LOSE LESS, MARKET MORE
Reducing risk factors for harvest losses

New John Deere W100 Series Windrowers

The all-new John Deere W100 Series Windrowers feature two 4-cylinder traction units: the 110-hp W110 and the 148-hp W150. They are compatible with a full line of interchangeable auger and draper head offerings. You can match the speed of the reels and belts to your ground speed with the header index, for picture-perfect windrows. And more than 45 inches (114cm) of underframe clearance keeps you going through tall crop.

The W110 and W150 windrowers are comfortable to operate and easy to service, too. Most daily service points are accessible from ground level on the right side of the engine. And, go from field to transport in seconds on the W150 with the standard-equipment reversible operator station, and a transport speed of 23 mph (37 km/h). To learn more, see your dealer today. Nothing Runs Like a Deere™.
THE EDITOR’S DESK
4  A year of challenges and new opportunities

ON OUR COVER
6  Lose less, market more

GROWING GLOBAL
11 Canola in Mexico – a country of opportunities
16 Feeding new waters
21 SPS – three simple letters for complex issues

IN THE FIELD
24 Seed selections
26 Farmer panel talks crop rotation
33 Diagnostic dilemmas

INDUSTRY UPDATE
37 The bottom line on policy changes

MARKET KNOW-HOW
41  Risk management for your crop marketing program

PROVINCIAL PERSPECTIVES
46  Alberta Canola Producers Commission
48  SaskCanola
50  Manitoba Canola Growers Association

HEALTHY LIVING
52  Recipe collections showcase canola oil’s benefits
54  Brownie Party Pops

Cover: Photo by Dave Reede

THE CANOLA DIGEST is a joint publication of the Alberta Canola Producers Commission (ACPC), SaskCanola, the Manitoba Canola Growers Association (MCGA) and the Canola Council of Canada.

CANADIAN POSTMASTER
Send address changes and undeliverable copies (covers only) to:
400 – 167 Lombard Avenue
Winnipeg, MB R3B 0T6

PRINTED IN CANADA
ISSN 0715-3651
Postage paid in Winnipeg, MB
Publication Mail Sales Agreement #40027283

CANADIAN POSTMASTER
Send address changes and undeliverable copies (covers only) to:
400 – 167 Lombard Avenue
Winnipeg, MB R3B 0T6

PRINTED IN CANADA
ISSN 0715-3651
Postage paid in Winnipeg, MB
Publication Mail Sales Agreement #40027283

THE CANOLA DIGEST
Maintaining and growing global markets is fundamental to the continued success of Canada’s canola industry. This issue focuses on efforts to expand export opportunities and tips to help you bring more canola to market.
For many growers, harvest was a disappointment. Heat, insects, disease and wind all conspired to reduce what most of us expected to be a record harvest. Canola Council of Canada agronomists are now reviewing the past crop year to find out what lessons can be drawn and carried forward to next year.

In our cover story, Lose Less, Market More, we take a look at one of the ways to reduce losses at harvest. In 2012, average losses of canola left behind in the field would be worth $500 million. As this article explains, a recent study may help you reduce your risk factors, giving you more canola to market and Canada more canola to export.

Also focused on harvest is SPS – Three Simple Letters for Complex Issues. As Manitoba grower Brian Chorney puts it, “One of the first things I do before spraying is to make sure I’ll be able to have the right pre-harvest interval.” In the second of a four-part series on market access, we explain how the time between spraying and cutting the crop is critical to keeping the export market doors open to Canadian canola.

With over 85 percent of our canola production going to export markets, our industry is always looking for new prospects. In Canola in Mexico – A Country of Opportunities, we examine how promoting canola oil’s health and culinary benefits is boosting Mexico’s interest in canola and establishing a foothold in this lucrative market.

In our regular feature of crop production challenges, Diagnostic Dilemmas, we profile a grower who found that none of the plants in one canola field seemed to be emerging. He didn’t think it was crusting because there had been a rain. So what was it? Read to find out.

And finally, you will notice that the Canola Performance Trials 2012 booklet is enclosed with this issue of Canola Digest. To make the most of this information, you may want to read Seed Selections, which offers great tips to help you navigate the information and make the best seed choices for your farm.

Enjoy the read! ●

Letters and comments are welcome: editor@canoladigest.ca
Across the prairies, DEKALB® brand 74-44 BL wins 71% of trials versus InVigor® L Series.

74-44 BL CONSISTENTLY OUT PERFORMS

2012 TRIAL WIN RATE

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

While no one wins them all, in FACT™ trials conducted by farmer co-operators, DEKALB won its fair share. Consistent yield performance under adverse conditions, that’s the complete package.

---

2012 YIELD COMPARISONS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L Series</td>
<td>40.6</td>
</tr>
<tr>
<td>74-44 BL</td>
<td>43.2</td>
</tr>
</tbody>
</table>

N = 55

2 YEAR YIELD COMPARISONS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L Series</td>
<td>42.8</td>
</tr>
<tr>
<td>74-44 BL</td>
<td>44.9</td>
</tr>
</tbody>
</table>

N = 67
Canola growers lose, on average, five to six percent of canola yield to shatter, pod drop and the harvest process. Some growers lose 10 percent or more. The average loss works out to 2 bu./ac. for a 40-bushel crop and 3 bu./ac. for a 60-bushel crop. These losses were confirmed in field surveys in 1999 and 2000 around Saskatoon, and in 2010, 2011 and 2012 across all three Prairie provinces.

Rob Gulden, associate professor in Plant Science at University of Manitoba, led both surveys. The first he did as a Ph.D. student at the University of Saskatchewan. The second survey, which wraps up this year and will have a final report later this winter, is funded through the Agriculture and Agri-Food Canada (AAFC) Canola-Flax Agri-Science Cluster program.

“Yields have increased in the past decade but the percentage of loss has stayed about the same,” says Gulden. With around 20 million acres of canola across the Prairies this year, losses add up to 40 million bushels – or more than $500 million – per year.

A 2-bushel loss will contribute 3,000 to 4,000 seeds per square metre, depending on seed size. “When I first started surveying back in 1999, I guessed that losses might be as high as 1,000 seeds per square metre,” says Gulden. “I wasn’t even close. It was a real eye opener. These losses are at least 20 times the seeding rate.”

WHAT FACTORS CONTRIBUTE TO HARVEST LOSSES?

“Total harvest losses in canola are a complex phenomenon that may begin as early as when the crop is planted,” says Gulden. “While losses cannot be eliminated entirely, measures to reduce the leading risk factors will help lower harvest losses.”

The risk factors are:

1. Maturity date. Later crops seem to have lower losses, as a percentage. Gulden does not know why that is, but it could be that conditions are cooler when swathing occurs, so pods may not be as brittle. Of course late crops also have a higher risk of frost damage and higher green seed, and also tend to have lower overall yield, so growers will want to balance risk factors.

2. Swath date. Swathing after 60 percent seed colour change tends to increase losses, given that early maturing pods will be quite ripe. An increase in overall seed size with later swathing, given that later seeds will fill more, can offset the losses, providing for a similar yield in the combine tank – but the losses are still happening.

3. Days to combine. Simply, the longer canola sits in the swath after it’s ready to combine, the higher losses will be. The crop gets more and more brittle, and the risk of wind damage escalates.

