeds Ltd. / Vulcan / (403) 485-6708				С
McNelly, Bevin / Clyde / (780) 348-5749				C
Meinczinger, Matthew Jr. / Busby / (780) 349-2456				C
Murray, Bruce / Lethbridge / (403) 327-9389				C
Mariaj, 21000 / Lottibridgo / (100) 021 3000				U

Niemela, Terrance & Tracy / Sylvan Lake / (403) 746-2645 Nisbet, Andrew E. & Diane E. / Bowden / (403) 224-3788 Penner, Larry / Three Hills / (403) 443-7212 Peters, Edward W. / Didsbury / (403) 335-4506		F	R R	С
Selte, Donald / Vermilion / (780) 853-2484				С
Smith, Miles A. / Trochu / (403) 442-2693				C
Victoor, Rene & Jamie / Sturgeon County / (780) 459-3253				С
Wagner, Terry & Loree / Lacombe / (403) 782-2107				С
Zwack, Thomas / Daysland / (780) 374-2450			R	С
CDC COWBOY BI: CDC, Dist: SeCan Members				
Airth, Jock & Linda / Brooks / (403) 362-4372			R	С
Bright, David / New Norway / (780) 855-2240			R	U
Chin Ridge Seeds Ltd. / Taber / (403) 223-3900	S			С
Davidson, E. Daryl & Dean / Kitscoty / (780) 846-2456				C
Degenhardt, Keith, Terry Lee & Kerry / Hughenden / (780) 856-2383				С
Foster, Norman R. / Beaverlodge / (780) 354-2107				C
Hadland, Edward / Baldonnel / (250) 789-3646			R	
M°Nelly, Bevin / Clyde / (780) 348-5749			R	
Pare, Raymond A. / Wainwright / (780) 842-2073			R	C
Sand, Ron W. & David R. / M <sup>o</sup> Laughlin / (780) 745-2251				С
Selte, Donald / Vermilion / (780) 853-2484	S	F		С
Stewart, E.Wilbur & Eldon / Big Valley / (403) 876-2784				С
Warkentin, Harold K. & Errol / Tofield / (780) 662-2617				С
Zwack, Thomas / Daysland / (780) 374-2450				С
CDC EARL BI: CDC, Dist: N/A				
Airth, Jock & Linda / Brooks / (403) 362-4372		F		
CDC HELGASON		'		
BI: CDC, Dist: SeCan Members				
Hadland, Edward / Baldonnel / (250) 789-3646			R	
Smith, Gary W. / Eckville / (403) 746-5878				С
CDC KINDERSLEY				
BI: CDC, Dist: SeCan Members	0		_	
Kittle, James W. & Andrew / Viking / (780) 336-2583	S	_	R	
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240	S	F	R R	
SeCan Association / Kanata / (613) 592-8600	2		n	

# Seed Depot Corp

4-5 Londesboro Road, Box 208, Pilot Mound MB R0G 1P0



John M. Smith President & CEO

> Ph. 204-825-2000 Fax 204-825-2758 john@seeddepot.ca

"Norking hard to earn your trust,"

# **TONY CROOYMANS SONS**

Pedigreed Seed



Box 1124, Bow Island

Alberta, T0K 0G0

Durum: AC Strongfield AC Lillian (solid stem), HRSW:

CDC Go, AC Stettler, AC Carberry,

AAC Bailey HRWW: AC Radiant SWSW: AC Sadash Barley: CDC Austenson Prairie Sapphire

\* We can source other varieties \*

Dealers for:

Dekalb: Canola, Corn Pickseed: Alfalfa, Grass, Forages, Corn Canterra Seeds: Cereals, Pulses,

Canola, Inoculant

403-545-2151 403-545-6333(shop) 403-545-6509 403-545-6206



QUALITY PEDIGREED SEED AVAILABLE FOR 2012

Certified, Registered, Foundation:

PFAS **CDC** Meadow Polstead **SW Midas** 

WHEAT CPS **AC** Foremost

# **BRYAN RADKE**

R.R. 1, SITE 1, BOX 2 BARRHEAD, ALBERTA T7N 1N2 PHONE (780) 674-5715 CELL (780) 674-0866 FAX (780) 674-8125



# SEED CLEANING CO-OP LTD.







# PEDIGREED SEED FOR SALE

# **BARLEY**

- CDC Cowboy
- Vivar
- AC Metcalfe
- Seebe
- CDC Copeland
- Ponoka
- Sundre
- CDC Thompson
- CDC Coalition
- CDC Meredith
- Busby
- Chigwell
- CDC Austenson

# **OATS**

- AC Morgan
- AC Mustang
- Bradley

# **WHEAT**

- HRSW
- AC Barrie
- Stettler
- Harvest
- Carberry
- CPS Red
- AC Foremost

## **PEAS**

- Cooper
- CDC Centennial
- Canstar
- CDC Meadow

# **FABA BEANS**

- Snowbird

# **TRITICALE**

- Tyndal

"OVER 275,000 BUSHELS OF PEDIGREED SEED STORAGE"

# PROCESSORS & RETAILERS FOR THE FOLLOWING GROWERS:

# **Anderson Seed Growers**

780-674-5670 | 780-674-1941

# **Bar 3 Farms**

780-348-5791 | 780-349-1434

# **Bevin McNelly**

780-348-5749 | 780-349-0685

# **Doug Cross**

780-349-2587 | 780-349-1453

# Cyre Seed Farms

780-349-4775 | 780-307-4246 780-307-4332

Forward Seed Farm 780-307-4343

# Trueblood Farms Ltd.

780-954-3745 | 780-349-0444

# True Seeds Ltd.

780-736-2289 | 780-777-5885

# Nick Jonk

780-349-5458 | 780-349-0483

# Beamish Seed Farms Ltd.

780-954-2166 | 780-307-4742

# Meinczinger Seed Farms

780-349-2456 | 780-349-9515

# Rick's Pedigreed Seed

780-674-2595 | 780-305-9517

**Brian Miller** 

780-674-1240

SEED TREATING AVAILABLE

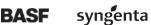
P (780) 349-3944 | F (780) 349-3623 | E wscp@telus.net

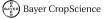
WWW.WESTLOCKSEED.CA 10016 93 Ave. Westlock, AB | Manager: Wayne Walker











Weigum, Garry / Three Hills / (403) 443-2476			R	
CDC MAVERICK				
BI: CDC, Dist: SeCan Members		_		
SeCan Association / Kanata / (613) 592-8600	S	F		
Viterra / Regina / (306) 569-5027	S			
CDC MAYFAIR  BL CDC Dist. Contours Souds				
<b>BI: CDC, Dist: Canterra Seeds</b> Sendziak, Don P. & Stephen / Edmonton / (780) 434-1322			R	
CDC MEREDITH			n	
BI: CDC, Dist: SeCan Members				
Baier, Bill & Dean / Clyde / (780) 348-5791	S	F		С
Benci, Dennis / Carmangay / (403) 643-2294	S		R	
Chin Ridge Seeds Ltd. / Taber / (403) 223-3900		F		
Crop Production Services Canada / Didsbury / (403) 335-3055			R	С
Davidson, E. Daryl & Dean / Kitscoty / (780) 846-2456	S	F		
Eliason, Bruce W. / Wrentham / (403) 222-2258				С
Ellis, Brian / Olds / (403) 556-2890				С
Goldstrom, David / Innisfail / (403) 227-2133				С
Hadland, Edward / Baldonnel / (250) 789-3646		F		С
Hadway, W. Tom & Carol / Didsbury / (403) 335-4929	S	F		
Harris, William P, Linda, Thomas & A. / Beaverlodge / (780) 354-2823	S		R	_
King, Harold F. / Three Hills / (403) 443-7330				С
Knight, William, G., Blaine, Craig & B. / Tees / (403) 784-3633	0			С
Kopjar, Gerald M. / Rowley / (403) 368-2409	S			C
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240 Logan, Glenn C., Marie & Douglas / Lomond / (403) 792-3696				С
Massey, Derwin / Stettler / (403) 883-2503				С
McDonald, Gerald / Grande Prairie / (780) 538-3868			R	C
Meding, Ernest / Trochu / (403) 442-2129			- 11	C
Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736				C
Mueller, Donald A. / Three Hills / (403) 823-3177				C
Niemela, Terrance & Tracy / Sylvan Lake / (403) 746-2645				C
Nisbet, Andrew E. & Diane E. / Bowden / (403) 224-3788	S	F		
Oatway, Grant / Lacombe / (403) 784-3418				С
Penner, Larry / Three Hills / (403) 443-7212				С
Peters, Edward W. / Didsbury / (403) 335-4506				С
Schmermund, Donnie / Calahoo / (780) 967-2850				С
Selte, Donald / Vermilion / (780) 853-2484	S			С
Shultz, Shawn / Didsbury / (403) 335-3694				С
Zwack, Thomas / Daysland / (780) 374-2450				С
CDC THOMPSON				
BI: CDC, Dist: FP Genetics			_	
Thompson, M. Ellwood & Kelly / Innisfail / (403) 728-3535 CDC TREY			R	
BI: CDC, Dist: FP Genetics				
Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928		F	R	
CDC YORKTON		'	11	
BI: CDC, Dist: Canterra Seeds				
Haney Farms (1985) Limited / Picture Butte / (403) 738-4517				С
Sendziak, Don P. & Stephen / Edmonton / (780) 434-1322			R	
CERVEZA				
BI: AAFC (Brandon), Dist: Mastin Seeds				
Lefsrud, Kevin J. & Edmund J. / Viking / (780) 336-2500			R	
Mastin, Robert B. / Sundre / (403) 556-2609		F	R	
0 - L L L / D L / /700\ 070\ 0000			D	

CHAMPION				
BI: Viterra, Dist: Viterra				
Logan, Glenn C., Marie & Douglas / Lomond / (403) 792-3696				С
Richards, Cliff & Dan / Sexsmith / (780) 766-2266	0	_	R	0
Viterra / Regina / (306) 569-5027	S	F	R	С
Wurz, John / Picture Butte / (403) 757-2330 CHIGWELL				С
BI: AAFRD (Lacombe), Dist: SeCan Members				
Anderson, Ken & Evelyn / Barrhead / (780) 674-5670				С
Brousseau, Jules / Foisy / (780) 657-2276				С
Crop Production Services Canada / Didsbury / (403) 335-3055			R	С
Hadland, Edward / Baldonnel / (250) 789-3646				С
Haney Farms (1985) Limited / Picture Butte / (403) 738-4517				С
Repka, Gerald / Willingdon / (780) 636-3458		_		С
Warkentin, Harold K. & Errol / Tofield / (780) 662-2617 Webber, Curtis / Stony Plain / (780) 963-6897		F		С
Witdouck, Dale & Calvin / Iron Springs / (403) 738-4395				C
CONLON				O
BI: NDSU, Dist: Seed Depot				
Niemela, Terrance & Tracy / Sylvan Lake / (403) 746-2645				С
Welsh, Donald Alan / Milk River / (403) 647-2228				С
FALCON				
BI: AAF, Dist: N/A Stickland, Melvin G., Irma & Brian / Red Deer / (403) 886-4875		F		С
GADSBY		'		U
BI: AAFRD (Lacombe), Dist: SeCan Members				
Dechaine, Louis / St. Lina / (780) 635-2235				С
Ohrn, Norman / Thorsby / (780) 985-2263				С
Warkentin, Harold K. & Errol / Tofield / (780) 662-2617	S	F		
Webber, Curtis / Stony Plain / (780) 963-6897				С
LEGACY BI: Busch Ag. Res., Dist: Viterra/FP Genetics				
Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928			R	С
MAJOR				
BI: N/A, Dist: Viterra				
Viterra / Regina / (306) 569-5027				С
MERIT 57				
BI: Busch Ag. Res., Dist: Canterra Seeds Haney Farms (1985) Limited / Picture Butte / (403) 738-4517			R	
Lefsrud, Kevin J. & Edmund J. / Viking / (780) 336-2500			R	
Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358			R	С
MUSKWA				
BI: AAFRD (Lacombe), Dist: N/A				
Chin Ridge Seeds Ltd. / Taber / (403) 223-3900	_			С
Logan, Glenn C., Marie & Douglas / Lomond / (403) 792-3696	S			0
Witdouck, Dale & Calvin / Iron Springs / (403) 738-4395				С
BI: AAFC (Brandon), Dist: FP Genetics				
Crop Production Services Canada / Didsbury / (403) 335-3055				С
Dalton, Dennis / Wainwright / (780) 842-2361		F		С
King, Harold F. / Three Hills / (403) 443-7330				C
Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358				С
Thompson, M. Ellwood & Kelly / Innisfail / (403) 728-3535		F	_	C
Victoor, Rene & Jamie / Sturgeon County / (780) 459-3253			R	С



Schultz, Jason / Bashaw / (780) 372-2286

Jock & Linda Airth

Phone (403) 362-4372

Fax (403) 362-8110 Box 807 • Brooks, Alberta • T1R 1B7



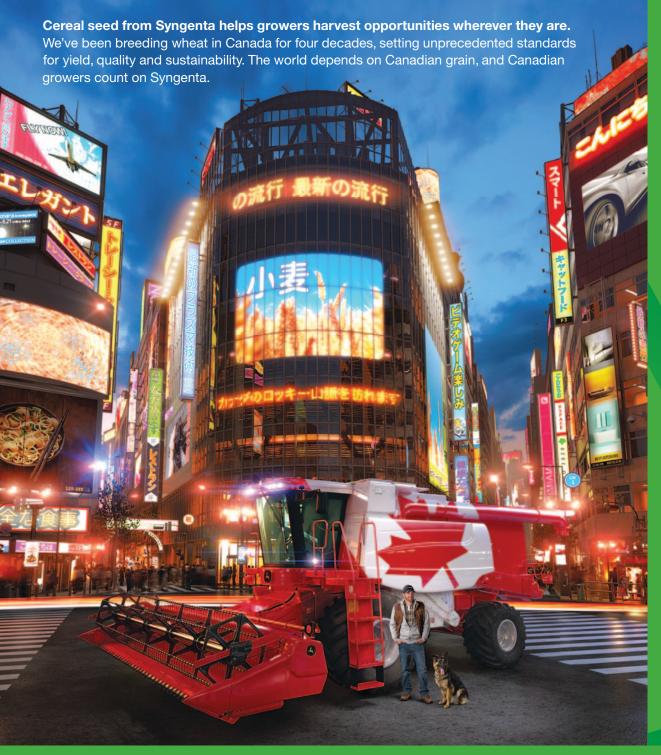
\*New: Malt Barley - Meredith

CDC Buteo Winter Wheat

Alvena Wheat

Morgan Oats

# Bred in Canada to feed the world.







For more information contact your retailer, call 1-87-SYNGENTA (1-877-964-3682) or visit SyngentaFarm.ca

Always read and follow label directions. The Alliance Frame, the Purpose Icon and the Syngenta logo are trademarks of a Syngenta Group Company. © 2012 Syngenta Canada Inc.

· · · · · · · · · · · · · · · · · · ·					· ·				
PONOKA					Smith, Gary W. / Eckville / (403) 746-5878			R	С
BI: AAFRD (Lacombe), Dist: SeCan Members					Tomlinson, Chelsea / Redwater / (780) 777-5885				С
Freh, Herman R. / Colinton / (780) 675-4840				С	Warkentin, Harold K. & Errol / Tofield / (780) 662-2617	S	F		С
Gibson, Donald / Sangudo / (780) 785-2214				С	Webber, Curtis / Stony Plain / (780) 963-6897				С
Meinczinger, Matthew Jr. / Busby / (780) 349-2456				С	AC MUSTANG				
Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595			R		BI: AAFC (Lacombe), Dist: Mastin Seeds				
Schmermund, Donnie / Calahoo / (780) 967-2850				С	Corns, Bryan & Gary / Grassy Lake / (403) 655-2464				С
Selte, Donald / Vermilion / (780) 853-2484	S		R		Feenstra, Lloyd / Barons / (403) 757-3737			R	
Warkentin, Harold K. & Errol / Tofield / (780) 662-2617			R		Mastin, Robert B. / Sundre / (403) 556-2609			R	
Webber, Curtis / Stony Plain / (780) 963-6897				С	BRADLEY				
SEEBE					BI: AAFC, Dist: N/A				
BI: AAFRD (Lacombe), Dist: SeCan Members					Jonk, Nicholas / Westlock / (780) 349-5458			R	
Anderson, Ken & Evelyn / Barrhead / (780) 674-5670				С	Selte, Donald / Vermilion / (780) 853-2484	S			
Baier, Bill & Dean / Clyde / (780) 348-5791			R		Warkentin, Harold K. & Errol / Tofield / (780) 662-2617	S			
Beamish, Dale / Jarvie / (780) 954-3960			R	С	CDC BALER				
Cross, Douglas / Westlock / (780) 349-2587				С	BI: CDC, Dist: FP Genetics				
Meinczinger, Matthew Jr. / Busby / (780) 349-2456				С	Crop Production Services Canada / Didsbury / (403) 335-3055		_		С
Schmermund, Donnie / Calahoo / (780) 967-2850				С	Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268		F		
Webber, Curtis / Stony Plain / (780) 963-6897				С	Sand, Ron W. & David R. / M <sup>2</sup> Laughlin / (780) 745-2251	S			C
SUNDRE					Sim, Darwin & Derek / Ponoka / (780) 372-2111		_		С
BI: AAFRD (Lacombe), Dist: Mastin Seeds					Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928	S	F	R	
Crop Production Services Canada / Didsbury / (403) 335-3055				C	CDC HAYMAKER				
Cross, Douglas / Westlock / (780) 349-2587				C	BI: CDC, Dist: N/A	0	F		
Feenstra, Lloyd / Barons / (403) 757-3737			R	C	Sim, Darwin & Derek / Ponoka / (780) 372-2111	S	r		
Gibson, Donald / Sangudo / (780) 785-2214				C	CDC SEABISCUIT BI: CDC, Dist: Canterra Seeds				
Hadland, Arthur Austin / Baldonnel / (250) 789-3566				С	Sendziak, Don P. & Stephen / Edmonton / (780) 434-1322	c			
Hallett, Dale R. & Richard / Carstairs / (403) 337-2469				С	DERBY	3			
Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268				C	BI: N/A, Dist: Mastin Seeds				
Jonk, Nicholas / Westlock / (780) 349-5458				С	Mastin, Robert B. / Sundre / (403) 556-2609		F		
Kemp, Richard L. / Innisfail / (403) 227-4836				С	Richard, Gerald / Spirit River / (780) 864-2339		ľ	R	
Lyster, Norman / Stettler / (403) 742-4456				С	FOOTHILL			11	
Mastin, Robert B. / Sundre / (403) 556-2609		F	R	С	BI: N/A, Dist: SeCan Members				
Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595			R		Degenhardt, Keith, Terry Lee & Kerry / Hughenden / (780) 856-2383				С
Richard, Gerald / Spirit River / (780) 864-2339				С	JORDAN				ľ
TR07728					BI: AAFC (Winnipeg), Dist: SeCan Members				
BI: WestBred LLC, Dist: DEKALB Canada/Monsanto Canada Inc.	0				Jones, Greg Thomas / Ponoka / (403) 783-6495			R	
Viterra / Regina / (306) 569-5027 <b>TROCHU</b>	S				Nisbet, Andrew E. & Diane E. / Bowden / (403) 224-3788		F		
BI: AAFRD (Lacombe), Dist: SeCan Members					LU				
Crop Production Services Canada / Didsbury / (403) 335-3055				С	BI: AAFC (Lacombe), Dist: SeCan Members				
Kittle, James W. & Andrew / Viking / (780) 336-2583				C	Warkentin, Harold K. & Errol / Tofield / (780) 662-2617		F		
Smith, Gary W. / Eckville / (403) 746-5878				C	MURPHY				
VIVAR				U	BI: AAFC (Lacombe), Dist: SeCan Members				
BI: AAFRD (Lacombe), Dist: SeCan Members					Degenhardt, Keith, Terry Lee & Kerry / Hughenden / (780) 856-2383				С
Beamish, Dale / Jarvie / (780) 954-3960				С	Markert Seeds Ltd. / Vulcan / (403) 485-6708			R	
Dueck, Ralph E. & Brent / Olds / (403) 556-2602		F		ľ	Warkentin, Harold K. & Errol / Tofield / (780) 662-2617	S	F	R	
Sim, Darwin & Derek / Ponoka / (780) 372-2111				С	Webber, Curtis / Stony Plain / (780) 963-6897				С
Webber, Curtis / Stony Plain / (780) 963-6897				C	STRIDE				
Witdouck, Dale & Calvin / Iron Springs / (403) 738-4395				C	BI: AAFC, Dist: N/A				
XENA				ľ	Jones, Greg Thomas / Ponoka / (403) 783-6495	S			
BI: Western Plant Breeders, Dist: Viterra					TRIACTOR				
Viterra / Regina / (306) 569-5027	S	F	R	С	BI: SW Seed Ltd., Dist: Canterra Seeds				_
					Sendziak, Don P. & Stephen / Edmonton / (780) 434-1322				С
OATO					WALDERN BI: AAFC (Lacombe), Dist: SeCan Members				
OATS	S	F	R	C	Selte, Donald / Vermilion / (780) 853-2484	S	R		
		-		_	Conto, Boniara / Vonninon / (100) 000 2404	O	١,,		
AC MORGAN					DVE				_
BI: AAFC (Lacombe), Dist: SeCan Members					RYE	s	F	R	r
Anderson, Ken & Evelyn / Barrhead / (780) 674-5670		F	R	С		3	г	n	<u></u>
Bratland, Jason H. / Hythe / (780) 356-3375				С	AC REMINGTON				
Chin Ridge Seeds Ltd. / Taber / (403) 223-3900				С	BI: AAFC (Swift Current), Dist: Canterra Seeds				
Degenhardt, Keith, Terry Lee & Kerry / Hughenden / (780) 856-2383				С	Corns, Bryan & Gary / Grassy Lake / (403) 655-2464	S			
Graham, Lawrence W. / Innisfail / (403) 227-2336	S				GAZELLE				
Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268				С	BI: N/A, Dist: SeCan Members				
Hill, Gordon P. / Taylor / (250) 789-3469				С	Degenhardt, Keith, Terry Lee & Kerry / Hughenden / (780) 856-2383		F		
Jonk, Nicholas / Westlock / (780) 349-5458				С	HAZLET				
Kalinsky, Dwayne / Iron River / (780) 826-4452				С	BI: N/A, Dist: SeCan Members				
Kemp, Richard L. / Innisfail / (403) 227-4836				С	Degenhardt, Keith, Terry Lee & Kerry / Hughenden / (780) 856-2383			R	
Klassen, Ken / Rosemary / (403) 378-4408				С	PRIMA				
Massey, Derwin / Stettler / (403) 883-2503				С	BI: AAFC (Swift Current), Dist: SeCan				
Ohrn, Norman / Thorsby / (780) 985-2263				С	Bayes, Harold / Trochu / (403) 443-2208				С
Peters, Edward W. / Didsbury / (403) 335-4506				С	Weigum, Sarah / Three Hills / (403) 443-2476				С
Richard, Gerald / Spirit River / (780) 864-2339			R	С					
Selte, Donald / Vermilion / (780) 853-2484	S			С					

TRITICALE - SPRING	s	F	R	C
AC ULTIMA				
BI: N/A, Dist: FP Genetics				
Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358		F		
BUNKER				
BI: AAFRD (Lacombe), Dist: FP Genetics				
Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358			R	С
PRONGHORN				
BI: AARD Dist: Not Assigned				
Mans, John / Nobleford / (403) 824-3585			R	
SUNRAY				
BI: AAFC, Dist: N/A	_	_		
Markert Seeds Ltd. / Vulcan / (403) 485-6708	S	F		
TAZA				
BI: AAFRD (Lacombe), Dist: Solick Seeds Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358			R	
TYNDAL			n	
BI: AAFRD (Lacombe), Dist: SeCan Members				
Airth, Jock & Linda / Brooks / (403) 362-4372			R	
Corns, Bryan & Gary / Grassy Lake / (403) 655-2464			R	
			11	C
Jonk Nicholas / Westlock / (780) 349-5458				_ ~
Jonk, Nicholas / Westlock / (780) 349-5458				
	s	F	R	С
	S	F	R	С
TRITICALE - WINTER	S	F	R	С
TRITICALE - WINTER BOBCAT	<b>s</b>	F	R	С
TRITICALE - WINTER  BOBCAT BI: AAFC (Swift Current), Dist: Corns Brothers Farms		F	R	С
TRITICALE - WINTER  BOBCAT BI: AAFC (Swift Current), Dist: Corns Brothers Farms Corns, Bryan & Gary / Grassy Lake / (403) 655-2464  FRIDGE BI: N/A, Dist: N/A		F	R	С
TRITICALE - WINTER  BOBCAT BI: AAFC (Swift Current), Dist: Corns Brothers Farms Corns, Bryan & Gary / Grassy Lake / (403) 655-2464  FRIDGE BI: N/A, Dist: N/A Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928		F	R	C
TRITICALE - WINTER  BOBCAT BI: AAFC (Swift Current), Dist: Corns Brothers Farms Corns, Bryan & Gary / Grassy Lake / (403) 655-2464  FRIDGE BI: N/A, Dist: N/A Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928  LUOMA		F	R	
BOBCAT BI: AAFC (Swift Current), Dist: Corns Brothers Farms Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 FRIDGE BI: N/A, Dist: N/A Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928 LUOMA BI: AARD (Lacombe), Dist: Corns Brothers Farms		F		
BOBCAT BI: AAFC (Swift Current), Dist: Corns Brothers Farms Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 FRIDGE BI: N/A, Dist: N/A Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928 LUOMA BI: AARD (Lacombe), Dist: Corns Brothers Farms Corns, Bryan & Gary / Grassy Lake / (403) 655-2464		F	R	
BOBCAT BI: AAFC (Swift Current), Dist: Corns Brothers Farms Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 FRIDGE BI: N/A, Dist: N/A Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928 LUOMA BI: AARD (Lacombe), Dist: Corns Brothers Farms Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 METZGER		F		
BOBCAT BI: AAFC (Swift Current), Dist: Corns Brothers Farms Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 FRIDGE BI: N/A, Dist: N/A Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928 LUOMA BI: AARD (Lacombe), Dist: Corns Brothers Farms Corns, Bryan & Gary / Grassy Lake / (403) 655-2464		F		

WHEAT - DURUM	s	F	R	C
AC NAVIGATOR				
BI: AAFC (Swift Current), Dist: Viterra				
Viterra / Regina / (306) 569-5027	S	F	R	С
BRIGADE BI: AAFC (Swift Current), Dist: Viterra				
Viterra / Regina / (306) 569-5027	S	F	R	C
CDC VERONA	3	Г	n	6
BI: CDC, Dist: Alliance Seed Corp.				
Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736				С
Nikkel, Ed / Lethbridge / (403) 792-2116				C
Van Roessel, William & Jean / Bow Island / (403) 545-6018				C
Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434		F		ľ
Willms, Kevin J. / Grassy Lake / (403) 655-2450	S	F	R	
DC VIVID				
BI: CDC, Dist: Viterra				
Viterra / Regina / (306) 569-5027	S			
Willms, Kevin J. / Grassy Lake / (403) 655-2450	S			
INTERPRISE				
BI: AAFC (Swift Current), Dist: Canterra Seeds				_
Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151				C
Haney Farms (1985) Limited / Picture Butte / (403) 738-4517		F		C
Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736 Welsh, Donald Alan / Milk River / (403) 647-2228		۲		C
Welsh, Stuart Jason / Milk River / (403) 647-2228  Welsh, Stuart Jason / Milk River / (403) 647-2228				C
Welsh, Stuart Jason / Whik river / (403) 047-2220				U
BI: N/A, Dist: N/A				
C & M Seeds / Palmerston / (519) 343-2126			R	С
Haney Farms (1985) Limited / Picture Butte / (403) 738-4517				C
STRONGFIELD				ľ
BI: AAFC (Swift Current), Dist: SeCan Members				
Chin Ridge Seeds Ltd. / Taber / (403) 223-3900				C
Haney Farms (1985) Limited / Picture Butte / (403) 738-4517				C
Hierath, Michael Wayne & Philip / Milk River / (403) 647-2347	S	F	R	C
Holmen, Jonathan W. & Carson R. / Rosedale / (403) 823-9296				C
Kiffiak, Edwin H. & Nathan J. / Foremost / (403) 867-2338				С
Strain, Arthur George / Foremost / (403) 867-2227				С

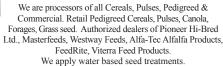
"WHERE QUALITY SEED IS OUR FIRST PRIORITY"

# ST. PAUL MUNICIPAL SEED CLEANING ASSOC. LTD.

Registered

P.O. Box 1101 St. Paul, Alberta TOA 3A0 Phone: 645-3939 Fax: 645-2122 Manager: Ron Wirsta

ron.wirsta@stpaulseedcleaning.com



We are a proud member of Association of Alberta Co-op Seed Cleaning Plants

# Rick's Pedigreed Seed



**Rick & Sharon Mueller** 780-674-6713

Richard & Rose Mueller 780-674-2595

2421 Twp Rd. 593A

Barrhead, AB T7N 1N2 rmueller@mcsnet.ca

Your barley and pulse specialist

Fax: (780) 674-5959 Cell: (780) 674-0853



Financing Available Scale, Seed Treating, and Ag Chemicals on Site

**Brent Andersen** Box 222 Kitscoty, AB T0B 2P0 Phone: 780-847-2022 Fax: 780-847-2011

# For all your seed needs

Pulses ·Canola Cereals

Forages

•Corn









Welsh, Donald Alan / Milk River / (403) 647-2228 Willms, Kevin J. / Grassy Lake / (403) 655-2450 TRANSCEND			R	С
BI: AAFC (Swift Current), Dist: N/A Benci, Dennis / Carmangay / (403) 643-2294 Hummel, Wallace H. / Milk River / (403) 647-3749 Markert Seeds Ltd. / Vulcan / (403) 485-6708	S	F	R R R	
<b>WHEAT - MIDGE TOLERANT</b>	s	F	R	С
CDC UTMOST-HARVEST BI: N/A, Dist: FP Genetics Andrukow, Allan / Viking / (780) 385-6402				
Benci, Dennis / Carmangay / (403) 643-2294  Dalton, Dennis / Wainwright / (780) 842-2361  Galloway Seeds Ltd. / Fort Saskatchewan / (780) 998-3036  Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268				
Hoff, Peter Edward / Gleichen / (403) 734-2140 King, Harold F. / Three Hills / (403) 443-7330 Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240				
Markert Seeds Ltd. / Vulcan / (403) 485-6708 Massey, Derwin / Stettler / (403) 883-2503 Pizzey, J. David / Canmore / (403) 609-3588				
Sand, Ron W. & David R. / M <sup>e</sup> Laughlin / (780) 745-2251 Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358 Tomlinson, Chelsea / Redwater / (780) 777-5885 Victoor, Rene & Jamie / Sturgeon County / (780) 459-3253				
CONQUER - 5701PR BI: AAFC, Dist: Canterra Seeds Markert Seeds Ltd. / Vulcan / (403) 485-6708				
ENCHANT-AC CRYSTAL  BI: N/A, Dist: FP Genetics  Sand, Ron W. & David R. / M <sup>e</sup> Laughlin / (780) 745-2251  GOODEVE-AC INTREPID	S			
BI: AAFC (Winnipeg), Dist: SeCan Members Alliance Seed Corporation / Winnipeg / (204) 272-2890 Lefsrud, Kevin J. & Edmund J. / Viking / (780) 336-2500				