4. Stand density. More plants mean fewer branches, so these crops tend to mature more evenly. Even maturity

“Yields have increased in the past decade but the percentage of loss has stayed about the same.”

– Rob Gulden
makes it easier to pick the right time to swath. More plants can also provide a more knitted stand that doesn’t whip around as much in the wind.

5. Swath width. Wider swaths produce a thicker, denser windrow with fewer pods exposed to wind damage.

6. Farm size relative to manpower and equipment. Larger farms may have more canola fields ready to swath at the same time yet may not have the equipment and manpower to swath all canola at the best time.

7. Combine speed. Faster combining ground speed generally increases losses during the harvest process, and these losses can rise rapidly if the combine is overloaded. However, combine speed has to be balanced with days to combine. As Gulden calculates the data over the winter, he may be able to assign probabilities to these factors and rank them by importance.

Another factor with combine speed is how fast the combine attacks the windrow. “Growers get good at setting the back of the combine to reduce losses, but the front might be just as or even more important,” says Gulden. “Most of the losses likely occur at the header, and before that, in the swath.”

Combine brand is not a factor, he adds. The surveys included all major combine brands, and there were no clear differences.

The study found wide variation in losses from grower to grower, which underlines the message that degree of loss is within a grower’s control. Data from both studies found a range from three percent to greater than 10 percent loss.

Gulden has one grower in particular from his 1999-2000 surveys that had among the lowest losses both years.

### THE VACUUM METHOD: ARE THERE BETTER OPTIONS?

Rob Gulden leads a second AAFC-funded study to test methods to measure canola losses in the field. The vacuum method Gulden currently uses to assess losses is time consuming and subject to predation losses by insects, mice and birds.

Andrea Cavalieri, a post-doctoral fellow working with Gulden, is testing two other methods:

1. **Visual assessment of canola plants** – How many pods have shattered? How many pods are on the ground?

2. **Tray-based measurement** – Trays are slid between the rows to collect whatever drops.

Cavalieri will also use the vacuum method, and then compare all three systems.

The study is also comparing eight canola varieties (four hybrids and four open-pollinated) and also two stand densities (40 and 120 plants per square metre) for differences in pod retention and reduced shattering. “Some varieties shatter a lot, some are surprisingly good,” says Cavalieri.
He made an effort to keep losses low by taking his time at harvest, and he was really upset that his yield loss was still three percent, Gulden says. Gulden had to assure him that some loss will happen, and that three percent is about as low as can be expected.

At the other end of the spectrum, the grower with the highest losses each year had a lot of land, and was stretched. “He wasn’t swathing in a timely fashion and was combining way too fast,” says Gulden.

“Growers get good at setting the back of the combine to reduce losses, but the front might be just as or even more important.”

– Rob Gulden

Leo Gignac farms northeast of Prince Albert, Saskatchewan, and has participated in the 2010-2012 surveys. He straight combines all his canola. In general, the survey has found that losses do increase with straight combined canola, but Gignac says his losses for 2010 and 2011 are in line with swathed crops. “Swathed windrows face the danger of blowing around in the wind, especially this year,” he says. “I find that straight combined canola doesn’t get over dry, and if it’s thick, the wind won’t actually cause that much loss – as long as it’s combined when ready.”

Gignac started his 2012 canola harvest September 18, the day he was interviewed for this article, and needed about two weeks of good weather to finish.

HOW ARE LOSSES MEASURED?

Right after harvest, the research team randomly chooses three locations in each field. At each location, they mark off a line from the middle of one windrow to the middle of the next, representing the exact width of the cut. A 30 foot swath, for example, is nine metres. Within each square metre along that line, they vacuum up all loose material in a 25 by 25 cm area. Canola seed is then separated from all the chaff and dirt and whatever else is sucked up. “Separation requires a lot of steps and is a pretty tedious job,” says Gulden. He will have data from over 300 fields across the Prairies once the survey is complete.

Along with post-harvest vacuuming, Gulden’s team also puts out trays at the end of flowering and leaves them until after swathing to catch what falls during that period. Otherwise, if these seeds were left in the field for weeks waiting for the combine, birds and insects would eat up part of the losses. “We try to minimize predation losses by retrieving samples as quickly after swathing or combining as we can,” he says.

Growers fill in a survey questionnaire for each field, providing agronomic information and facts about how the field was harvested. This information will be used to explain the harvest loss data.

“The more fields we have, the more confidence we will have in the results, particularly in the factors and to what degree each contributes to yield losses. One of the challenges will be that many of the factors interact with each other, making it difficult to single out their contribution,” says Gulden. “Growers can then use this information, if they choose, to look at their harvest systems and find ways to reduce losses and put more of their crop in the bin.”

Jay Whetter is communications manager with the Canola Council of Canada. He is also editor of the free Canola Watch agronomy newsletter. To sign up, visit www.canolawatch.org and look for the sign up box down the right side of the home page.
Make Tracks this Fall with TIGER 90CR® Sulphur & Win Big!

Win big with optimum yields when you add TIGER 90CR® sulphur to your fall fertilizer program.

Adding TIGER 90CR® sulphur to your fall program improves sulphur fertilizer efficiency for your spring crops and enhances nitrogen and phosphorus uptake. And because TIGER 90CR™ sulphur is 90% plant food, it is the most concentrated form of sulphur fertilizer (covering 50–90 acres per ton).

So make tracks with TIGER 90CR® sulphur and win even better agronomic and economic results from your crops.

Enter to win an Arctic Cat ATV at www.MakeTracksWinBig.com

2012 “Make Tracks & Win Big” Sweepstakes

Summary Rules: No purchase necessary. Open to residents of the Continental US (except New York and Rhode Island) and Canada (except Quebec). Must be 18+ years (US) or age of majority (Canada) to enter. Sweepstakes runs from 9:00:01am ET July 15, 2012 through 11:59:59pm ET December 31, 2012. Enter online at www.MakeTracksWinBig.com. Limit one (1) entry per person. One (1) grand prize of a 2012 Arctic Cat Prowler XTZ 1000i (orange) (ARV: USD $15,599) and twenty (20) secondary prizes of an Arctic Cat jacket (ARV: USD $120) are available to be won. Odds of winning depend on the number of eligible entries received. Math skill-testing question required in Canada. Official rules available at www.MakeTracksWinBig.com.
Pod for pod, Cargill Specialty Canola will make you more money.

Choose Cargill Specialty Canola for premier, high-yielding hybrids—from VICTORY® and InVigor® Health—that generate unparalleled profits. And enjoy the convenience of a simple program that saves you time and hassle. Want the proof? Go to cargillspecialtycanola.com.
Efforts to promote canola oil’s health and culinary benefits are boosting Mexico’s interest in canola and establishing a foothold in this lucrative market.

Canola exports are big business for the Canadian economy, bringing in over $6 billion annually and representing 85 percent of Canada’s canola production. Mexico is Canada’s fourth largest canola market in the world and 30 percent of the Mexican vegetable oil market is now canola oil.

In a country where the leading causes of death are cardiovascular disease and diabetes, the potential market opportunity for canola oil is huge. Mexico has a population of 111 million people who consume a total of 2.1 million tonnes of vegetable oil a year. Canola oil, known for its health and culinary benefits, makes Mexico an ideal market. Canola oil is trans fat-free, cholesterol-free, and has the least amount of saturated fat of all primary cooking oils. It is also high in omega-3 fat and is a good source of vitamins E and K.