# WILLMS SEEDS Grassy Lake, Alberta

Seed Available For 2012

- · Chickpeas
- Durum
- Flax
- Peas
- Barley
- · Hard Red
- Spring Wheat
- · Clearfield Red &
- Green Lentils · Soft White Spring Wheat
- · Winter Wheat







Weigh Bin and Truck Scale on farm Will Treat & Inoculate & Apply Polymer

Tim (403) 655-2434 Cell (403) 634-4155 Henry (403) 655-2413

# Alliance Seed Cleaning Association Ltd.

Commercial, Pedigreed & Separation Cleaning

**Terry Howe** 

Optical Colour Sorting

Manager

Ph: 1-780-879-3927 Fax: 1-780-879-2414

Email: allianc@wildroseinternet.ca Box 147Alliance, Alberta T0B 0A0



Complete Line of Processing, Treating & Bagging Facilities Feed, Vet Supplies & Grass Seed Sales

# SHAW-AC DOMAIN

# BI: AAFC (Winnipeg), Dist: SeCan Members

Huvenaars, John & Lisa / Hays / (403) 725-2126 Shultz, Shawn / Didsbury / (403) 335-3694

Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358 Warkentin, Harold K. & Errol / Tofield / (780) 662-2617

UNITY-WASKADA

# BI: AAFC (Winnipeg), Dist: SeCan Members

Dow, Willard & Dale / Rivercourse / (306) 387-6767 Eliason, Bruce W. / Wrentham / (403) 222-2258 Jacula, Dean S. & Shawn D. / Vermilion / (780) 853-7333

Warkentin, Harold K. & Errol / Tofield / (780) 662-2617

## **VESPER-WASKADA**

#### BI: N/A, Dist: SeCan Members

Pare, Raymond A. / Wainwright / (780) 842-2073 Pizzey, J. David / Canmore / (403) 609-3588

# NHEAT - SPRING

BI: Syngenta Seeds Canada, Dist: Viterra Murray, Bruce / Picture Butte / (403) 732-5550 Viterra / Regina / (306) 569-5027

BI: Viterra, Dist: Viterra

Viterra / Regina / (306) 569-5027

**AAC BAILEY** 

BI: AAFC (Swift Current), Dist: Canterra Seeds

Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151 **AAC REDWATER** 

BI: AAFC (Lacombe), Dist: SeCan Members

Oatway, Ward / Lacombe / (403) 784-3418 AC ANDREW

BI: AAFC (Lethbridge), Dist: SeCan Members

Kittle, James W. & Andrew / Viking / (780) 336-2583

BI: AAFC (Swift Current), Dist: SeCan Members

Davidson, E. Daryl & Dean / Kitscoty / (780) 846-2456 Pare, Raymond A. / Wainwright / (780) 842-2073 Sand, Ron W. & David R. / McLaughlin / (780) 745-2251

**AC DOMAIN** 

BI: AAFC (Winnipeg), Dist: SeCan Members

Warkentin, Harold K. & Errol / Tofield / (780) 662-2617

**AC EATONIA** 

BI: Viterra, Dist: Viterra

Willms, Kevin J. / Grassy Lake / (403) 655-2450

AC ELSA

BI: AAFC (Swift Current), Dist: SeCan Members

Warkentin, Harold K. & Errol / Tofield / (780) 662-2617

AC FOREMOST

# BI: AAFC (Swift Current), Dist: SeCan Members

Anderson, Ken & Evelyn / Barrhead / (780) 674-5670 Beamish, Dale / Jarvie / (780) 954-3960 Cyre, Clifford & Greg / Barrhead / (780) 349-4775

Dallas, Bradley C. / Bowden / (403) 224-2162

Ellis, Brian / Olds / (403) 556-2890





SF

F R C

F

F

F

S

R C

R C

C

C

С

С

С

R С С

Canada's Seed Partner



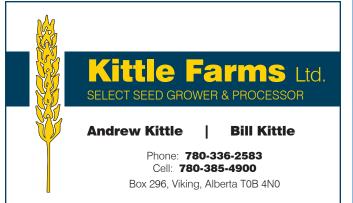
Peter & Cynthia Hoff

Box 518, Gleichen, Ab. TOJ-1NO Ph (403)734-2140 Fax (403)734-3938



Foster, Norman R. / Beaverlodge / (780) 354-2107 Galloway Seeds Ltd. / Fort Saskatchewan / (780) 998-3036 Hadway, W. Tom & Carol / Didsbury / (403) 335-4929			C C
Jackson, Thomas / Killam / (780) 385-2332			С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240			C
Meinczinger, Matthew Jr. / Busby / (780) 349-2456			O
Nanninga, Justin / Neerlandia / (780) 674-3822			
Nisbet, Andrew E. & Diane E. / Bowden / (403) 224-3788		F	С
Radke, Bryan Victor / Barrhead / (780) 674-5715		F	•
Thompson, M. Ellwood & Kelly / Innisfail / (403) 728-3535			С
Victoor, Rene & Jamie / Sturgeon County / (780) 459-3253		F	С
Webber, Curtis / Stony Plain / (780) 963-6897			С
Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928			С
AC MEENA			
BI: AAFC (Lethbridge), Dist: Haney Farms			
Murdoch, Jody / Fort Steele / (250) 489-2339			
Saari, Sue / Cranbrook / (250) 421-0874			
AC SPLENDOR			
BI: AAFC (Winnipeg), Dist: SeCan Members			_
Sand, Ron W. & David R. / McLaughlin / (780) 745-2251 <b>ALVENA</b>			С
BI: Semiarid Prairie Agricultural Research Centre,			
Dist: SeCan Members			
Wagner, Terry & Loree / Lacombe / (403) 782-2107			С
Webber, John D.J. / Berwyn / (780) 338-3657			C
CARBERRY			0
BI: N/A, Dist: SeCan Members			
Benci, Dennis / Carmangay / (403) 643-2294			С
Card, Gordon B. / Magrath / (403) 758-3444			С
Chin Ridge Seeds Ltd. / Taber / (403) 223-3900			С
Corns, Bryan & Gary / Grassy Lake / (403) 655-2464			С
Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151			С
Dovichak, Michael / Brooks / (403) 501-5420			
Dyck, Heinz W. & Colin & Alan / Rosemary / (403) 378-3321		F	
Eliason, Bruce W. / Wrentham / (403) 222-2258			С
Feenstra, Lloyd / Barons / (403) 757-3737			С
Haney Farms (1985) Limited / Picture Butte / (403) 738-4517			С

Huvenaars, John & Lisa / Hays / (403) 725-2126				С
Jonk, Nicholas / Westlock / (780) 349-5458			R	
Kopjar, Gerald M. / Rowley / (403) 368-2409	S		R	
Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736				C
Peters, Edward W. / Didsbury / (403) 335-4506			R	
Pizzey, J. David / Canmore / (403) 609-3588			R	
Stamp, Richard, M., Greg & Nathan / Enchant / (403) 739-2233				C
Strain, Arthur George / Foremost / (403) 867-2227	S			
Templeton, Doran / Lethbridge / (403) 345-4144				С
Van Roessel, William & Jean / Bow Island / (403) 545-6018			R	С
Welsh, Donald Alan / Milk River / (403) 647-2228				С
Welsh, Stuart Jason / Milk River / (403) 647-2228				C
Witdouck, Dale & Calvin / Iron Springs / (403) 738-4395				С
CARDALE				
BI: AAFC (Winnipeg), Dist: Seed Depot		_		
Van Roessel, William & Jean / Bow Island / (403) 545-6018		F		
CDC ABOUND				
BI: CDC, Dist: Viterra				0
Krywko, Edward W. & Ron / Morinville / (780) 939-2166		_	D	C
Viterra / Regina / (306) 569-5027 CDC GO		F	R	U
BI: CDC, Dist: Public				
Chin Ridge Seeds Ltd. / Taber / (403) 223-3900				С
Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151	S			С
Crop Production Services Canada / Didsbury / (403) 335-3055	U			C
Dovichak, Michael / Brooks / (403) 501-5420				C
Dyck, Heinz W. & Colin & Alan / Rosemary / (403) 378-3321			R	Ü
Ellis, Brian / Olds / (403) 556-2890			R	С
Feenstra, Lloyd / Barons / (403) 757-3737				C
Hadway, Walter Thomas / Didsbury / (403) 335-4929				C
Hoff, Peter Edward / Gleichen / (403) 734-2140				C
Holmen, Jonathan W. & Carson R. / Rosedale / (403) 823-9296				C
Kaun, David E. / Penhold / (403) 886-4562			R	C
Kemp, Richard L. / Innisfail / (403) 227-4836				C
King, Harold F. / Three Hills / (403) 443-7330				C
Limoges, Marcel / McLennan / (780) 324-3024				C
Mac Farguhar, Bill / Cremona / (403) 337-2910				C
4 / /				_





Clive, AB TOC 0Y0 P: 403-784-3777 E: cliveseed@platinum.ca F: 403-784-3776

# Markert Seeds Ltd.

P.O. Box 1150 Vulcan, AB T0L 2B0 Phone/Fax: 403.485.6708 info@markertseeds.com | www.markertseeds.com

# Quality

Three generations of producing superior pedigree seed.

## Service

The knowledge and support to help you get the most out of your seed.



# Dependability

Helping your business grow with our years of experience.



Celebrating 60 Years Serving the Pedigree Seed Industry



Markert Seeds Ltd. / Vulcan / (403) 485-6708		F	R	
Mastin, Robert B. / Sundre / (403) 556-2609	S		R	
Metzger, Don / Three Hills / (403) 572-3284			R	С
Murray, Bruce / Lethbridge / (403) 327-9389		F	R	
Nisbet, Andrew E. & Diane E. / Bowden / (403) 224-3788		F		
Page, Dan / Didsbury / (403) 335-4563				С
Penner, Larry / Three Hills / (403) 443-7212				С
Richard, Gerald / Spirit River / (780) 864-2339				С
Schmermund, Donnie / Calahoo / (780) 967-2850		F	R	С
Sich, Louis John & Ivan / Trochu / (403) 442-2112				С
Smith, Miles A. / Trochu / (403) 442-2693				С
Templeton, Doran / Lethbridge / (403) 345-4144				С
Weigum, Garry / Three Hills / (403) 443-2476				С
Witdouck, Dale & Calvin / Iron Springs / (403) 738-4395				C
CDC IMAGINE				Ü
BI: CDC, Dist: Viterra				
Logan, Glenn C., Marie & Douglas / Lomond / (403) 792-3696	S			
CDC NRG003				
BI: CDC, Dist: Canterra Seeds				
Kapitski, Lawrence / Andrew / (780) 365-2134			R	С
Laliberte, Adam & Vos, Henry / Fairview / (780) 835-5286			R	С
CDC PLENTIFUL				
BI: CDC, Dist: FP Genetics				
Andersen, B.W. / Kitscoty / (780) 847-2022			R	
Galloway, James D. & Peter / Fort Saskatchewan / (780) 998-3036	S			
CDC STANLEY				
BI: CDC, Dist: Viterra				
Jacula, Dean S. & Shawn D. / Vermilion / (780) 853-7333			R	
Viterra / Regina / (306) 569-5027	S	F	R	С
CDC THRIVE				
BI: CDC, Dist: Cargill Ltd.				
Cameron, Danny / Millet / (780) 387-5313		F		
CDC VR MORRIS				
BI: CDC, Dist: Viterra	. 1			
Viterra / Regina / (306) 569-5027	S		R	
HARVEST				
BI: AAFC (Winnipeg), Dist: FP Genetics				
Andersen, B.W. / Kitscoty / (780) 847-2022				С

Benci, Dennis / Carmangay / (403) 643-2294			R	
Crop Production Services Canada / Didsbury / (403) 335-3055				С
Dalton, Dennis / Wainwright / (780) 842-2361				С
Galloway Seeds Ltd. / Fort Saskatchewan / (780) 998-3036			R	С
Kapitski, Lawrence / Andrew / (780) 365-2134				С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240				С
Sim, Darwin & Derek / Ponoka / (780) 372-2111				С
Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358			R	С
Tomlinson, Chelsea / Redwater / (780) 777-5885			R	
Victoor, Rene & Jamie / Sturgeon County / (780) 459-3253		F	R	С
Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928	S	F	R	
ILLIAN  BLANES (Swift Surrent) Bist SeSen Members				
BI: AAFC (Swift Current), Dist: SeCan Members Chin Ridge Seeds Ltd. / Taber / (403) 223-3900				С
Corns, Bryan & Gary / Grassy Lake / (403) 655-2464				C
Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151				C
Hierath, Michael Wayne & Philip / Milk River / (403) 647-2347			R	C
Kiffiak, Edwin H. & Nathan J. / Foremost / (403) 867-2338			11	C
Strain, Arthur George / Foremost / (403) 867-2227				C
Welsh, Donald Alan / Milk River / (403) 647-2228				C
Willms, Kevin J. / Grassy Lake / (403) 655-2450	S	F	R	U
MINNEDOSA	Ü	ľ		
BI: AAFC (Winnipeg), Dist: SeCan Members				
Kopiar, Gerald M. / Rowley / (403) 368-2409			R	
IUCHMORE				
BI: AAFC (Swift Current), Dist: FP Genetics				
Airth, Jock & Linda / Brooks / (403) 362-4372			R	
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240			R	
Massey, Derwin / Stettler / (403) 883-2503			R	
Thompson, M. Ellwood & Kelly / Innisfail / (403) 728-3535			R	
IRG010				
BI: AAFC (Swift Current), Dist: Canterra Seeds			_	
Plante, Jacques / St. Paul / (780) 645-4604			R	
Sendziak, Don P. & Stephen / Edmonton / (780) 434-1322	S		R	
ARK				
BI: N/A, Dist: N/A Lyster, Norman / Stettler / (403) 742-4456				С
Lystol, Norman / Stettlet / (403) / 42-4430				U