The canola industry is lucrative and beneficial for both Canada and Mexico, as imports generate more than $8.6 billion pesos ($700 million CAD) a year. Not only has the canola industry helped Mexico achieve better nutrition, it has also provided the country around 4,000 jobs.

Mexico is also one of the most important canola seed export destinations, purchasing about 1.4 million tonnes from Canada annually. There are several competitive canola oil brands in Mexico. Alimentos Capullo is one of the top recognized canola oil brands by consumers.

Alimentos Capullo, which belongs to the North American company ACH Food Companies Inc., has been in the Mexican market for 50 years and is one of the first branches that promoted health and especially heart health in Mexico. The canola market has grown significantly and Capullo is now faced with more than 60 competitors, all trying to establish themselves as the leading choice for consumers, while promoting the health and cooking benefits of canola.

**RAISING CONSUMER AWARENESS**

In 2009 CanolaInfo began a widespread marketing campaign in Mexico to establish canola as the top vegetable oil choice and create awareness of continued on page 12

**GROWING GLOBAL**

Awareness and known use of canola oil by Mexican consumers increased from nine percent in 2009 to 13 percent in 2012.
the benefits of using canola oil for consumers. The campaign focused on changing consumers’ consumption preferences and establishing the importance of good health and its relationship with canola oil.

“The two major challenges canola oil suppliers face are lack of awareness of what canola oil is and a lack of understanding of healthy fats versus unhealthy fats,” says Cory McArthur, vice president of market development for the Canola Council of Canada (CCC).

In March of 2012, The Nielsen Company surveyed 1,000 Mexican consumers to see how the CanolaInfo campaign has changed public opinion of health and canola oil. In part, due to efforts by companies such as ACH and the CanolaInfo campaign, awareness and known use of canola oil by consumers increased from nine percent in 2009 to 13 percent in 2012.

The type of oil has become more important to consumers since 2009, which is why Mauricio García de León, group marketing manager for Alimentos Capullo, says the company will not be changing their oil choice.

**MARKET CHALLENGES**

The 2008 economic crisis saw big changes for the Capullo brand as they switched from 100 percent canola oil to a mixed blend (25 percent canola oil and 75 percent soybean oil) to reduce the cost of the product. García heard from their customers that “consumers were contacting us and were not happy with the new product.” Therefore, in November 2011, Alimentos Capullo revitalized the brand, co-created an image with consumers, returned to market the product and build additional canola products, other than oil, to help build awareness,” says Garcia.

McArthur sees tremendous opportunity for the future of canola in the Mexican market. “In the last few years, Mexican interest in canola has continually increased and studies confirm this trend,” he says.

With Mexico’s changing eating habits and the continuing focus on nutrition, canola products can help consumers improve their health and increase life expectancy. Maintaining a positive relationship with this key international customer is important for Canada’s exporters and the entire canola sector.

**Ali Hyde is a communications assistant with the Canola Council of Canada.**

**Mauricio García de León, group marketing manager for Alimentos Capullo.**

100 percent canola and will not be looking back. “We will keep our current formula as this is what consumers demand,” says García.

The Mexican economy is one of the key challenges ACH and the Alimentos Capullo brand currently face. “Currently, consumers are not necessarily focused on the brand of oil they are using, but they are concerned about the price,” explains García.

Due to low Mexican income and the current American dollar, the economy is not creating ideal market conditions. However, García sees plenty of opportunity in the market. “Mexican people are trying to become a more informed society and are willing to take the time to understand which products are beneficial for their health and this is where canola oil can succeed,” he says.

The Nielson study found that almost 60 percent of respondents show a willingness to switch to canola oil compared to 47 percent in 2009. This increase is important for brands such as Alimentos Capullo, as they can capitalize on market opportunities.

“In order to increase awareness of canola we need to create more opportunities to

**Notice to Farmers**

**Trait Stewardship Responsibilities**

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.**
GO FOR GOLD

CONVENTION

VANCOUVER B.C.

MARCH 14-15, 2013

Head for the summit

Informative speakers • Inspired networking opportunities • All in a five-star setting

Register today at www.canolacouncil.org/convention
Early registrants are eligible for great prizes!
Unsung hero.

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.

Bayer CropScience
By John Gaudes

With a new century’s technology and the world’s biggest markets seeking to grow a prosperous food supply, the aquaculture industry continues to grow at a rapid pace.

Aquaculture supplied the world with 148 million tonnes of fish in 2010, with 128 million tonnes used for human consumption. That’s according to a 2011 study by the Food and Agriculture Organization (FAO) of the United Nations. For five decades now the aquaculture industry has grown astronomically, at an average rate of 3.2 percent per year. The same cannot be said for the world’s fishmeal supply.

The pending “fishmeal trap” will ensnare companies dependent on fishmeal as their farm’s protein source. Amid rising prices and unsteady supply levels, they could see their growth come to a grinding halt in the years ahead.

With the aquaculture industry using about 80 percent of the world’s fishmeal production, the last decade has been spent discovering and using sustainable and inexpensive alternate protein sources. Thanks to research ramping up here in Canada, as well as overseas, canola meal is making a stronger case than ever to be the ideal alternate protein source.

GLOBAL MARKET POTENTIAL
Markets around the world are eager to explore canola meal’s potential in fish feed, especially China. Seventy percent of the world’s fish production takes place in China, with more still in surrounding Southeast Asia. In 2010, Asia farmed an astounding 85.4 million tonnes of fish and shellfish for human consumption. Where canola meal can fit into these figures, however, mostly depends on the fish species. Carnivorous fish such as trout and salmon require a higher concentration of protein in their diet.

Dr. Murray Drew, associate dean of Animal and Poultry Science at the University of Saskatchewan, works mainly with rainbow trout. “Most plant ingredients have anti-nutritional factors that cause fish to grow less efficiently, eat less feed and damage the intestine which reduces growth,” explains Drew, citing factors such as high fibre and residual glucosinolates. “Canola is no exception.”

continued on page 18
Put it in terms your accountant can appreciate:

Use Clearfield® and see how your profits may increase by

$25 PER ACRE

Find out how yours add up at clearfield.ca/canola

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 challenge for us at all.

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 mgi 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.

Clearfield, and the unique Clearfield symbol are registered trade-marks of BASF Agrochemical Products B.V.; all used with permission by BASF Canada Inc. © 2012 BASF Canada Inc.
“However, canola has a great balance of essential amino acids so canola protein is a very desirable protein source. Processing canola meal to extract this protein results in canola protein concentrate (CPC), which has reduced or zero levels of anti-nutritional factors,” he says. “This product is a good feed ingredient for aquaculture fish.”

These carnivorous fish, though, are mostly farmed in Norway, Chile and Scotland. In China, where production is far greater, they farm species such as herbivorous carp, tilapia and Pacific white shrimp that can use lower protein feeds made of lower quality ingredients. This factor means there has been far more focus in China on incorporating canola meal into the aquaculture industry.

“Canola meal is consistently one of the cheaper ingredients [in fish feed],” says Dr. Dominique Bureau, professor at the University of Guelph. “Though it’s a bit low in protein and digestible nutrients, there has been a lot of effort put forth to increase this.”

**AQUACULTURE RESEARCH**

Bureau, who earned his PhD. in Nutritional Sciences at the University of Guelph in 1997, has taken the lead in several aquaculture and fish nutrition research projects and cited research in his own lab. He has seen a 10 percent increase in the digestibility of protein in canola meal in recent years.

Recognizing this advancement, the Canola Council of Canada (CCC), in a joint venture with Chinese aquaculture development company Tongwei Group, has initiated a series of canola feed trials with tilapia. In the past year these studies compared growth performance between tilapia fed with Canadian canola meal and tilapia fed with Chinese and Indian rapeseed meal – a meal Drew called “unusable for fish diets.”

**Canola meal is making a stronger case than ever to be the ideal alternate protein source for aquaculture.**

Despite the higher price of import, Canadian canola meal proved to have far less anti-nutritional factors than the local rapeseed meal. While not toxic and slightly higher in protein, the poor processing used in the local rapeseed meal damaged or destroyed valuable nutrients and reduced growth of the fish.

Canola meal, while more palatable, still raised questions over its relatively low protein content. The conclusion of the study was that more research needed to be done with processing canola meal to create CPC, as the trials continue toward a healthy balance of protein and anti-nutritional factors.

For Drew, the door is open for canola meal, but more work needs to be done. “I think we need to research the use of canola meal further,” he says. “We need to know the effect of processing canola meal on the nutritional quality of canola meal.”

Canola meal also faces stiff competition from other vegetable feeds. For example, soybean meal currently accounts for about 75 percent of all protein used in aquaculture. With high protein and very little negative effects, soybean meal can provide as much as 50 percent of the protein in the diet of many species. Other protein-rich meals include corn gluten meal, sunflower meal and processed land animal proteins.

Canola meal, though, has its trump card in its price. While it doesn’t have the most protein, its price has already given it inroads in China’s market – with huge potential in the years ahead.

Trade relations continue to improve with China, with encouragement coming from an August 2012 study highlighting economic complementarities between the two countries. This study, done by International Trade Minister Ed Fast and his Chinese counterpart, Minister of Commerce Chen Deming, showed more bi-lateral agreements between the two countries in the works.

Regardless, canola remains Canada’s top agricultural export to China. In 2011, Canadian sales of canola seed, oil and meal to China were in excess of $1.5 billion – representing more than 50 percent of Canadian agri-food exports to China.

If joint research between the two countries continues to reveal favourable results, and there is enough encouraging data to suggest canola meal can be used in Chinese farm diets, those export numbers will continue to grow hand-in-hand with the booming aquaculture industry.

John Gaudes is a communications assistant with the Canola Council of Canada.
It’s the canola herbicide you’ve been wishing for.

It’s no wonder farmers are just itching to get their hands on this. New ARES™ herbicide is an integral part of the enhanced Clearfield® Production System for canola. It controls all the weeds other systems get plus the ones they don’t, including tough weeds like Lamb’s quarters, Wild buckwheat and Cleavers. And with its user-friendly, liquid formulation, it’s bound to be on most canola farmers’ wish lists this year. Visit your BASF retailer or agsolutions.ca/ARES for more details.

Always read and follow label directions.

AgSolutions is a registered trade-mark of BASF Corporation; ARES is a trade-mark, and Clearfield and the unique Clearfield symbol are registered trade-marks of BASF Agrochemical Products B.V.; all used with permission by BASF Canada Inc. © 2012 BASF Canada Inc.
Yields big. Stands strong.

Sets a new standard...World Class Standability!

VT 500 G canola takes maximum nitrogen rates without lodging. This unique trait allows farmers to maximize fertility with confidence. Get the yield you’re looking for and swath it faster with VT 500 G.

For more information, visit your Viterra ag retail or seed.viterra.ca

NITROGEN RATE IMPACT ON LODGING

<table>
<thead>
<tr>
<th>WORLD CLASS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXCELLENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VERY GOOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VT 500 G

Data extracted from the 2011 Viterra Performance Checks.

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 borders 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. Density and Design®, Density Icons, Roundup Ready® and Roundup® are trademarks of Monsanto Technology LLC. Monsanto Canada, Inc. licensee. ©2012 Monsanto Canada, Inc.
Weeds, insects and disease are all too familiar problems for farmers. But they can also pose a challenge for canola exports. In part two of our series on major access issues facing canola, this issue of Canola Digest explores Sanitary and Phytosanitary Standards.

SPS – THREE SIMPLE LETTERS FOR COMPLEX ISSUES

By Brian Innes

Sanitary and Phytosanitary Standards are put in place to protect plant, animal and human health. As trade in agriculture and food products increases, countries are concerned about protecting their domestic agriculture production from risks such as invasive species or diseases such as blackleg. At the same time consumers are increasingly concerned about food quality and want to be assured that exporting countries are using best practices to manage issues such as pesticide residues or micro-organisms like salmonella.

As a result, SPS measures have the potential to limit market access for canola in international markets and are a key component of the Canola Market Access Plan (CMAP) – a project jointly funded by the canola industry and Agriculture and Agri-Food Canada through the AgriFlexibility program.

In many cases, the most important way to prevent SPS issues is through proper growing practices. Avoiding market access issues because of pesticide residues relies on growers to observe correct pre-harvest intervals for the pesticides they use. The Canola Council of Canada’s (CCC) Export Ready program is in place to help growers observe the correct pre-harvest interval to limit pesticide residues.

“This year was a challenging one for many growers I know – lots of insect and disease pressure,” says Brian Chorney, a canola grower from East Selkirk, Manitoba. “One of the first things I do before spraying is make sure I’ll be able to have the right pre-harvest interval.”

Chorney’s actions help ensure that exporters are able to meet the requirements of international buyers.

Countries set their own Maximum Residue Limits (MRLs), or rely on international standards set by the Codex Alimentarius Commission – an international standard setting body under the United Nations Food and Agricultural Organization. Aligning MRLs internationally helps ensure that differences in standards between countries don’t result in market access barriers. The CCC works with industry allies and the product registrants to align MRLs in our major markets.

According to Jim Everson, vice president of corporate affairs for the CCC, trading food and feed products requires constant vigilance to ensure that SPS measures don’t unnecessarily distort the market. “With the interests at play in agriculture and food, it’s essential that the canola industry is proactive to manage SPS issues.”

A pre-harvest interval refers to the time between pesticide spraying and when your crop is swathed or direct combined. For a list of pre-harvest intervals on common canola products visit canolacouncil.org and follow the Export Ready link.

continued on page 22
issues that could limit market access,” says Everson. “It’s important that measures imposed by importing countries are science-based and don’t distort trade.”

Countries belonging to the World Trade Organization have agreed that SPS measures should be based on recognized international standards as well as scientific evidence and risk assessment. The agreement recognizes that governments have the right to apply SPS measures, but only to the extent necessary to protect human, animal or plant life or health.

Despite this agreement, Everson says it is sometimes difficult to determine whether SPS measures are being employed to address genuine risks or to protect domestic industry from foreign competition.