# Got Ergot or Fusarium? How about Barley in your Wheat?

# Big Problems, We Have Three Solutions

Make the best of a bad situation and make money at the same time





PRODUCERS & RETAILERS OF PEDIGREED SEED CUSTOM POLLINATORS FOR CANOLA & ALFALFA SEED

**Dale Witdouck** Office: (403) 738-4395 Iron Springs, Alberta Email: dale@witdouckfarms.com

www.witdouckfarms.com



R.R. #1 Innisfail, AB **Ellwood: Kelly:** 

728-3131 728-3858

FAX: 403-728-3303 **OFFICE: 403-728-3535** 







FP-GENETICS

PASTEUR				
BI: N/A, Dist: SeCan Members				
Chin Ridge Seeds Ltd. / Taber / (403) 223-3900	S			
Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151	S			
Holmstrom, Darrell & Barbara / Killam / (780) 385-3574	S			
SADASH				
BI: AAFC (Lethbridge), Dist: SeCan Members				
Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151	S		R	C
Gibson, Donald / Sangudo / (780) 785-2214				С
Haney Farms (1985) Limited / Picture Butte / (403) 738-4517			R	
Huvenaars, Carl / Hays / (403) 725-2213			R	С
Laird, Patrick R. / Paradise Valley / (780) 745-2379				С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240				С
Sand, Ron W. & David R. / McLaughlin / (780) 745-2251				С
Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434			R	
Witdouck, Dale & Calvin / Iron Springs / (403) 738-4395			R	
Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928				С
SNOWBIRD				
BI: AAFC (Winnipeg), Dist: FP Genetics				
Lefsrud, Kevin J. & Edmund J. / Viking / (780) 336-2500			R	
SNOWSTAR				
BI: AAFC (Winnipeg), Dist: SeCan Members				
Benci, Dennis / Carmangay / (403) 643-2294	S		R	
Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736			R	
STETTLER				
BI: AAFC (Winnipeg), Dist: SeCan Members				
Andersen, B.W. / Kitscoty / (780) 847-2022				C
Archer, Charles Darrel / Wetaskiwin / (780) 352-3179				С
Baier, Bill & Dean / Clyde / (780) 348-5791	S	F	R	
Benci, Dennis / Carmangay / (403) 643-2294				С
Cameron, Danny / Millet / (780) 387-5313			R	С
Clark, Todd / Edmonton / (780) 472-6308				С
Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151				С
Crop Production Services Canada / Didsbury / (403) 335-3055				С
Cyre, Clifford & Greg / Barrhead / (780) 349-4775	S	F	R	С
Dallas, Bradley C. / Bowden / (403) 224-2162				С
Davidson, E. Daryl & Dean / Kitscoty / (780) 846-2456				С

Foster, Norman R. / Beaverlodge / (780) 354-2107				С
Galloway, James D. & Peter / Fort Saskatchewan / (780) 998-3036			R	С
Hadway, W. Tom & Carol / Didsbury / (403) 335-4929			R	
Harris, William P., Linda, Thomas & A. / Beaverlodge / (780) 354-282	23 S	F		С
Hoff, Peter Edward / Gleichen / (403) 734-2140			R	С
Huvenaars, Richard / Hays / (403) 725-2213				С
Jackson, Thomas / Killam / (780) 385-2332				С
Jensen, Albert / Drumheller / (403) 823-9976				С
Kapitski, Lawrence / Andrew / (780) 365-2134				С
Kittle, James W. & Andrew / Viking / (780) 336-2583			R	С
Klassen, Ken / Rosemary / (403) 378-4408				С
Kopjar, Gerald M. / Rowley / (403) 368-2409			R	С
Kotowich, Paul & Dennis / St.Paul / (780) 645-2535				С
Laliberte, Adam & Vos, Henry / Fairview / (780) 835-5286				С
Limoges, Marcel / McLennan / (780) 324-3024				С
Lopushinsky, Julian / Bruderheim / (780) 796-2048			R	С
Macyk, Don / Waskatenau / (780) 358-2411				С
Massey, Derwin / Stettler / (403) 883-2503				С
M°Donald, Gerald / Grande Prairie / (780) 538-3868				С
Metzger, Don / Three Hills / (403) 572-3284				С
Miller, Brian / Barrhead / (780) 674-5001				С
Mueller, Darcy / Three Hills / (403) 820-4115				С
Nemetz, Charlie, Jerritt, Lewis & B. / Stettler / (403) 742-0436				C
Oatway, Ward / Lacombe / (403) 784-3418		F	R	
Pare, Raymond A. / Wainwright / (780) 842-2073	S	F		С
Penner, Larry / Three Hills / (403) 443-7212			R	С
Persely, Edward & Shirley / Bonnyville / (780) 826-2992				C
Peters, Edward W. / Didsbury / (403) 335-4506				C
Sand, Ron W. & David R. / M <sup>o</sup> Laughlin / (780) 745-2251			R	C
Sekulic, John Jr. / Rycroft / (780) 765-2280				C
Sekulic, Warren, F / Rycroft / (780) 765-2234				C
Sendziak, Don P. & Stephen / Edmonton / (780) 434-1322				C
Sim, Darwin & Derek / Ponoka / (780) 372-2111				C
Trueblood, Brian G. / Dapp / (780) 954-3745			R	
Van Roessel, William & Jean / Bow Island / (403) 545-6018			-11	С
Victoor, Rene & Jamie / Sturgeon County / (780) 459-3253			R	0
Wagner, Terry & Loree / Lacombe / (403) 782-2107			п	C
vvagnen, renny & Luice / Labunnue / (403) / 02-210/				U

# **Sexsmith Co-operative** Seed Cleaning Association Ltd.

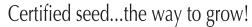
Your complete cleaning and treating facility Agents for pulse crops and producer car loading





Box 253 Sexemith ABTOH 3CO Toll Free 1-888-568-4940 Phone: (780) 568-3970 Fax: (780) 568-3964 email: sacp@telus.net Manager: Sheldon Shura





# COLICK EEDS LTD.



Bayer 💮

SeCan



WESTEEL



Len or Kelsey Box 97 Halkirk, AB TOC 1M0

Ph. (403) 884-2358 Fax: (403) 884-2360 (L) Cell (403) 323-0317 (K) Cell (403) 323-0315



Since the early 1900's, Wheatcrest has been centered around agriculture and being good stewards of the land in the southern Alberta area. From these beginnings, we have grown into the operation that we are today specializing in the production and processing of pedigreed seed.



Glenn & Marie, Douglas & Heather Logan Box 249, Lomond, AB TOL 1G0

Phone (403) 792-3696 | Fax (403) 792-3397 www.wheatcrest.com | e-mail: seed@wheatcrest.com





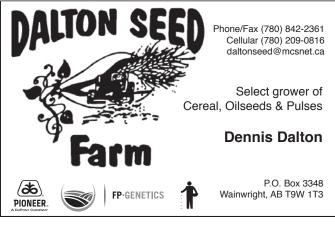


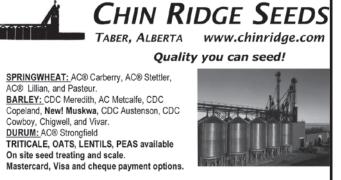


Warkentin, Harold K. & Errol / Tofield / (780) 662-2617     Weigum, Garry / Three Hills / (403) 443-2476     Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434     Witdouck, Dale & Calvin / Iron Springs / (403) 738-4395     Wuthrich, David / Cecil Lake / (250) 781-3527     Zwack, Bryan / Daysland / (780) 374-3577     Zwack, Thomas / Daysland / (780) 374-2450     SUPERB BI: AAFC (Winnipeg), Dist: SeCan Members     Jones, Danny / Beaverlodge / (780) 354-8089     Syy985 BI: Syngenta Seeds Canada, Dist: Viterra     Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268     Syngenta Canada Inc. / Melfort / (306) 752-5397     WhiteHAWK BI: AAFC (Lacombe), Dist: SeCan Members     Benci, Dennis / Carmangay / (403) 643-2294     Markert Seeds Ltd. / Vulcan / (403) 485-6708     Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736     WR859 CL BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada     Syngenta Canada Inc. / Melfort / (306) 752-5397     S F R C     C C C C C C C C C C C C C C C C C					
Wuthrich, David / Cecil Lake / (250) 781-3527 Zwack, Bryan / Daysland / (780) 374-3577 Zwack, Thomas / Daysland / (780) 374-2450 SUPERB BI: AAFC (Winnipeg), Dist: SeCan Members Jones, Danny / Beaverlodge / (780) 354-8089 SY985 BI: Syngenta Seeds Canada, Dist: Viterra Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268 Syngenta Canada Inc. / Melfort / (306) 752-5397 Viterra / Regina / (306) 569-5027 WHITEHAWK BI: AAFC (Lacombe), Dist: SeCan Members Benci, Dennis / Carmangay / (403) 643-2294 Markert Seeds Ltd. / Vulcan / (403) 485-6708 Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736 WR859 CL BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada Syngenta Canada Inc. / Melfort / (306) 752-5397 S F R C  WHEAT - WINTER S F R C  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227 AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389 CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055	Weigum, Garry / Three Hills / (403) 443-2476 Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434			R	C C
BI: AAFC (Winnipeg), Dist: SeCan Members Jones, Danny / Beaverlodge / (780) 354-8089  SY985  BI: Syngenta Seeds Canada, Dist: Viterra Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268 Syngenta Canada Inc. / Melfort / (306) 752-5397 SFRC Viterra / Regina / (306) 569-5027  WHITEHAWK BI: AAFC (Lacombe), Dist: SeCan Members Benci, Dennis / Carmangay / (403) 643-2294 Markert Seeds Ltd. / Vulcan / (403) 485-6708 Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736  WR859 CL BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada Syngenta Canada Inc. / Melfort / (306) 752-5397 SFRC  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389 CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055	Wuthrich, David / Cecil Lake / (250) 781-3527 Zwack, Bryan / Daysland / (780) 374-3577				C C
Jones, Danny / Beaverlodge / (780) 354-8089  SY985  BI: Syngenta Seeds Canada, Dist: Viterra  Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268  Syngenta Canada Inc. / Melfort / (306) 752-5397  Viterra / Regina / (306) 569-5027  WHITEHAWK  BI: AAFC (Lacombe), Dist: SeCan Members  Benci, Dennis / Carmangay / (403) 643-2294  Markert Seeds Ltd. / Vulcan / (403) 485-6708  Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736  WR859 CL  BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada  Syngenta Canada Inc. / Melfort / (306) 752-5397  S F R C  WHEAT - WINTER  S F R C  AC BELLATRIX  BI: AAFC (Lethbridge), Dist: FP Genetics  Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST  BI: AAFC (Lethbridge), Dist: SeCan Members  Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO  BI: CDC, Dist: SeCan Members  Corns, Bryan & Gary / Grassy Lake / (403) 655-2464  Crop Production Services Canada / Didsbury / (403) 335-3055					
SY985 BI: Syngenta Seeds Canada, Dist: Viterra Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268 Syngenta Canada Inc. / Melfort / (306) 752-5397 S F R C Viterra / Regina / (306) 569-5027 WHITEHAWK BI: AAFC (Lacombe), Dist: SeCan Members Benci, Dennis / Carmangay / (403) 643-2294 Markert Seeds Ltd. / Vulcan / (403) 485-6708 Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736 WR859 CL BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada Syngenta Canada Inc. / Melfort / (306) 752-5397 S F R C  WHEAT - WINTER S F R C  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227 AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389 CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055	· · · · · · · · · · · · · · · · · · ·				
BI: Syngenta Seeds Canada, Dist: Viterra Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268 Syngenta Canada Inc. / Melfort / (306) 752-5397 S F R C Viterra / Regina / (306) 569-5027 WHITEHAWK BI: AAFC (Lacombe), Dist: SeCan Members Benci, Dennis / Carmangay / (403) 643-2294 Markert Seeds Ltd. / Vulcan / (403) 485-6708 Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736 WR859 CL BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada Syngenta Canada Inc. / Melfort / (306) 752-5397 S F R C  WHEAT - WINTER S F R C  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227 AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389 CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055				R	
Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268  Syngenta Canada Inc. / Melfort / (306) 752-5397  Viterra / Regina / (306) 569-5027  WHITEHAWK  BI: AAFC (Lacombe), Dist: SeCan Members  Benci, Dennis / Carmangay / (403) 643-2294  Markert Seeds Ltd. / Vulcan / (403) 485-6708  Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736  WR859 CL  BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada  Syngenta Canada Inc. / Melfort / (306) 752-5397  S F R C  WHEAT - WINTER  S F R C  AC BELLATRIX  BI: AAFC (Lethbridge), Dist: FP Genetics  Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST  BI: AAFC (Lethbridge), Dist: SeCan Members  Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO  BI: CDC, Dist: SeCan Members  Corns, Bryan & Gary / Grassy Lake / (403) 655-2464  Crop Production Services Canada / Didsbury / (403) 335-3055					
Syngenta Canada Inc. / Melfort / (306) 752-5397  Viterra / Regina / (306) 569-5027  WHITEHAWK  BI: AAFC (Lacombe), Dist: SeCan Members  Benci, Dennis / Carmangay / (403) 643-2294  Markert Seeds Ltd. / Vulcan / (403) 485-6708  Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736  WR859 CL  BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada  Syngenta Canada Inc. / Melfort / (306) 752-5397  S F R C  WHEAT - WINTER  S F R C  AC BELLATRIX  BI: AAFC (Lethbridge), Dist: FP Genetics  Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST  BI: AAFC (Lethbridge), Dist: SeCan Members  Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO  BI: CDC, Dist: SeCan Members  Corns, Bryan & Gary / Grassy Lake / (403) 655-2464  Crop Production Services Canada / Didsbury / (403) 335-3055				R	
Viterra / Regina / (306) 569-5027  WHITEHAWK BI: AAFC (Lacombe), Dist: SeCan Members Benci, Dennis / Carmangay / (403) 643-2294 Markert Seeds Ltd. / Vulcan / (403) 485-6708 Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736  WR859 CL BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada Syngenta Canada Inc. / Melfort / (306) 752-5397  S F R C  WHEAT - WINTER  S F R C  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055		S	F		С
BI: AAFC (Lacombe), Dist: SeCan Members  Benci, Dennis / Carmangay / (403) 643-2294  Markert Seeds Ltd. / Vulcan / (403) 485-6708  Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736  WR859 CL  BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada Syngenta Canada Inc. / Melfort / (306) 752-5397  S F R C  WHEAT - WINTER  S F R C  AC BELLATRIX  BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST  BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO  BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055	, ,				
Benci, Dennis / Carmangay / (403) 643-2294  Markert Seeds Ltd. / Vulcan / (403) 485-6708  Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736  WR859 CL  BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada  Syngenta Canada Inc. / Melfort / (306) 752-5397  S F R C  WHEAT - WINTER  S F R C  AC BELLATRIX  BI: AAFC (Lethbridge), Dist: FP Genetics  Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST  BI: AAFC (Lethbridge), Dist: SeCan Members  Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO  BI: CDC, Dist: SeCan Members  Corns, Bryan & Gary / Grassy Lake / (403) 655-2464  Crop Production Services Canada / Didsbury / (403) 335-3055	WHITEHAWK				
Markert Seeds Ltd. / Vulcan / (403) 485-6708 Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736  WR859 CL BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada Syngenta Canada Inc. / Melfort / (306) 752-5397  S F R C  WHEAT - WINTER  S F R C  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055					
Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736  WR859 CL  BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada Syngenta Canada Inc. / Melfort / (306) 752-5397  S F R C  WHEAT - WINTER  S F R C  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055		S	F		С
WR859 CL BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada Syngenta Canada Inc. / Melfort / (306) 752-5397  S F R C  WHEAT - WINTER  S F R C  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055			_		_
BI: Syngenta Seeds Canada, Dist: Syngenta Seeds Canada Syngenta Canada Inc. / Melfort / (306) 752-5397  SFRC  WHEAT - WINTER  SFRC  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055			F	R	С
Syngenta Canada Inc. / Melfort / (306) 752-5397  SFRC  WHEAT - WINTER  SFRC  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055					
WHEAT - WINTER  S F R C  AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055		S	F	R	С
AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055	ojingonia odnada mo. / monort / (coo) / oz coo.	Ŭ	·		Ü
AC BELLATRIX BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055	WILLY WINTED				
BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055  C C	WHEAT - WINTER	S	F	R	С
BI: AAFC (Lethbridge), Dist: FP Genetics Strain, Arthur George / Foremost / (403) 867-2227  AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055  C C	AC RELLATRIX				
AC TEMPEST BI: AAFC (Lethbridge), Dist: SeCan Members Murray, Bruce / Lethbridge / (403) 327-9389  CDC BUTEO BI: CDC, Dist: SeCan Members  Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055  CS					
BI: AAFC (Lethbridge), Dist: SeCan Members  Murray, Bruce / Lethbridge / (403) 327-9389 S  CDC BUTEO  BI: CDC, Dist: SeCan Members  Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 C Crop Production Services Canada / Didsbury / (403) 335-3055 C	Strain, Arthur George / Foremost / (403) 867-2227				С
Murray, Bruce / Lethbridge / (403) 327-9389 S CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 C Crop Production Services Canada / Didsbury / (403) 335-3055 C					
CDC BUTEO BI: CDC, Dist: SeCan Members Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crop Production Services Canada / Didsbury / (403) 335-3055 C	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '				
BI: CDC, Dist: SeCan Members  Corns, Bryan & Gary / Grassy Lake / (403) 655-2464  Crop Production Services Canada / Didsbury / (403) 335-3055		S			
Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 C Crop Production Services Canada / Didsbury / (403) 335-3055 C					
Crop Production Services Canada / Didsbury / (403) 335-3055					C
	, , , , , , , , , , , , , , , , , , , ,				

**FLOURISH** BI: AAFC (Lethbridge), Dist: N/A S Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434 BI: CDC, Dist: SeCan Members S S SeCan Association / Kanata / (613) 592-8600 F Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434 RADIANT BI: AAFC (Lethbridge), Dist: Canterra Seeds Benci, Dennis / Carmangay / (403) 643-2294 С С Corns, Bryan & Gary / Grassy Lake / (403) 655-2464 Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151 С Galloway Seeds Ltd. / Fort Saskatchewan / (780) 998-3036 F С Hegland, David Olaf / Wembley / (780) 766-2450 Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736 C С Stamp, Richard, M., Greg & Nathan / Enchant / (403) 739-2233







Call us at 1-800-563-7333 or 403-223-3900

# CANOLA SEED DISTRIBUTORS

For additional canola varieties available for purchase and detailed variety information please contact these canola seed distributors.

BASF / 1-800-371- 2273 / www.agsolutions.ca Bayer CropScience / 1-888-283-6847 / www.bayercropscience.ca BrettYoung / 1-800-665-5015 /www.brettyoung.ca Canterra Seeds Ltd. / (204) 988-9750 / www.canterra.com Cargill Specialty Canola Oils / 1-800-323-6232 / www.victorycanola.com DEKALB Canada/Monsanto Canada Inc. / 1-800-667-4944 / www.DEKALB.ca DL Seeds / (204) 331-2361 / www.dlseeds.ca

Dow AgroSciences / 1-800-667-3852 / www.dowagro.ca Dupont Pioneer / 1-800-265-9435 / www.pioneer.com/canada FP Genetics / 1-877-791-1045 / www.fpgenetics.ca Mastin Seeds / (403) 556-2609 / www.mastinseeds.com SeCan / 1-800-764-5487/ www.secan.com Viterra / (306) 569-4448 / www.viterra.ca

#### ADDITIONAL RESOURCES:

Canola Council of Canada / 1-866-834-4378 / www.canolacouncil.org Alberta Agriculture and Rural Development / 310-FARM (3276) / www.agriculture.alberta.ca Alberta Canola Producers Commission / 1-800-551-6652 / www.canola.ab.ca

# **CANOLA - JUNCEA** S F R C CENTENNIAL BI: N/A. Dist: Viterra C Viterra / Regina / (306) 569-5027 OASIS CL BI: N/A, Dist: Viterra Viterra / Regina / (306) 569-5027 C



Box 327 Nobleford, AB Ph: (403) 824-3585 Fax: (403) 824-3900

Barley: Vivar, Harper, Chiqwell, CDC Austensen

Triticale: Pronghorn **Custom Forage Blends** Dual Mix/Triple Mix

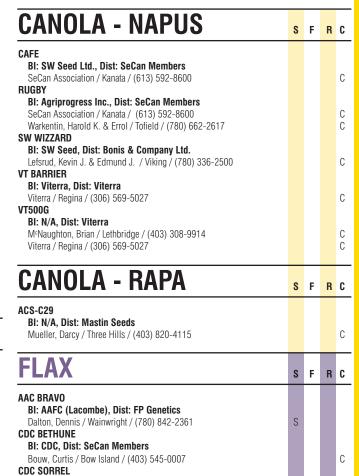














Corns, Bryan & Gary / Grassy Lake / (403) 655-2464

**Forages** Sorgum Sudan Siberian Hay Millet **Annual Grasses** Hay Barley

**Winter Silage Blends** Flax Sorrel

BI: CDC, Dist: SeCan Members

Ph. Bryan 403-655-2464 Ph. Gary 403-655-2339 Fax 403-655-2543

cornsbrothers@hotmail.com

Treating and Blending

**Winter Cereals Spring Cereals** Spring Wheat Lillian Carberry

Durum Winter Wheat Strongfield Triticale Tyndal, Pronghorn

Última Oats

Mustang, Morgan **Barley** Sundre

# SEED CLEANING CO-OP

Box 60, Warburg, Alberta TOC 2TO

# "FOR CLEANER SEED"

Seed Grain - Seperation - Dockage - Grass Seed Seed Treating – Grass Seeder Rentals Tarps – Pony Oats – and much more

MANAGER: Tom Luethi warburascp@lastmilesolutions.ca

PHONE: 780-848-2365 CELL: 780-945-6424

HOME: 780-696-2151 FAX: 780-848-2366



**Triticale** 

**Bobcat** 

Luoma

Buteo

Rve

Radiant

Reminaton

Metzger

# Anderson Seed Growers

Oats: AC Morgan Barley: Seebe, Busby, & Chigwell

Wheat: AC Foremost

Ken & Ev Anderson Phone: (780) 674-5670 Fax: (780) 674-6612 R.R.1 Barrhead AB T7N 1N2 asgseed@xplornet.com

Degenhardt, Keith, Terry Lee & Kerry / Hughenden / (780) 856-2383 Huvenaars, John & Lisa / Hays / (403) 725-2126 King, Harold F. / Three Hills / (403) 443-7330 Markert Seeds Ltd. / Vulcan / (403) 485-6708 Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736 Sendziak, Don P. & Stephen / Edmonton / (780) 434-1322 Sich, Louis John & Ivan / Trochu / (403) 442-2112  HANLEY BI: AAFC (Morden), Dist: SeCan Members Klassen, Ken / Rosemary / (403) 378-4408 Lefsrud, Kevin J. & Edmund J. / Viking / (780) 336-2500  PRAIRIE GRANDE BI: AAFC (Lacombe), Dist: SeCan Members Kopjar, Gerald M. / Rowley / (403) 368-2409  PRAIRIE SAPPHIRE BI: AAFC (Morden), Dist: Alliance Seed Corp. Crooymans, John, Joseph & Andrew / Bow Island / (403) 545-2151 Dovichak, Michael / Brooks / (403) 501-5420 Stamp, Richard, M., Greg & Nathan / Enchant / (403) 739-2233 Witdouck, Dale & Calvin / Iron Springs / (403) 738-4395	S	F	R	000000 0 00000	BI: Pioneer Hi-Bred, Dist: Pioneer Hi-Bred Pioneer Hi-Bred International Inc. / Lethbridge / (403) 327-6135  55V12 BI: N/A, Dist: Pioneer Hi-Bred Pioneer Hi-Bred International Inc. / Lethbridge / (403) 327-6135  55V48 BI: Pioneer Hi-Bred, Dist: Pioneer Hi-Bred Pioneer Hi-Bred International Inc. / Lethbridge / (403) 327-6135  ABLE BI: N/A, Dist: Pickseed Canada Inc. Pickseed Canada Inc. / Winnipeg / (204) 633-0088  AC GRAZELAND BR BI: AAFC (Saskatoon), Dist: Pickseed Canada Inc. Pickseed Canada Inc. / Winnipeg / (204) 633-0088  ACTIS BI: N/A Dist: La Co-op Federee BrettYoung / St. Norbert / (204) 261-7932  AKORI BI: N/A, Dist: Pickseed Canada Inc. Pickseed Canada Inc. / Winnipeg / (204) 633-0088		
ALFALFA	s	F	R	С	DALTON BI: AAFC, Dist: N/A Vanderstoel, Jeroen & Maureen / Enchant / (403) 654-2653	F	
2410 BI: N/A, Dist: BrettYoung Dairyland Seed Co. / Homedale / (208) 772-2465 3010 BI: N/A, Dist: BrettYoung BrettYoung / St. Norbert / (204) 261-7932 4010BR BI: N/A, Dist: BrettYoung BrettYoung / St. Norbert / (204) 261-7932 48417 BI: Dairyland Seed, Dist: N/A Dairyland Seed Co. / Homedale / (208) 772-2465				C C C	Particles of Secondary Manager (1998) 1984 2083  BI: Forage Genetics Int., Dist: Viterra  Forage Genetics International / Nampa / (208) 466-3568 Gold Medal Seeds Limited / Brooks / (403) 362-3444 Vanderstoel, Jeroen & Maureen / Enchant / (403) 654-2653 Viterra / Regina / (306) 569-5027  FORCE BI: N/A, Dist: Northstar Seed Ltd. Northstar Seed Ltd. / Neepawa / (204) 476-5241  GENEVA BI: Novartis, Dist: Viterra Pickseed Canada Inc. / Winnipeg / (204) 633-0088  GENOA BI: Forage Genetics Int., Dist: Pickseed Canada Inc. Pickseed Canada Inc. / Winnipeg / (204) 633-0088	F	





# SERVING THE COMMUNITY SINCE 1959

# **Processors of Pedigreed Seed for:**

Simco Seeds Echo Ridge Seeds

Knight's Seed Farm Jason Schultz

# Bill Sinclair

Office/Plant Manager

Box 418, Bashaw, Alberta T0B 0H0 Phone: (780) 372-3868 Fax: (780) 372-3068

Custom Treating | On-Site Sales | Portable and In Plant Optical Sorting Available



See our website for a full listing of seed varieties available:

www.seednet.ca

When you want seed you can count on.... Count on SeedNet Buy from people you know and trust .. Farmers helping farmers

C

С

C

С

С

C

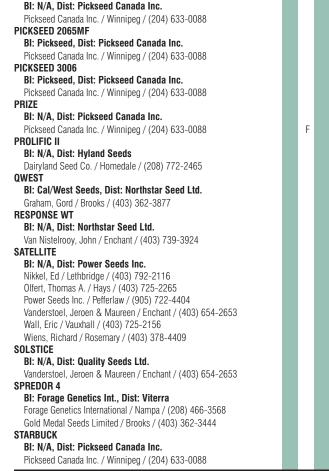
С

C

C

C

**GIBRALTAR** BI: Pickseed, Dist: Pickseed Canada Inc. С Pickseed Canada Inc. / Winnipeg / (204) 633-0088 HALO BI: N/A, Dist: Viterra Forage Genetics International / Nampa / (208) 466-3568 С HAYGRAZER BI: Great Plains Research Co., Dist: Northstar Seed Ltd. С Northstar Seed Ltd. / Neepawa / (204) 476-5241 **LEADER** BI: N/A, Dist: Pickseed Canada Inc. Nikkel, Ed / Lethbridge / (403) 792-2116 F Pickseed Canada Inc. / Winnipeg / (204) 633-0088 F **LEGENDAIRY 5.0** BI: N/A, Dist: Agronomy Company of Canada Forage Genetics International / Nampa / (208) 466-3568 C Gold Medal Seeds Limited / Brooks / (403) 362-3444 С **LEXUS** BI: N/A, Dist: Quality Seeds Ltd. Northstar Seed Ltd. / Neepawa / (204) 476-5241 **MAGNUM VI WET** BI: Dairyland Research Intl. (Clinton), Dist: Seed-Link Inc. Dairyland Seed Co. / Homedale / (208) 772-2465 С Petersen, Donald / Tilley / (403) 377-2367 MARVEL BI: N/A, Dist: Quality Seeds Ltd. С Forage Genetics International / Nampa / (208) 466-3568 MASKA BI: AAFC, Dist: N/A Claassen, Louis & Maryden / Vaux Hall / (403) 654-4441 С Vanderstoel, Jeroen & Maureen / Enchant / (403) 654-2653 MEGAGRAZE (MAGNA551 = USA) BI: N/A, Dist: Quality Seeds Ltd. Dairyland Seed Co. / Homedale / (208) 772-2465 С Northstar Seed Ltd. / Neepawa / (204) 476-5241 С



PERFECT



Office: 403-739-2233 Box 3030

BI: N/A, Dist: Northstar Seed Ltd.

Northstar Seed Ltd. / Neepawa / (204) 476-5241

**MULTIPLIER 3** 

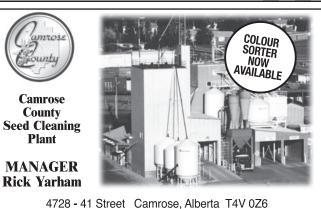
Enchant, AB, T0K 0V0 richard@stampseeds.com Rick: 403-634-1588 Greg: 403-634-1586



www.stampseeds.com

www.seednet.ca

С





26514A Twp Rd 534 Sturgeon County, Alberta **T8T 1K3** 



Rene (780) 459-3253 Jamie (780) 914-6027

# **Central Peace Seed Cleaning** Association Ltd.

Phone: (780) 672-2371 Fax: (780) 672-4997 Email: ryarham@county.camrose.ab.ca



Your One Stop Cleaning and Treating Facility for Cereal, Oilseeds and Pulse Crops

Box 369, RYCROFT, AB TOH 3A0

Email: cpsca@abnorth.com

**Curtis Boychuk** Manager Res: 780-774-2119



# **UFA Farm & Ranch Supply stores**

Airdrie	
Athabasca	1-877-675-4999
Brooks	1-877-590-3337
Camrose	1-888-672-9992
Claresholm	1-877-832-2667
Consort	1-888-300-1437
Drayton Valley	1-866-921-0313
Fairview	
Falher	1-866-837-2258
Fort Saskatchewan	1-800-661-6758
Grande Prairie	1-877-532-0252
Grimshaw	1-888-332-4633
Hanna	1-888-854-9747
High River	1-888-652-7317
La Crete	
Leduc	1-800-310-9886
Lethbridge	1-800-835-6932
Mayerthorpe	1-888-465-5655

Medicine Hat	1-800-737-9287
Olds	1-877-996-3348
Oyen	1-888-664-8848
Pincher Creek	
Ponoka	1-800-403-4485
Provost	
Red Deer	1-888-343-4490
Spruce Grove	
St. Paul	1-877-645-7702
Stettler	1-877-742-1551
Strathmore	
Taber	1-877-223-8917
Trochu	
Two Hills	1-888-684-5333
Vermilion	1-800-350-4843
Vulcan	1-888-485-1380
Westlock	1-888-300-1425

# **UFA Preferred Vendors**

# **InVigor**



InVigor® L120	DEKALB® 74-44 BL
InVigor® L130	DEKALB® 74-47 CR
InVigor® L135C	DEKALB® 73-75 RR
InVigor® L150	DEKALB® 73-15 RR
InVigor® 5440	DEKALB® 73-45 RR
	DEKALR® 72-65 RR



CANTERRA	1990
CANTERRA	1980
CANTERRA	1970
CANTERRA	1960
CANTERRA	1918



Nexera<sup>™</sup> 1012 RR Nexera™ 1016 RR Nexera<sup>™</sup> 2012 CL

For solutions that help you grow, you can depend on UFA.