**MANAGING SPS BARRIERS**

The Canadian canola industry is actively engaged in preventing SPS market access barriers related to plant, animal and human health. This work involves coordination between researchers, growers, processors and exporters, as well as domestic and foreign governments, to prevent and limit potential market access barriers. Pursuing transparent science-based policies, aligning SPS standards globally, and working cooperatively with government and industry partners when issues arise are all components of CMAP.

Two priorities of CMAP involve mitigating concerns around blackleg and ensuring food safety requirements reflect the level of risk imposed. Since concerns in China about blackleg in canola arose in 2009-10, the canola industry has worked to build China’s confidence about the safety of importing Canadian canola. Keeping the market open has been the result of research, diplomacy, cooperation and support from the Canadian government. In the 2011-12 crop year Canada shipped more than 2.5 million tonnes of canola seed to China.

The CCC continues to coordinate research on ways to mitigate the risk of blackleg being transferred to Chinese rapeseed crops. “We continue to work closely with Chinese and Canadian officials to build understanding,” says Everson. “Once Chinese authorities are confident that blackleg does not pose a significant risk, full market access should return.”

“*It’s important that measures imposed by importing countries are science-based and don’t distort trade.*”

– **Jim Everson**

**FOOD AND FEED SAFETY**

Food and feed safety requirements are increasing as consumers and governments seek to reduce potential risks to human and animal health. Testing methods are also improving, enabling detection of bacteria and other substances at levels never before detected. The result is that several countries are modernizing their food and feed safety systems.

According to Everson, it’s important for the canola industry that food and feed safety requirements are appropriate for the level of risk and are aligned between Canada and our major trading partners. “As Canada and the United States both modernize their food and feed safety requirements, the CCC is working closely to ensure they facilitate our market access,” he says. “We must ensure that food and feed safety requirements prevent risks while maintaining our competitiveness internationally.”

These are just a few of the many potential SPS market access challenges. Through CMAP, the CCC continues to keep a sharp eye out for others that could limit market access in the future.

**Brian Innes is corporate affairs manager with the Canola Council of Canada in Ottawa.**
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

NEW
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.

© 2012, PHL PR83_TechBrief_CD_AE
The Canola Performance Trials (CPT) program is now in its second year of providing growers with third-party variety performance data. Here are some tips to help you navigate the information and make the best seed choices for your farm.

### SEED SELECTIONS

By Heidi Dancho

The CPT provides me a broad picture of how a variety behaves in yield, maturity, height and lodging resistance in my region and across Western Canada,” he says. “I’ll also do some further research with retailers and neighbours on yield performance and other characteristics such as standability and pod shatter, since I prefer to straight cut my canola as much as possible.”

For 2012, growers like Groeneweg will have even more CPT data to help with their seeding decisions. “Although the weather was not cooperating as much as we wanted, because we had a robust program in place with a lot of locations, we are still going to end up with a nice data set for 2012,” says Dr. Rale Gjuric, trial coordinator, noting that results for 2012 are based on 23 small plot trials and 81 field scale trials throughout the Prairies. “The overall management of the trials has improved in 2012, and that is consistent with our plans for the CPT going forward – that the system constantly evolves and improves.”

The new 2012 trial results will be available in November through a printed booklet, and updated on www.canolaperformancetrials.ca.

1. **ZOOM IN AROUND YOUR FARM**

“The map view is a good place to start because it shows you all the trials geographically, and allows you to zoom into the region around your farm to see how a variety performed in each individual trial,” says Shawn Senko, Canola Council of Canada (CCC) agronomy specialist in eastern Saskatchewan. Clicking on each location will provide an overlay with trial data.

“Within the overlay screen of trial data, don’t forget to click on the location name,” reminds Senko. “This will provide important trial management information such as the seeding date, harvest date, tillage method and the previous crop that will help growers relate to what they typically do on their own farm.” Other information such as rainfall and application data for herbicides, fungicides and fertilizers is found below the variety trial data.
LOOK AT MULTIPLE LOCATIONS

“From the map view, you can also choose the Advanced Filters option, which allows you to narrow the results based on your town, province and proximity radius,” says Senko, noting that you should go a fairly large distance (about 100 km) to get a decent number of sites generated, ideally more than seven.

“Try to look at a few locations around your farm and other areas that you are familiar with to get a better sense of how a variety may perform under different situations,” advises Anastasia Kubinec, oilseeds crop specialist with Manitoba Agriculture, Food and Rural Initiatives, and CPT technical committee lead.

CPT Small Plot Trials

<table>
<thead>
<tr>
<th>Season Zone/Province</th>
<th># of Trials Harvested</th>
</tr>
</thead>
<tbody>
<tr>
<td>LONG</td>
<td></td>
</tr>
<tr>
<td>Manitoba</td>
<td>4</td>
</tr>
<tr>
<td>MEDIUM</td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>3</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>9</td>
</tr>
<tr>
<td>Manitoba</td>
<td>1</td>
</tr>
<tr>
<td>SHORT</td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>3</td>
</tr>
<tr>
<td>BC</td>
<td>2</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
</tr>
</tbody>
</table>

2 CHANGES FOR FIELD SCALE TRIALS

“When you’re looking at the field scale trials, you’ll notice that for 2012, the biggest change we made was having a common variety at each location,” says Kubinec. “Having this constant variety will improve the ability to combine and compare the data between different field scale trial locations.”

3 MORE THAN JUST YIELD

“While a lot of growers tend to focus on yield data to make their seed decision, I would caution that yield is not the only thing,” says Groeneweg. “For example, the growing season this year really pointed out that we need to strongly consider traits such as disease and lodging resistance as well.”

Kubinec agrees, noting disease resistance is becoming a higher priority. “A big issue for growers is blackleg tolerance,” she says. “This may mean choosing a variety rated R (resistant) instead of MR (moderately resistant), especially if they have seen blackleg in their fields or heard from neighbours that the incidence of the disease has been on the rise.”
ALL CROPS CONTRIBUTE

By Jay Whetter

These three growers carefully choose their rotations, going for crops that are profitable on their own and that fit well within the cycle. Their aim is for a rotation system – with alternatives and “plan Bs” thrown in – so they don’t rely on canola alone for the economic well-being of the farm.

LEE MOATS
Riceton, Saskatchewan

Lee Moats farms at Riceton, Saskatchewan, in the Regina heavy clay soils. His typical rotation is cereal-pulse-oilseed. “We have broad choices for crops within this rotation, but we’ve whittled it down to almost all lentils, not much peas, canola instead of flax, and preferably winter wheat. If harvest timing doesn’t work out, we’ll plant durum or canary seed,” says Moats. “We like to think we have a cropping system, not a rotation,” he says.

Canola and lentils: Lentils provide Moats with a nitrogen fixing crop in a rotation with two heavy nitrogen-using crops. “I’m not sure we’ve entirely come to grips with the rotational benefits of lentils and canola, and whether the benefit derives from nitrogen fixing alone or soil improvement and other additional factors, but our experience is that canola does very well on pulse stubble,” he says.

Moats is experimenting with GreenSeeker, a tool that uses optical sensors to measure the vegetation index in canola and wheat mid-season to determine how much nitrogen to top dress. “Our rate of nitrogen on canola has been disturbingly low to the point where I have had trouble accepting the technology, but it has worked out very well,” he says.

“We grew 64-bushel canola in 2009 on lentil stubble and applied only 60 pounds of nitrogen, on average. Then in 2010, we grew 55 bu./ac. canola with about the same nitrogen rate,” he says.

GreenSeeker helped in 2011 as well. “Our crop was so poor from water damage that GreenSeeker determined it didn’t require any top dress nitrogen,” says Moats. In 2012, half his canola was on lentil stubble, and half on unseeded acres. Yields were below average, as they were for many growers in the region.

Given the nitrogen removal of the high-yielding canola in 2009 and 2010, the nitrogen balance doesn’t add up, he says. “We think that maybe long term zero till has given the soils more mineralizable nitrogen, and the added benefit of nitrogen fixing from the lentils is greater than I expected,” he says. “In any event, we will continue to use the GreenSeeker to maintain our yields while at the same time optimize our nitrogen use.”

Canola and winter wheat: Seeding winter wheat in the fall means fewer acres to seed in the spring, making it easier to get canola in early. With canola seeded early, it is harvested early – usually with no down-grading fall frost issues – giving time to seed winter wheat.

“The only way winter wheat works is if canola is in the ground early. Happily, that’s also the best seeding time for canola in terms of yield potential and profitability,” says Moats.

The environment can throw a wrench into the best laid plans, he adds. “We had very difficult springs and falls in 2009 and 2010, so our winter wheat plantings were down dramatically. You have to have a plan B when that happens.”

Weed competition is another benefit to winter wheat. Moats says about
75 percent of his winter wheat crops, on average, never require an in-crop wild oat herbicide spray. "That makes it an excellent tool to manage herbicide-resistant weeds, particularly Group-1 resistant wild oats," he says, noting that winter wheat does favour certain weeds, especially winter annuals such as flixweed, which have to be managed carefully.

In closing, Moats adds that modifying a system for profitability has to be part of the plan. "We used to be on a four-year rotation, with cereals every other year, but we pushed to a three-year rotation because of economics," he says.

"We like to think we have a cropping system, not a rotation."

– Lee Moats

CURTIS SIMS  
MaeGregor, Manitoba

Curtis Sims and his son, Nathan, grow canola, winter wheat, edible beans and corn.

Winter wheat is a strong performer in his area, and most years the yield benefit more than makes up for any price discount to hard red spring. "The yield difference is a very powerful multiplier," says Sims. "Most years there’s a big advantage for winter wheat."

Winter wheat also reduces erosion. "Winds can really blow here, and it can do generations of damage in one year if we let it," he says. "With a winter crop, you don’t have to worry about the soil blowing away."

Canola and winter wheat are the "perfect pair," he says, "But because a two-crop rotation may not be good in the long run, we like to have another crop in the rotation."

For Sims, that crop is edible beans, which he plants after winter wheat and ahead of canola. "Canola does really well after edible beans," he says. "Beans don’t really fix nitrogen the way peas do, but there may be some other fertility or soil benefit. Beans may not take as much moisture from deep in the soil profile. Whatever’s going on, canola does well on beans."

Beans also offer another angle on weed control. Sims applies liquid Treflan and works it in the spring (beans don’t leave enough stubble and biomass behind to work in the fall without a high risk of soil erosion). He follows that up with in-crop Basagran if needed, he says.

continued on page 29

When it’s time to market your canola, give us a call. We’re Bunge, Canada’s largest canola processor. We offer convenient on-farm pick up for all IP canola contracts. We’ve got flexible delivery options for you to choose from. Transactions are easy and we make sure you have plenty of marketing choices.

As canola specialists, we know what’s happening in the markets, nationally and internationally. We’re constantly talking with food and food service companies, developing new markets and new oil products.

Speaking of the markets, there’s an ever-increasing demand for Nexera™. That’s why we’ve added crushing capacity specifically for Nexera contracts.

Let’s talk. Give a Bunge grain marketing specialist a call today.
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®

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
Sims used to grow peas, but they didn’t handle the wet years very well. “Beans flood out too, but bean prices are usually good enough that the yield we do get after a flood still provides enough for an economic recovery. The same can’t be said for peas.”

This year, Sims also tried canola on corn stubble. He used a ChopMate corn head to break up residue, which is important because he doesn’t want to use too much tillage ahead of shallow-seeded canola. He disked the field once in the spring. Sims can’t draw any conclusions after 2012. Corn didn’t seem to be detrimental ahead of canola, he says, but with the extreme heat and lack of moisture in July and August, all canola yields took a big hit.

The key with Sims’ rotation is flexibility. “We don’t have a set pattern. We’ll make adjustments based on problem weeds in a field, and on markets to some extent. We like the two year rotation of canola and winter wheat on some fields, but we’ve been growing beans for 15 years and they are an important part of our business.”

Clayton Swanson has a couple of rotations to use when land is taken out of alfalfa production. For fields close to the feedlot, he’s trying canola or corn, followed by cereals (rye or oats) underseeded with clover for silage. The following year he’ll take the clover alone for silage. For land farther from the feedlot, he’s testing a three-year rotation of canola-peas-cereals.

Alfalfa is a very good nitrogen fixing crop – up to 200 pounds over three years, Swanson says. It also provides a long break for canola diseases. But alfalfa is a challenge to put in and take out. They start by desiccating alfalfa with glyphosate at full bloom. “It’s important to get the plants when they’re healthiest and growing strong,” he says.

They wait five to seven days, and then cut the field for silage. In the fall, they leave cattle out extra-long – to overgraze – which puts stress on remaining alfalfa so winterkill is more likely. In spring, they do a pre-seed burn and skim over the ground with a cultivator with 16 inch sweeps to level mole hills and smooth the seedbed.

Swanson seeds Roundup Ready canola varieties into alfalfa stubble, and usually sprays twice in-crop. “Even then, we may still need to deal with volunteer alfalfa the following year, so we’ll use fall rye with 2,4-D or corn or back to back Roundup Ready canola.”

Looking for nitrogen-fixing alternatives to alfalfa, Swanson experimented with peas and sweet clover. “Clover is supposed to provide similar nitrogen fixation to alfalfa, but the research is limited,” he says. “Clover is a bi-annual so as long as we silage it prior to going to seed next year it should be finished – or at least that’s what I’ve been told.”

Another challenge with forages in rotation is gophers, especially on fields that border native pasture. Cutworms haven’t been as bad, he says, although he did lose one field. “It was an isolated field I didn’t check much, and I pretty much lost the entire quarter in a matter of a week.”

Clayton Swanson and his family farm in east central Alberta, near the Saskatchewan border. They run a large cow-calf operation and feedlot, and have broadened their crop rotation to take advantage of nitrogen reserves.

“We had alfalfa on two-thirds of our land base, and had been spreading feedlot manure on that land for decades. It was a fertility gold mine and we needed something to harvest that fertility,” says Swanson. “So we added canola to the rotation.”

Their first canola crops on alfalfa land yielded 55 bushels per acre with only 30 to 40 pounds of nitrogen fertilizer. Growth can be tremendous, Swanson says, and too much at times. “With that much nitrogen, plants keep growing and take too long to ripen, so we work with the seed company to pick varieties that mature faster in high organic soil.”

Jay Whetter is communications manager for the Canola Council of Canada.
Bushels of smiles.

To see how InVigor® hybrids are performing in your area visit: InVigorResults.ca

Bayer CropScience
Out yields...right to the limit.