The top Canola varieties are now available at your local UFA. Talk to us today and we'll help you make the best selections for your operation, so you can grow with confidence all season long.

Because a whole lot can grow from one good decision.







STEAK BI: Pickseed, Dist: Pickseed Canada Inc. Pickseed Canada Inc. / Winnipeg / (204) 633-0088 STEALTH SF BI: N/A, Dist: Quality Seeds Ltd. Northstar Seed Ltd. / Neepawa / (204) 476-5241 SUPER NOVA BI: Pickseed, Dist: Pickseed Canada Inc. Pickseed Canada Inc. / Winnipeg / (204) 633-0088 BI: N/A, Dist: Seed-Link Inc. BrettYoung / St. Norbert / (204) 261-7932 BI: N/A, Dist: Quality Seeds Ltd. Northstar Seed Ltd. / Neepawa / (204) 476-5241 VISION BI: N/A. Dist: Pickseed Canada Inc. Kolk, John / Iron Springs / (403) 738-4596 Pickseed Canada Inc. / Winnipeg / (204) 633-0088 **VR TOTAL** BI: N/A, Dist: Viterra Gold Medal Seeds Limited / Brooks / (403) 362-3444 WL 319H0 BI: N/A, Dist: N/A Forage Genetics International / Nampa / (208) 466-3568 **WL 348AP** BI: N/A, Dist: N/A Forage Genetics International / Nampa / (208) 466-3568 **WL 357HQ** BI: N/A, Dist: Growmark Inc. Forage Genetics International / Nampa / (208) 466-3568 Gold Medal Seeds Limited / Brooks / (403) 362-3444 BI: N/A, Dist: Quality Seeds Ltd. Forage Genetics International / Nampa / (208) 466-3568 WL343HQ BI: N/A, Dist: Growmark Inc.

WL353LH BI: N/A, Dist: Growmark Inc. Forage Genetics International / Nampa / (208) 466-3568 C Gold Medal Seeds Limited / Brooks / (403) 362-3444 C **BROMEGRASS** S F R C **AC KNOWLES** BI: AAFC (Saskatoon), Dist: Viterra Kerschbaumer, John A. / Fairview / (780) 835-4508 C. Vanderstoel, Jeroen & Maureen / Enchant / (403) 654-2653 C AC ROCKET BI: AAFC (Sainte-Foy), Dist: Viterra Noble, Robert / Manning / (780) 836-2337 C Viterra / Regina / (306) 569-5027 C BI: AAFC (Saskatoon), Dist: Public BrettYoung / St. Norbert / (204) 261-7927 C Dynamic Seeds Ltd. / Fairview / (780) 835-5435 С C Froese, Cornelius H. / La Crete / (780) 927-4645 Kerschbaumer, John A. / Fairview / (780) 835-4508 С С Lay, Dennis M. / Beaverlodge / (780) 354-8357 Mittelstadt, Mark Andrew / Fairview / (780) 835-3239 C Noble, Robert / Manning / (780) 836-2337 С Sallis, Gary / Manning / (780) 836-2381 C Shaw, Theron Harry / Fairview / (780) 835-0826 BI: AAFC (Saskatoon), Dist: SeCan Members BrettYoung / St. Norbert / (204) 261-7932 C Card, Gordon B. / Magrath / (403) 758-3444 C Froese, Cornelius H. / La Crete / (780) 927-4645 F С Hadland, Edward / Baldonnel / (250) 789-3646 Hostettler, Fritz / Bluesky / (780) 835-4761 C Kipke, Bob / Hines Creek / (780) 494-2260 С С Koester, Gordon / Rockyford / (403) 533-2248 С Van Garderen, Case / Picture Butte / (403) 738-4203 С Vanderstoel, Jeroen & Maureen / Enchant / (403) 654-2653



Forage Genetics International / Nampa / (208) 466-3568

Cleaning, treating and seed sales.

C

С

С

С

С

Distributor of Viterra Seed.

4710-40 Avenue, Wetaskiwin, Alberta T9A 0A2 Phone: 780-352-6212 Fax: 780-352-6219 E-mail: seedclean@incentre.net Toll free: 1-877-352-6212

# Boyle Seed Cleaning Co-op

Box 120 Boyle Alberta, T0A 0M0 Phone (780) 689-3941 Fax (780) 689-3091

Organic, Certified and Common Grain Grass Seed Cleaning Grass Seed Sold Common & Certified Plant Manager: George McKenzie



Sunshine Seeds Ltd. is a producer, processor and marketer of premium quality forage, native, turf and cereal seed located in southern Alberta.

Contact us today about your seed requirements! www.sunshineseeds.ca | P: (403) 758-3444 | F: (403) 758-3555 223055 Highway 5, Magrath, Alberta











MANCHAR BI: No Rep. Dist: N/A				
Kramer, Steve / Fairview / (780) 835-4494				С
Obrigewitch, Trevor / Fairview / (780) 835-4763				C
MONTĂNA				
BI: Montana State University, Dist: Viterra				
Pickseed Canada Inc. / Winnipeg / (204) 633-0088				С
CANARY GRASS	s	F	R	С
CDC TOGO				
BI: CDC, Dist: Canterra Seeds		_		
Kiffiak, Edwin H. & Nathan J. / Foremost / (403) 867-2338		F		
CICER MILKVETCH	s	F	R	С
ARC ASPEN	П			
BI: ARC, Dist: N/A				
Andersen, Terry / Bon Accord / (780) 921-3461				С
/ELDT BI: AAFC (Lethbridge), Dist: Viterra				
Vanderstoel, Jeroen & Maureen / Enchant / (403) 654-2653				С
CLOVER	s	F	R	C
AURORA				
BI: AAFC (Beaverlodge), Dist: BrettYoung				
BrettYoung / St. Norbert / (204) 261-7932		_		C
BrettYoung / Rycroft / (780) 765-3069 Dynamic Seeds Ltd. / Fairview / (780) 835-5435		F		С
Limoges, Daniel / Girouxville / (780) 833-1287				C
Moore Seed Processors Inc. / Debolt / (780) 957-3964				C







**Barrhead District Seed Cleaning Co-op Ltd.** 

Phone (780) 674-2569 Fax (780) 674-3701

Box 4408 Barrhead, Alberta T7N 1A3



				_
ORCHARDGRASS	S	F	R	С
KAY BI: AAFC (Ottawa) Dist: SeCan Members/Ken Long Seeds Card, Gordon B. / Magrath / (403) 758-3444				С
RYEGRASS	S	F	R	C
SWIFT BI: AAFC (Lethbridge), Dist: SeCan Members Card, Gordon B. / Magrath / (403) 758-3444 Whitney, David / Fairview / (780) 835-4897				C C
TIMOTHY	S	F	R	C
ALMA BI: Pickseed Canada Inc., Dist: ABT Canada Moore Seed Processors Inc. / Debolt / (780) 957-3964 ARLAKA BI: N/A, Dist: Pickseed Canada Inc. Pickseed Canada Inc. / Winnipeg / (204) 633-0088 Wood, Robert, Patricia & Marshall / Bowden / (403) 224-3928 AURORA BI: Mitsui Chemicals Inc., Dist: BrettYoung		F		C C
General Feed & Grain Inc. / Bonners Ferry / (208) 267-3185  BOTTNIA II  BI: Henri Malon Ltd., Dist: N/A  Viterra / Regina / (306) 569-5027  CLIMAX  BI: AAFC (Ottawa), Dist: Public				C
Heuston, Scott / Creston / (250) 428-7026  COMTAL  BI: N/A, Dist: Pickseed Canada Inc.  BrettYoung / Rycroft / (780) 765-3069  Moore Seed Processors Inc. / Debolt / (780) 957-3964  Pickseed Canada Inc. / Winnipeg / (204) 633-0088				C C C

DERBY				
BI: Growmark Inc., Dist: Growmark Inc.				
BrettYoung / Rycroft / (780) 765-3069				С
General Feed & Grain Inc. / Bonners Ferry / (208) 267-3185				С
PROMESSE BI: Growmark Inc., Dist: Growmark Inc.				
BrettYoung / Rycroft / (780) 765-3069				C
TENHO				0
BI: Parsons Seeds Ltd., Dist: N/A				
Moore Seed Processors Inc. / Debolt / (780) 957-3964		F		С
Skrlik, Perry / Nampa / (780) 322-2190				С
TILLER				
BI: N/A, Dist: Pickseed Canada Inc.				
Pickseed Canada Inc. / Winnipeg / (204) 633-0088				С
TITAN (LISCHKA IN GERMANY)				
BI: N/A, Dist: Northstar Seed Ltd.				
Northstar Seed Ltd. / Neepawa / (204) 476-5241				С
TUUKKA				
BI: Boreal Plant Breeding (Finland), Dist: BrettYoung Moore Seed Processors Inc. / Debolt / (780) 957-3964		F		C
Woole Seed Flocessors IIIc. / Debott / (100) 351-5304		1		U
WHEATGRASS	s	F	R	C
	s	F	R	С
WHEATGRASS  AC GOLIATH BI: Saskatoon Research Station, Dist: SeCan Members	S	F	R	С
AC GOLIATH	S	F	R	
AC GOLIATH BI: Saskatoon Research Station, Dist: SeCan Members	S	F	R	С
AC GOLIATH BI: Saskatoon Research Station, Dist: SeCan Members BrettYoung / St. Norbert / (204) 261-7932	S	F	R	С
AC GOLIATH BI: Saskatoon Research Station, Dist: SeCan Members BrettYoung / St. Norbert / (204) 261-7932 Schmitt, Cameron John / Milk River / (403) 647-2157	S	F	R	С
AC GOLIATH BI: Saskatoon Research Station, Dist: SeCan Members BrettYoung / St. Norbert / (204) 261-7932 Schmitt, Cameron John / Milk River / (403) 647-2157 AC SALTLANDER	S	F	R	C
AC GOLIATH BI: Saskatoon Research Station, Dist: SeCan Members BrettYoung / St. Norbert / (204) 261-7932 Schmitt, Cameron John / Milk River / (403) 647-2157 AC SALTLANDER BI: AAFC (Swift Current), Dist: N/A Miller, Kenneth F. / Milk River / (403) 647-2127 ADANAC	S	-	R	CCC
AC GOLIATH  BI: Saskatoon Research Station, Dist: SeCan Members BrettYoung / St. Norbert / (204) 261-7932 Schmitt, Cameron John / Milk River / (403) 647-2157  AC SALTLANDER BI: AAFC (Swift Current), Dist: N/A Miller, Kenneth F. / Milk River / (403) 647-2127  ADANAC BI: N/A, Dist: BrettYoung	S	-	R	C
AC GOLIATH  BI: Saskatoon Research Station, Dist: SeCan Members  BrettYoung / St. Norbert / (204) 261-7932  Schmitt, Cameron John / Milk River / (403) 647-2157  AC SALTLANDER  BI: AAFC (Swift Current), Dist: N/A  Miller, Kenneth F. / Milk River / (403) 647-2127  ADANAC  BI: N/A, Dist: BrettYoung  BrettYoung / St. Norbert / (204) 261-7932	S	-	R	C
AC GOLIATH BI: Saskatoon Research Station, Dist: SeCan Members BrettYoung / St. Norbert / (204) 261-7932 Schmitt, Cameron John / Milk River / (403) 647-2157 AC SALTLANDER BI: AAFC (Swift Current), Dist: N/A Miller, Kenneth F. / Milk River / (403) 647-2127 ADANAC BI: N/A, Dist: BrettYoung BrettYoung / St. Norbert / (204) 261-7932 AG-299 (AEC HILLCREST)	S	-	R	CCC
AC GOLIATH BI: Saskatoon Research Station, Dist: SeCan Members BrettYoung / St. Norbert / (204) 261-7932 Schmitt, Cameron John / Milk River / (403) 647-2157 AC SALTLANDER BI: AAFC (Swift Current), Dist: N/A Miller, Kenneth F. / Milk River / (403) 647-2127 ADANAC BI: N/A, Dist: BrettYoung BrettYoung / St. Norbert / (204) 261-7932 AG-299 (AEC HILLCREST) BI: N/A, Dist: N/A	S	-	R	CCC
AC GOLIATH BI: Saskatoon Research Station, Dist: SeCan Members BrettYoung / St. Norbert / (204) 261-7932 Schmitt, Cameron John / Milk River / (403) 647-2157 AC SALTLANDER BI: AAFC (Swift Current), Dist: N/A Miller, Kenneth F. / Milk River / (403) 647-2127 ADANAC BI: N/A, Dist: BrettYoung BrettYoung / St. Norbert / (204) 261-7932 AG-299 (AEC HILLCREST)	S	-	R	CCC
AC GOLIATH BI: Saskatoon Research Station, Dist: SeCan Members BrettYoung / St. Norbert / (204) 261-7932 Schmitt, Cameron John / Milk River / (403) 647-2157 AC SALTLANDER BI: AAFC (Swift Current), Dist: N/A Miller, Kenneth F. / Milk River / (403) 647-2127 ADANAC BI: N/A, Dist: BrettYoung BrettYoung / St. Norbert / (204) 261-7932 AG-299 (AEC HILLCREST) BI: N/A, Dist: N/A	S	-	R	CCC

# **Plante** Farms



- CDC Coalition Barley certified
- AC NRG 010 Wheat registered



(780) 645-4604

CELL (780) 614-0156

Jacques Plante • St. Paul, AB • Box 906 • T0A 3A0





Manager: Greg Andrews

PO Box 1235,

Three Hills, AB, TOM 2A0

Toll Free: (866) 443-5464 Ph: (403) 443-5464

Fax: (403) 443-5450

thscp@telusplanet.net



**Pedigreed Varieties:** 

Three Hills

& District

Seed Cleaning Plant Ltd.