Maximum yield performance.

When it comes to yield, VR 9559 G canola is competitive with any hybrid system—right across the prairies. What’s more, it offers bigger yield response to higher fertility rates.

For more information, visit your Viterra ag retail or seed.viterra.ca

NITROGEN RATE IMPACT ON YIELD

Data abstracted from the 2011 Viterra Agronomic System Trials (VAST)

Do it with sulfur
MAXIMIZE YOUR YIELDS

Do it with phosphate
DON’T EXHAUST THE SOURCE
A grower waits and waits but his seed isn’t coming up. It turns out there’s nothing wrong with the seed; there just isn’t enough of it. Add a few stresses to the mix, and he has a worrisome situation.

**NO MARGIN FOR ERROR**

**Problem:** A grower called because none of the plants in one canola field seemed to be emerging. The CCC agronomist asked if crusting may be the issue because the grower was in an area where a lot of crusting was already reported. The grower didn’t think it was crusting because there had been a rain that he thought would have been sufficient to soften the crust and allow emergence.

**Action:** The CCC agronomist found only about two plants per square foot. She started digging, uncovering clear evidence of crusting, but also of cutworm feeding. In fact, cutworm feeding looked to have taken out about three plants per square foot, on average.

When the agronomist asked about the seeding rate, the grower said he used 5 lb./ac., and then brought out a leftover bag of seed. The thousand seed weight (TSW) printed on the bag was seven grams, which was very high. At 5 lb./ac., the seeding rate amounted to 8.7 seeds per square foot. Seeding only 8.7 seeds per square foot doesn’t leave a margin for error, especially when 50 percent seedling survival is typical. This seeding rate for this TSW would only be expected to produce about five plants per square foot, even without any insects or crusting. Mounting stresses made the situation much worse.

Setting a target of 10 plants per square foot based on seed size and typical survival will allow for some plant death to the environment, insects or machinery glitches and still leave a reasonable stand for good yield. Keep the potential for large thousand seed weights in mind when booking seed, and make sure seeding rate is realistic for the target population.

With very heavy seed, growers are unlikely to want to seed at 10 lb./ac., so they will want to take other steps, such as seeding into warmer soils, and seeding shallow and uniform, to facilitate higher than typical rates of emergence and ensure an acceptable stand. Even then, the plant stand will likely be lower than 10 plants per square foot, so early weed control and close scouting for early-season insect threats will help growers protect the stand that’s there.

Canola seedlings will twist and turn back downward when they come up against an impenetrable crust. If rains come quick and mellow the crusted soil, some of these may turn back skyward again. Others will not recover.
The agronomist talked to the grower about how seed size affected the plant stand, and how taking TSW into account is an important step in stand establishment. Together they collected cutworms and sent them to the Saskatchewan Ministry of Agriculture for identification. Most of them were bristly species. As for crusting, rain is really the only relief, but if soils had crusted after a couple weeks of dry conditions, damage may have already been done.

The key with emergence issues is to start digging. Look for stranded seeds, diseased seedlings, insects and insect feeding, and seed depth. Also remember that establishment issues can result from more than one factor.

By mid-July, this field had about two healthy plants per square foot, on average. With good weed control and a favourable environment, that population can still produce a good yield. However, getting at least five healthy plants established per square foot has been shown to substantially increase the chances of achieving maximum yields for your genetics.

As blackleg progresses, severe cases cause internal dry rot that kills the plant. With a 5 severity rating – completely black, completely dead inside the stem – the stem canker may shrink inwards to some extent as the tissue desiccates. Clippers will reveal blackening inside the stem, distinguishing it from foot rot or other diseases such as sclerotinia and clubroot.

Blackleg lesions are white or grey with a dark border. Fruiting bodies called pycnidia – which look like black specks – form in the centre of the lesion. These specks inside lesions are a distinguishing feature of blackleg.

The agronomist also found a fairly high presence of foot rot. The same disease complex of rhizoctonia, fusarium and pythium that causes seedling rots and blights can cause foot rot later in the season. Premature ripening and lodging are signs of both blackleg and foot rot (and any other disease that blocks the movement of nutrients up and down the stem and through the roots). Foot rot forms brown hard lesions near stem bases, and in severe cases the stem is girdled. Blackleg doesn’t normally pinch off a stem. To confirm the two diseases, the agronomist used clippers to slice open stems just below ground level. Lower stems that were diseased but did not have black necrosis inside the stem were likely foot rot.

The discussion then turned to management. The grower had been using an aggressive canola rotation, and the canola field with the blackleg and foot rot was actually seeded into canola stubble. With this rotation, disease inoculum builds and builds in the soil and on crop residue. Moist conditions, which this grower had through June and July, can cause this build up to explode, even if the grower hadn’t really noticed serious disease in last year’s crop. With this rotation, fungicide costs go up, scouting costs go up and generally the labour required to baby the crop goes up. Plus you take a significant yield hit.

Prevention is the only effective management strategy for blackleg and foot rot. Once infection has occurred it’s too late to do anything about it in that year. Blackleg prevention means using resistant varieties, using longer rotations between canola crops and applying fungicides when risk assessment (based on moisture conditions and past history of the disease) deems infection likely. Fungicide has to be applied before you see signs of infection. As for foot rot, rotation is also effective. While seed treatments will protect against seedling blight, they will not provide season-long protection.

Jay Whetter is communications manager with the Canola Council of Canada. He is also editor of the CCC’s free Canola Watch agronomy newsletter. Go to www.canolawatch.org and find the sign up box down the right column.
REALIZE YOUR YIELD POTENTIAL WITH 6060 RR

In just two seasons, 6060 RR has reached the top with impressive yields that stand out across all canola production systems. In the inaugural Canola Performance Trials (CPT’s) in 2011, 6060 RR out-yielded the trial average by 4%, and these trials included the top performers in all herbicide systems.

6060 RR produces a heavily podded, impressive crop with excellent standability and oil content. With an early seeding date and top tier fertility management, 6060 RR shows how great your canola yields are destined to be.

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

brettyoung.ca • 800-665-5015
In the hands of farmers, better seeds can help meet the needs of our rapidly growing population, while protecting the earth’s natural resources. So people have the food, clothing and fuel they need today, and our world has the land, water and energy it needs for tomorrow.

That’s improving agriculture. That’s improving lives. And that’s what Monsanto is all about.
Changes being proposed in Ottawa will have significant bottom-line impact for canola farmers.

From grain commission reforms to rail service improvements, changes that Ottawa is considering will have lasting impacts on the farm. Here are three policy issues for canola growers to watch.

**CGC REFORMS**

How the Canadian Grain Commission (CGC) is funded and operated is about to change significantly.

The federal government is moving the CGC to a full cost recovery agency as early as August 2013. This means that approximately $40 million in annual government funding, representing 50 percent of the CGC’s operating budget, will soon need to come from increased fees charged for services provided by the CGC. On a per tonne basis, it means farmers will end up paying about $3.44/tonne for CGC services compared to the current $1.80/tonne.

The federal government also plans to modernize the CGC’s structure, which hasn’t changed significantly in over 25 years. Extending the service known as ‘Subject to Inspector’s Grade and Dockage’ to crush and other processing plants is another proposed CGC change.