Wheat: AC Stettler • AC Kane • AC NRG010 • Alikat

Barley: CDC Yorkton • Sundre • CDC Mayfair • Bentley • Merit-57 • CDC Austenson

Oats: Triactor • AC Morgan • CDC Seabiscuit

Peas: AC Thunderbird • CDC Patrick

Flax: CDC Sorrel





1024-112A St. NW Edmonton, AB T6J 6S1 Phone: 780-434-1322 Cell: 780-940-7566 Fax: 780-432-9363 Email: sendseed@telusplanet.net

Don/Krystyna & Stephen Sendziak

CLARKE BI: N/A, Dist: SeCan Members Weigum, Garry / Three Hills / (403) 443-2476 FAIRWAY				С
BI: U of S (Saskatoon), Dist: Public Whitney, David / Fairview / (780) 835-4897 KIRK				С
BI: AAFC (Saskatoon), Dist: SeCan Members Card, Gordon B. / Magrath / (403) 758-3444 Kerschbaumer, John A. / Fairview / (780) 835-4508 Swanson, Wray / Milk River / (403) 647-3998 NORDAN				C C
BI: George A. Rogler (Mandan), Dist: Public Schiebout, Everett H. / Barons / (403) 757-3757				С
WILDRYE	s	F	R	С
WILDCAT BI: N/A, Dist: BrettYoung BrettYoung / St. Norbert / (204) 261-7932				
CHICKPEAS - DESI	s	F	R	С
CDC EBONY BI: CDC, Dist: N/A Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434 CDC JADE	S			
BI: CDC, Dist: N/A Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434 CDC ALMA BI: CDC, Dist: N/A	S			

CHICKPEAS - KABULI	s	F	R	
CDC FRONTIER  BI: CDC, Dist: Sask. Pulse Growers  Kiffiak, Edwin H. & Nathan J. / Foremost / (403) 867-2338	S			
DCC LEADER BI: CDC, Dist: N/A Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434 CDC ORION	S	F		
BI: CDC, Dist: N/A Klempnauer, Joerg / Vauxhall / (403) 524-4705 Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434		F		
		_		T
FABA BEANS	s	F	R	
FABA BEANS  NOWBIRD  BI: Innoseeds B.V., Dist: Bob Park  Benci, Dennis / Carmangay / (403) 643-2294  Cyre, Clifford & Greg / Barrhead / (780) 349-4775  Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240	S	F	R R R	
BI: Innoseeds B.V., Dist: Bob Park Benci, Dennis / Carmangay / (403) 643-2294 Cyre, Clifford & Greg / Barrhead / (780) 349-4775	s	F	R	







SeCan

FP-GENETICS

Tel: (403) 883-2503 Fax: (403) 883-2800

Cell: (403) 741-6464 E-mail: djmassey@xplornet.com



- Select Growers & Seed Processors
- STETTLER · CDC GO
- CDC COPELAND AC METCALFE • CDC COWBOY • CDC MEREDITH
- CDC MEADOW PEAS CDC AUSTENSON AC FOREMOST CARBERRY

Tom & Carol Hadway & Family P.O. Box 544, Didsbury, Alberta T0M 0W0



Stettler, AB TOC 2LO

Box 534

# **Haralie Seed Farms**

Producers & Processors of Pedigreed Seed

**Harold and Natalie Warkentin Tofield** Phone & Fax: (780) 662-2617 Cell: (780) 405-8089

- Wheat AC Shaw VB, Superb, Stettler, AC Elsa, AC Unity VB
- Barley CDC Austenson, Chigwell, Gadsby, Ponoka, CDC Cowboy
- · Oats AC Morgan, AC Lu, AC Murphy
- Canola Fusion, Rugby, All BrettYoung Varieties
- Peas CDC Meadow, CDC Horizon, CDC Patrick
- Grass & Forage All BrettYoung Seed Varieties



LENTILS	s	F	R	С
CDC DAZIL				
BI: CDC, Dist: N/A Willms Henry & Timothy H / Grassy Lake / (403) 655-2434			R	
Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434 CDC IMAX			п	
BI: CDC, Dist: Sask. Pulse Growers			D	0
Kiffiak, Edwin H. & Nathan J. / Foremost / (403) 867-2338 CDC IMPOWER			R	С
BI: CDC, Dist: Sask. Pulse Growers				
Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434				С
CDC ROSIE BI: CDC, Dist: N/A				
Holmstrom, Darrell & Barbara / Killam / (780) 385-3574	S			
CDC SCARLET BI: CDC, Dist: N/A				
Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434	S			
MUSTARD	s	F	R	С
				_
AC PENNANT BI: N/A, Dist: N/A				
Viterra / Regina / (306) 569-5027				С
ANDANTE N/A Birth N/A				
BI: N/A, Dist: N/A Mercer, Lloyd, Connie & Ryan / Lethbridge / (403) 327-9736				С
Viterra / Regina / (306) 569-5027				С
PEAS	S	F	R	С
AAC PEACE RIVER				
BI: AAFC, Dist: FP Genetics		_		
Hadland, Edward / Baldonnel / (250) 789-3646 <b>ABARTH</b>	S	F		
BI: Limagrain, Dist: FP Genetics				
Dalton, Dennis / Wainwright / (780) 842-2361	S			
Sim, Darwin & Derek / Ponoka / (780) 372-2111 ARGUS	S			
BI: AAFC (Lacombe), Dist: SeCan Members			R	
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240				^
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240 Oatway, Ward / Lacombe / (403) 784-3418				С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240				С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240 Oatway, Ward / Lacombe / (403) 784-3418  CANSTAR BI: AAFC (Morden), Dist: Canseed (Canada) Ltd. Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595		F	R	С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240 Oatway, Ward / Lacombe / (403) 784-3418  CANSTAR BI: AAFC (Morden), Dist: Canseed (Canada) Ltd. Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595  CDC AMARILLO		F		С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240 Oatway, Ward / Lacombe / (403) 784-3418  CANSTAR BI: AAFC (Morden), Dist: Canseed (Canada) Ltd. Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595  CDC AMARILLO BI: CDC, Dist: N/A Van Roessel, William & Jean / Bow Island / (403) 545-6018	S	F		С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240 Oatway, Ward / Lacombe / (403) 784-3418  CANSTAR  BI: AAFC (Morden), Dist: Canseed (Canada) Ltd.  Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595  CDC AMARILLO  BI: CDC, Dist: N/A  Van Roessel, William & Jean / Bow Island / (403) 545-6018  CDC CENTENNIAL	S	F		С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240 Oatway, Ward / Lacombe / (403) 784-3418  CANSTAR BI: AAFC (Morden), Dist: Canseed (Canada) Ltd. Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595  CDC AMARILLO BI: CDC, Dist: N/A Van Roessel, William & Jean / Bow Island / (403) 545-6018  CDC CENTENNIAL BI: CDC, Dist: Sask. Pulse Growers	S	F		С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240 Oatway, Ward / Lacombe / (403) 784-3418  CANSTAR BI: AAFC (Morden), Dist: Canseed (Canada) Ltd. Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595  CDC AMARILLO BI: CDC, Dist: N/A Van Roessel, William & Jean / Bow Island / (403) 545-6018  CDC CENTENNIAL BI: CDC, Dist: Sask. Pulse Growers Jonk, Nicholas / Westlock / (780) 349-5458 Lefsrud, Kevin J. & Edmund J. / Viking / (780) 336-2500	S			C
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240 Oatway, Ward / Lacombe / (403) 784-3418  CANSTAR BI: AAFC (Morden), Dist: Canseed (Canada) Ltd. Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595  CDC AMARILLO BI: CDC, Dist: N/A Van Roessel, William & Jean / Bow Island / (403) 545-6018  CDC CENTENNIAL BI: CDC, Dist: Sask. Pulse Growers Jonk, Nicholas / Westlock / (780) 349-5458		F		

CDC DAKOTA				
BI: CDC, Dist: N/A Klempnauer, Joerg / Vauxhall / (403) 524-4705	S			
CDC GOLDEN				
BI: CDC, Dist: Sask. Pulse Growers				
Degenhardt, Keith, Terry Lee & Kerry / Hughenden / (780) 856-2383				С
CDC HORIZON				
BI: CDC, Dist: N/A				
Boles, Don / Three Hills / (403) 443-0123			R	
Foster, Norman R. / Beaverlodge / (780) 354-2107		_	R	
Hadland, Edward / Baldonnel / (250) 789-3646		F	R	
Warkentin, Harold K. & Errol / Tofield / (780) 662-2617	S	F	R	
CDC HORNET				
BI: CDC, Dist: N/A				0
Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358				С
CDC LEROY BI: CDC, Dist: N/A				
Jonk, Nicholas / Westlock / (780) 349-5458			R	
Klempnauer, Joerg / Vauxhall / (403) 524-4705	S		11	
Sim, Darwin & Derek / Ponoka / (780) 372-2111	J			С
CDC LIMERICK				U
BI: CDC, Dist: N/A				
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240	S			
Warkentin, Harold K. & Errol / Tofield / (780) 662-2617	S			
Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434	S			
CDC MEADOW				
BI: CDC, Dist: Sask. Pulse Growers				
Airth, Jock & Linda / Brooks / (403) 362-4372			R	
Andersen, B.W. / Kitscoty / (780) 847-2022				С
Benci, Dennis / Carmangay / (403) 643-2294	S	F		С
Bouw, Curtis / Bow Island / (403) 545-0007			R	
Crop Production Services Canada / Didsbury / (403) 335-3055				С
Cyre, Clifford & Greg / Barrhead / (780) 349-4775				С
Dallas, Bradley C. / Bowden / (403) 224-2162				С
Davidson, E. Daryl & Dean / Kitscoty / (780) 846-2456			R	С
Foster, Norman R. / Beaverlodge / (780) 354-2107				С
Gross, Bruno / Bow Island / (403) 545-6495				С
Hadland, Edward / Baldonnel / (250) 789-3646	S		R	С
Harbin, Clifford T. & Bruce C. / Rivercourse / (780) 745-2268			R	С
Hoff, Peter Edward / Gleichen / (403) 734-2140			R	_
Jacula, Dean S. & Shawn D. / Vermilion / (780) 853-7333				С
Kapitski, Lawrence / Andrew / (780) 365-2134			R	С
King, Harold F. / Three Hills / (403) 443-7330		_	R	С
Kittle, James W. & Andrew / Viking / (780) 336-2583		F		C
Kopjar, Gerald M. / Rowley / (403) 368-2409				С
Limoges, Marcel / M <sup>o</sup> Lennan / (780) 324-3024				С
Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240				С
Markert Seeds Ltd. / Vulcan / (403) 485-6708				C
Massey, Derwin / Stettler / (403) 883-2503	0	г		С
Mastin, Robert B. / Sundre / (403) 556-2609	S	F		0
Mattinson, Rodney William / Viking / (780) 336-2453				С
Meinczinger, Matthew Jr. / Busby / (780) 349-2456				C
Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595				C
Nemetz, Charlie, Jerritt, Lewis & B. / Stettler / (403) 742-0436				C
Page, Dan / Didsbury / (403) 335-4563				С



Picture Butte, AB Toll Free:877-738-4517 Fax: 403-738-4420 Email: shaney@haneyfarms.com WWW.HANEYFARMS.COM

Pedigreed Seed Since 1937











Cereals - Canola - Corn - Triticale Forages - Seed Treating

								_
Pare, Raymond A. / Wainwright / (780) 842-2073	S	F	R	BI: CDC, Dist: N/A				
Penner, Larry / Three Hills / (403) 443-7212			R	C Benci, Dennis / Carmangay / (403) 643-2294	S	F		
Peters, Edward W. / Didsbury / (403) 335-4506				Bouw, Curtis / Bow Island / (403) 545-0007	S			
Radke, Bryan Victor / Barrhead / (780) 674-5715	S	F	R		S			
Richard, Gerald / Spirit River / (780) 864-2339			R	Holmstrom, Darrell & Barbara / Killam / (780) 385-3574	S			
Richards, Cliff & Dan / Sexsmith / (780) 766-2266				C Kiffiak, Edwin H. & Nathan J. / Foremost / (403) 867-2338	S	F		
Sand, Ron W. & David R. / M <sup>o</sup> Laughlin / (780) 745-2251				C Kopjar, Gerald M. / Rowley / (403) 368-2409		F		
Shultz, Shawn / Didsbury / (403) 335-3694					S			
Sich, Louis John & Ivan / Trochu / (403) 442-2112					S	F		
Sim, Darwin & Derek / Ponoka / (780) 372-2111					S			
Smithers, Graydon / Three Hills / (403) 443-7737				C Webber, John D.J. / Berwyn / (780) 338-3657	F			
Thompson, M. Ellwood & Kelly / Innisfail / (403) 728-3535				C Welsh, Donald Alan / Milk River / (403) 647-2228	F			
Tomlinson, Chelsea / Redwater / (780) 777-5885			R	Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434	F			
Trueblood, Brian G. / Dapp / (780) 954-3745			11	C CDC TETRIS				
Van Roessel, William & Jean / Bow Island / (403) 545-6018				BI: CDC, Dist: N/A				
Warkentin, Harold K. & Errol / Tofield / (780) 662-2617				Cox, Donald C. / Fairview / (780) 835-2418	S			
Weigum, Garry / Three Hills / (403) 443-2476			R	Martin Daland D. (O. ada. ((400) EEC 0000	S	F		
Welsh, Donald Alan / Milk River / (403) 647-2228			11	Mueller, Richard J., R.R. & Rosemary / Barrhead / (780) 674-2595	S	F		
Welsh, Stuart Jason / Milk River / (403) 647-2228				Rewerts, Ken / Fairview / (780) 835-3474		F		
CDC PATRICK				Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434			R	
BI: CDC, Dist: N/A				COOPER				
Hegland, David Olaf / Wembley / (780) 766-2450				BI: Cebeco Zaden, Dist: Canterra Seeds				
Hill, Gordon P. / Taylor / (250) 789-3469				Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240				С
Howard, Fred / Wanham / (780) 694-2427				CUTLASS				
McDonald, Gerald / Grande Prairie / (780) 538-3868				BI: Cebeco Zaden, Dist: Canterra Seeds				
Penner, Larry / Three Hills / (403) 443-7212				Webber, John D.J. / Berwyn / (780) 338-3657				С
Thompson, M. Ellwood & Kelly / Innisfail / (403) 728-3535				GARDE				
Warkentin, Harold K. & Errol / Tofield / (780) 662-2617		F		BI: Innoseeds B.V., Dist: Bob Park				_
CDC PLUTO		ľ		Mueller, Darcy / Three Hills / (403) 820-4115				С
BI: CDC, Dist: N/A				SORENTO				
Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434		F		BI: Limagrain Nederland B.V., Dist: FP Genetics				С
CDC RAEZER				Dalton, Dennis / Wainwright / (780) 842-2361				C
BI: CDC, Dist: N/A				Galloway Seeds Ltd. / Fort Saskatchewan / (780) 998-3036 SW MIDAS				U
Holmstrom, Darrell & Barbara / Killam / (780) 385-3574	S			OW INITIANS				
Krywko, Edward W. & Ron / Morinville / (780) 939-2166	S							
Willms, Henry & Timothy H. / Grassy Lake / (403) 655-2434	S							
CDC SAFFRON								

# LEFSRUD SEED and PROCESSORS LTD. **ED, KEVIN and KYLA LEFSRUD**

# Certified, Registered and Foundation Seed **Cleaning and Treating**



R.R. #1 Viking, Alberta Tel & Fax (780) 336-2500 or (780) 336-2588 Cell: 336-5700 Kevin | 336-6700 Ed E-mail: lefsrud@telusplanet.net www.telusplanet.net/public/lefsrud



# John & Lisa Huvenaars

Box 144 Hays, Alberta T0K 1B0

Phone: 403-725-2126 E-mail: huvseed@cciwireless.ca

Farm is 9 km east of Hays on No. 524, then 1 km south



TF (800) 444-8961 P (780) 352-3240 F (780) 352-6943

RR#1, New Norway, Alberta, TOB 3L0 lindholmseed@xplornet.com



# Clifford & Lynda

Ph: (780) 745-2268 Fax: (780) 745-2218 Cell: (780) 808-3300

E-mail: harbin@telusplanet.net



FP-GENETICS

# Bruce & Joni

Ph: (780) 745-2462 Cell: (780) 872-8723

Cereals, Canola, Peas, Forage, Grass

BI: AAFC (Lacombe), Dist: FP Genetics

Andersen, B.W. / Kitscoty / (780) 847-2022

THUNDERBIRD

BI: AAFC (Lacombe), Dist: Canterra Seeds

Airth, Jock & Linda / Brooks / (403) 362-4372 Galloway Seeds Ltd. / Fort Saskatchewan / (780) 998-3036

Galloway, James D. & Peter / Fort Saskatchewan / (780) 998-3036

King, Harold F. / Three Hills / (403) 443-7330

Lindholm, Craig, Stevan, Dane & L. / New Norway / (780) 352-3240 Sendziak, Don P. & Stephen / Edmonton / (780) 434-1322

Solick, Leonard, Kelsey & Corwin / Halkirk / (403) 884-2358

R C

С

С

С

C

# Rosebud Seed Cleaning Co-op

"Your Complete Cleaning & Treating Facility" Manager: Lloyd Wells



# **Processors and Agents For:**

Gordara Seed Farms **R4 Seed Farms** Livingspring Seed Farms



Licensed with CSI

Box 664 Rosebud, AB T0J 2T0 Ph: (403) 677-2231 Fax: (403) 677-2200



Will & Jean Van Roessel

Box 490 Bow Island, AB T0K 0G0

PHONE/FAX: (403) 545-6018 E-MAIL: will@specialtyseeds.ca www.specialtyseeds.ca

Canterra SeCan BrettYoung



# MERCER SEEDS LTD.

Spring Wheat: Carberry HRSW, Snowstar HWSW

Flax: CDC Sorrel, CDC Sanctuary Barley: CDC Meredith

Yellow Peas: CDC Centennial Winter Wheat: Radiant Durum: CDC Verona, Enterprise

Lentils: Queen Green, King Red Mustard: Andante Yellow, Centennial Brown, Vulcan Oriental

Faba Beans: FB9-4

Ryan Mercer RR8-10-11

Lethbridge, AB. T1J 4P4

P: 403-327-9736 C: 403-308-2297

E: rmercer@mercerseeds.ca



# **GLD AGVentures**

Pedigree Seed Sales | Box 270 Andrew, AB TOB OCO Phone: (780) 365-3536 | Cell: (780) 945-6107 | Lawrence Kapitski (780) 365-2134

Roundup Ready® Liberty Link® and Clearfield® Canola Certified cereals and pulses, on farm scale.





BrettYoung.

PEAS: **CDC Meadows** Agassiz

WHEAT: Stettler Harvest CDC NRG 003 OATS: Triactor

**BARLEY** AC Metcalfe

\*Access to other varieties









# Lewis M. Carter is Proud to Announce The VISTASORT® Color Sorter.



# Visit our website for more of our fine products at lewismcarter.com



Lewis M. Carter Manufacturing (Canada) Ltd. 835-58<sup>th</sup> Street East, Saskatoon, SK S7K 6X5 Telephone: 306-242-9292 • Fax: 306-934-4840

Toll Free: 1-800-667-6924 • Email: Imc@lewismcarter.com





Pedigreed, Commercial, Birdseed & Milling Grains

# Harold & Jan King

RR2, Three Hills, AB T0M 2A0

(403) 443-7330

Fax (403) 443-7992 Harold Cell (403) 443-0005 Jan Cell (403) 443-0006



- ✓ Top Varieties
  - ✓ Lowest Royalties
    - ✓ Freedom from Annual Fees

# Western Canadian Seed Growers:

We are a small privately owned seed distribution company with farm roots. We have an excellent team of grower/retailers in Manitoba but are now looking to add to our team in Saskatchewan and Central-Northern Alberta.

Some of our varieties will work very well for you and your customers. . . but if not let's talk about what you need in new varieties.

For more information feel free to talk to our dealers, check out our website or give me a call

> - John M. Smith 204-825-2000

SEEDDEPOT.CA

# STAY ON TOP

of the Rapidly-Evolving Seed Industry with Germination Update

Germination Update is a must-read, bi-weekly newsletter delivered directly to your email or mobile device covering the latest news, views and breakthroughs in the Canadian seed industry.

Subscribe at Germination.ca





# Stronger start, Faster finish.

**PRIMER**, **STARTER**, and **FOLIAR** nutrition products from Omex promote vigorous seedling emergence, help larger roots develop earlier and improve plant health – getting your crop off to a stronger start and to the finish line faster.





# ALBERTA SEED GROWERS ADVERTISING IN THIS ISSUE OF ALBERTA SEED GUIDE.

GLD AgVentures / 780.365.3536 Ikapitski@mcsnet.ca / (94)

Anderson Seed Growers / 780.674.5670

asgseed@xplornet.com / (83)

Radke Pedigreed Seed Ltd. / 780.674.5715

moosecreek@xplornet.com/(72)

Rick's Pedigreed Seeds / 780.674.6713

rmueller@mcsnet.ca / (77)

Cyre Seed Farms Ltd. / 780.349.4775 gcyre@xplornet.com / (89)

#### **Bow Island**

Specialty Seeds Ltd. / 403.545.6018

will@specialtyseeds.ca / www.specialtyseeds.ca (94)

Tony Crooymans & Sons / 403.545.2151 johncrooymans@canopycanada.net / (72)

SeedNet Inc. / www.seednet.ca / (84)

#### Brooks

Airth Farms Ltd. / 403.362.4372 airthfarms@xplornet.com / (74)

#### Carmangay

Benci Seed Farms Inc. / 1.877.833.1801 dbenci@wildroseinternet.ca / www.benciseeds.ca (84)

Westway Farms Ltd. / 403.335.4929 westway@airenet.com / (91)

#### Edmonton

Sendziak Seed Farms / 780.434.1322 sendseed@telusplanet.net / (90)

#### **Enchant**

Stamp's Selected Seeds / 403.739.2233

richard@stampseeds.com / www.stampseeds.com / (85)

#### **Grassy Lake**

Corns Brothers Farm / 403.655.2464

cornsbrothers@hotmail.com / www.cornsbrothers.ca (83)

Willms / 403.655.2434 / tim@willmsseeds.com

#### Gleichen

Livingspring Farms Ltd. / 403.734.2140 peter@livingspringfarms.com / (78)

Solick Seeds / 403.884.2358 lsolick@wildroseinternet.ca/(81)

Huvenaars Seed Farms Ltd. / 403.725.2126 huvseed@cciwireless.ca / www.huvseed.com / (93)

Thompson Family Farms Ltd. / 403.728.3535 / (80)

## Iron Springs

Witdouck Farms / 403.738.4395

dale@witdouckfarms.com / www.witdouckfarms.com / (80)

# Lethbridge

Mercer Seeds Ltd. / 403.327.9736 rmercer@mercerseeds.ca / (94)

# Lomond

Wheatcrest Farms / 403.792.3696

seed@wheatcrest.com / www.wheatcrest.com / (81)

Sunshine Seeds Ltd. / 403.758.3444 www.sunshineseeds.ca / (88)

#### Marwayne

All In Farm Services / 780.847.2022 allinfarm@hmsinet.ca / (77)

#### Mossleigh

Parrish & Heimbecker / 403.534.3961 www.parrishandheimbecker.com / (71)



Haney Farms / 1.877.738.4517 shaney@haneyfarms.com / www.haneyfarms.com / (92)

# Rivercourse

Harbin Seed Farm Ltd. / 780.745.2268 www.telusplanet.net/public/harbin / (93)

#### Rosemary

Klassen Seeds Inc. / 403.378.4408 kenklass@live.ca / (94)

Echo Ridge Farm Inc. / 403.883.2503 djmassey@xplornet.com / (91)

# St. Albert

Victoor Seed Farm Inc. / 780.459.3253 vsf@airsurfer.ca / (85)

#### St. Paul

Plante Farms / 780.645.4604 jgplante@telusplanet.net / (90)

Knight's Seed / 403.784.3633 bgknight@platinum.ca / (74)

Chin Ridge Seeds / 1.800.563.7333 www.chinridge.com / (82)

#### Three Hills

King's Seed Farm Ltd. / 403.443.7330 / (96)

Haralie Seed Farms / 780.662.2617 haralie@hotmail.com / (91)

# Viking

Kittle Farms Ltd. / 780.336.2583 andrewkittle@hotmail.com / (79)

Lefsrud Seed & Processors Ltd. / 1.780.336.2500

lefsrud@telusplanet.net

www.telusplanet.net/public/lefsrud / (93)

#### Vulcan

Markert Seeds Ltd. / 403.485.6708

info@markertseeds.com / www.markertseeds.com (79)

# Wainwright

Dalton Seed Farm / 780.842.2361 daltonseed@mcsnet.ca / (82)



# SEED CLEANING PLANTS AND TREATING SERVICES IN YOUR COMMUNITY.

The Association of Alberta Co-op Seed Cleaning Plants is a group of locally operated co-operatives that offer valuable cleaning services for communities throughout Alberta and British Columbia. They were established through the joint efforts of the Province of Alberta and local municipal governments.

Farmers can get seed cleaned and treated at facilities across the province. Additional services available at several facilities include pulse processing, value processing, pedigreed seed processing, specialty processing, and seed inoculating, as well as seed and chemical sales.

# Location / ad page #

Alliance Alliance Seed Cleaning / 780.879.3927 / allianc@wildroseinternet.ca./ www.seed.ab.ca/plants/Alliance / (42)

Barrhead Barrhead District Seed Cleaning Co-op Ltd. / 780.674.2569 / barrseed@telus.net / (89)

Bashaw Bashaw Seed Cleaning Co-op Association Ltd. / 780.372.3868 / bashawscp@xplornet.com / www.seed.ab.ca/plants/Bashaw / (84)

Boyle Boyle Seed Cleaning Co-op Association Ltd. / 780.689.3941 / boyleseed@xplornet.ca / (88)

Camrose Camrose County Seed Cleaning Plant / 780.672.2371 / ryarham@county.camrose.ab.ca / www.county.camrose.ab.ca / (85)

Carstairs Mountain View Seed Cleaning Plant Ltd. / 403.337.3155 / mvscpl@hotmail.com / www.seed.ab.ca/plants/MountainView / (96)

Clive Clive Seed Cleaning Co-op / 403.784.3777 / cliveseed@platinum.ca / (79)

Coronation Coronation Seed Cleaning Co-op Ltd. / 403 578 3810 / coroseed@xplornet.com / seed.ab.ca/plants/coronation / (77)

Morinville Morinville Municipal Seed Cleaning Co-op Ltd. / 780.939.4021 / mscp@telusplanet.net / seed.ab.ca/plants/Morinville / (90)

Rosebud Rosebud Seed Cleaning Co-op Ltd. / 403.677.2231 / rosebudscp@rosebud.ca / www.rosebud.ca/(94)

**Rycroft** Central Peace Seed Cleaning Association / 780.765.3821 / cpsca@abnorth.com / www.seed.ab.ca/plants/Rycroft / (85)

Sexsmith Sexsmith Co-op Seed Cleaning Association Ltd. / 1.888.568.4940 / sscp@telus.net / www.seed.ab.ca/plants/Sexsmith / (81)

St. Paul St. Paul Municipal Seed Cleaning Association Ltd. / 780.645.3939 / ron.wirsta@stpaulseedcleaning.com / www.stpaulseedcleaning.com / (77)



Stony Plain Stony Plain Seed Cleaning Association Ltd. / 780.963.2581 / bperegrym@spseed.ca / www.spseed.ca / (89)

Three Hills Three Hills & District Seed Cleaning Plant Ltd. / 403.443.5464 / thscp@telusplanet.net / www.seed.ab.ca/plants/ThreeHills / (90)

Warburg Warburg Seed Cleaning Co-op Ltd. / 780.848.2365 / warburgscp@lastmilesolutions.ca / www.seed.ab.ca/plants/warburg / (83)

Wembley Wembley Co-op Seed Cleaning Association Ltd. / 780.766.2630 / wembleyseed@telus.net / (91)

Westlock Westlock Seed Cleaning Co-op Ltd. / 780.349.3944 / wscp@telus.net/ www.westlockseed.ca / (73)

Wetaskiwin Wetaskiwin Seed & Grain Co-operative Ltd. / 877.352.6212 / seedclean@incentre.net / www.seed.ab.ca/plants/Wetaskiwin / (88)



# **Robotic Weeding**

Blue River Technology, a pioneer in robotics and computer technology, is testing prototypes of its "Lettuce-Bot," an autonomous weed-seeking robot. The robot is designed to move up and down rows, identifying weeds using a combination of algorithms, and killing them one by one with a targeted injection of fertilizer. Celebrated as a possible future alternative to the use of herbicides, the Bot has potential for application on organic and chemical-free farms or large-scale operations, where efficiency is the watchword. The rolling weed-seeker uses computer vision technology to first identify plants and then to decide which plants in the row are lettuce and which are weeds—even when the plants' leaves are overlapping. "Our culture fosters extreme innovation aimed at real-world problems," said Jorge Heraud, co-founder and CEO of Blue River Technology, in a press release.

# **Remote-Controlled Irrigation**

India-based company Ossian Agro Automation has created a new remote-controlled GSM technology called Nano Ganesh, which allows the user to remotely turn irrigation pumps on and off from any distance, using either mobile phones or landlines. The farmer can also check on the availability of power supply at the pump, and with some models can even receive notification if the cable or pump is tampered with. How it works? A Nano Ganesh instrument is first connected to the farmer's system; to access it the farmer dials a number dedicated to the Nano Ganesh set and simply punches in a code. A benefit is the farmer doesn't have to purchase a new pumping set—the technology can be connected to existing electrical starters and motor pumps.



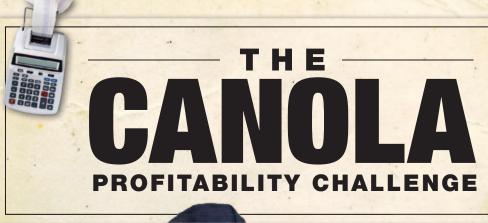


# **Portable Bio-Sensing**

A multidisciplinary team of researchers and scientists at the National Centre for Scientific Research in Athens, Greece, is developing FOODsniffer, a patented biosensor designed to detect infections, pesticide residues or toxins in agricultural crops. The system is also currently being tested for the detection of mycotoxins in grains. The tool is portable and easy to use, and results from the analysis are transmitted in real time to a cloudbased service. Information gleaned from the in-field analysis can be used either to address crop infections or to monitor pesticide residue prior to harvest.

# **Z-Trapping**

Spensa Technologies is testing prototypes of its "Z-Traps," unique automated units capable of monitoring insect populations in real time. Growers deploy several Z-traps in the field. Each trap monitors the number of insects it captures, and then the information from all traps is wirelessly transmitted to a base location. The aggregated information can then be accessed by growers via the Internet or smartphone. "Frequent and reliable monitoring of pest populations is one of the most fundamental components of IPM," states the company's website. "Spensa Z-Traps offer a novel and cost-effective IPM solution by automating the critical but labour-intensive task of monitoring insect populations."





The Chemical Company

We're not asking you to switch everything. But you do owe it to yourself to use the **Clearfield** Production System on some of your canola acres. In fact, we challenge you to compare it to your current system side-by-side. Because **Clearfield** may outperform what you're using now in terms of profitability – by \$25 more per acre according to field trials. With that in mind, this may not be much of a

The Profitability Calculator is a tool that automates calculations of values and is precise only to the extent of accuracy of all inputted values. Yield data is based on mid and long season testing only. Values shown are an example only. Values of inputs such as the costs of seed and crop protection products (including application rates and frequency) will vary over time, location and crop conditions. This tool may be unable to reflect the details of every user's experience and in such cases the resulting calculation may be invalid as a comparison of profitability for any particular individual.

## Always read and follow label directions.

challenge for us at all.





# Experience the complete picture with WR859 CL

You won't miss a single detail when you choose WR859 CL. You'll get higher protein, excellent yield and a very strong disease resistance package including the best rating for *Fusarium* head blight resistance available in a CWRS wheat variety. WR859 CL is only available at your Richardson Pioneer Ag Business Centre.

PIONEER® FOR THE SALE AND DISTRIBUTION OF SEED IS A REGISTERED TRADE-MARK OF PIONEER HI-BRED INTERNATIONAL, INC. AND IS USED UNDER LICENSE BY THE UNAFFILIATED COMPANY RICHARDSON PIONEER LIMITED.





Always read and follow label directions. The Syngenta logo is a trademark of a Syngenta Group Company. © 2012 Syngenta Canada Inc.