“An increase in CGC fees will come right off my bottom line.”

– Stan Jeeves

However, if these and other changes making the CGC more efficient are not passed through Parliament prior to the end of the 2013 crop year, it could be years before CGC fees are reduced. This is because farmers will first need to wait for the government to pass the changes through Parliament and then for the CGC to go through the regulatory process required to reduce its fees, all of which could take three or more years from the time legislation is introduced.

“An increase in CGC fees will come right off my bottom line,” says Stan Jeeves, a Saskatchewan canola grower. “If the government is asking farmers to foot the bill for the CGC, it needs to ensure the services we are paying for provide value and are delivered as efficiently as possible.”

**RAIL SERVICE**

Poor rail service is a perennial issue for the Western grains industry. The canola industry’s competitiveness in global markets is highly dependent on timely and efficient rail service, so this is a significant issue for canola growers.

In an effort to improve service, the government initiated a Rail Service Review that provided railways and shippers with an opportunity to negotiate solutions to their service issues with the help of a facilitator. Unfortunately that process was not successful, and in the absence of significant and meaningful railway competition, the only option now is to enforce balanced accountability through legislation, and to effectively enforce the level of service that a competitive market would provide.

That is exactly what the government has committed to do. This fall, legislation is expected to be introduced that will provide shippers with the right to negotiate a Service Level Agreement with the railways. Such an agreement should improve the predictability of railway performance by providing

continued on page 38
a mechanism that would define service expectations in advance and include meaningful consequences for non-performance.

“Poor rail service not only affects our industry’s reputation as a reliable supplier,” says Colin Felstad, an Alberta canola grower. “When elevators are unexpectedly plugged, it impedes my ability to deliver grain and that affects my ability to manage cash flow and labour resources. Meaningful and lasting change is long overdue.”

PESTICIDE HARMONIZATION

A joint Canada/U.S. initiative to improve the harmonization of regulations between the countries is focused on reducing the technology gap between U.S. and Canadian farmers. Over the next year the Canadian and U.S. governments will work to facilitate equal access to pesticide products in both countries, and align maximum residue limits where possible.

Part of the approach will include finding ways to eliminate regulatory obstacles that prevent the joint submission of pesticides applications in the U.S. and Canada. If successful, this would facilitate the simultaneous registration of products in Canada and the U.S., eliminating the technology gap that sometimes exists for Canadian farmers when products are registered first in the U.S.

“In today’s global market, even U.S. farmers are our competitors,” says Barry Chappell, a Manitoba canola grower, “when they have access to products we don’t, it puts Canadian producers at a direct competitive disadvantage.”

Cheryl Mayer is the director of policy development with the Canadian Canola Growers Association.

“When elevators are unexpectedly plugged, it impedes my ability to deliver grain and that affects my ability to manage cash flow and labour resources.”

– Colin Felstad

**After 3 years of research, your Primer Canola is here!**

NEW Primer Canola has been specifically formulated and tested to meet the unique nutritional needs of germinating canola.

Speak to an Omex Plant Health Professional today at 1-866-860-9660 or visit omexcanada.com.
CASH FLOW SOLUTIONS FOR MY FARM

Cash advances for more than 20 grain, oilseed and pulse crops available.

Apply for a post-harvest advance today:
1. Call 1.866.745.2256
2. On-line at www.ccca.ca
3. Pick up an application at your local elevator

CHECKING MY ACCOUNT BALANCE AT WWW.CCGA.CA IS SO CONVENIENT

The Benefits
- Flexibility in executing your sales plan.
- Up to $400,000 advance with $100,000 interest-free and $300,000 at prime rate.
- Up to 18-month repayment period.

Have a 2012-13 Advance?
Post-harvest reports are due December 31, 2012.

The 2012-13 cash advance program administered by CCGA is made available to Canadian farmers through Agriculture and Agri-Food Canada’s Advance Payments Program.
ReDifining Canola Performance

Pioneer® brand D-Series canola hybrids are bred to deliver outstanding performance. D3153 delivers high yield with exceptional standability and harvestability. D3152 adds the Pioneer Protector® Clubroot trait for protection from this devastating disease. And new D3154S has the Pioneer Protector® Sclerotinia trait for built-in protection.

D-Series canola hybrids are available exclusively from select independent and Co-op retailers and are backed with service from DuPont Canada.

Purchases of D-Series canola hybrids will qualify you for the 2013 DuPont™ FarmCare™ Connect Grower Program. Terms and Conditions apply.
RISK MANAGEMENT FOR YOUR CROP MARKETING PROGRAM

By Remi Schmaltz and John Snell

In the ever changing marketplace, guest contributors Remi Schmaltz and John Snell provide some tools and steps to establish a more sophisticated approach to grain marketing.

Historically, grain marketing and profitability has been a challenge that requires balancing volumetric risks from weather with the ever volatile commodity prices. However, the grain farming community in Western Canada has been blessed with several years of very favourable conditions due to a combination of high historic margins and generally fortunate weather. These conditions are certainly unique in the farming community and have made marketing rather easy. However, the question at hand is obvious. Will this recent good fortune for the Canadian grain farmer last?

If one examines the changing marketplace, technology has driven grain productivity to unimagined levels. Yet grain marketing techniques and sophistication are also expanding at a rapid pace. The agribusiness world is evolving into a new and dynamic marketplace where the understanding and execution of solid risk management practices will become a necessary process for every grain producer.

UNDERSTANDING RISK MANAGEMENT

What does risk management actually mean? It certainly is not speculating in the futures market as many do. Risk management is the practice of identifying and controlling favourable prices and margins in a timely and efficient manner. The objective is to achieve certainty in favourable prices, not necessarily to predict price movement. Weather, war and world economies can each provide unforeseen price movement that must be contained. The producer’s goal should be simply to control profitable margins.

COLLECTING CURRENT AND ACCURATE DATA

Data should contain all input costs including the current marked-to-market positions on volatile fertilizer and fuels exposure. The output data on expected yields along with marked-to-market prices on hedged and un-hedged crops will allow the producer to constantly evaluate and proactively manage price risk. Having a system to accurately collect and view this data is a crucial cornerstone of an improved marketing program.

DEVELOPING A PROACTIVE PRICING PLAN

The next step would be to develop a proactive pricing plan. In a quieter moment, a producer should examine and stipulate multiple quantitative margin triggers. These triggers could be based on a farm’s historically attractive margins or could be designed to protect a breakeven margin on rented land. Again, to accurately project these numbers, the producer will need to collect and have production and market data in a workable form.

continued on page 42
Once gathered, many questions can be answered immediately. What is my breakeven margin? What is my expected margin per acre? What are my volumetric risks and what quantity do I feel comfortable hedging prior to the growing season? How much do I want to hedge prior to harvest? Lastly, with prices so high, how much should I now hedge of next year’s crop? Being proactive with these favourable prices can pay dividends.

**FOLLOWING THE GAME PLAN**

After pricing triggers are established, the farmer must have the courage and discipline to follow the game plan. Too many times the producer is unduly influenced by adverse near term market news and may deviate from what is needed. A well-thought out, predetermined price plan helps to avoid emotional decisions.

How does a producer execute a pricing plan? There are several avenues to consider. Traditionally, the easiest method is selling/pricing crops at a flat price with the local elevator that offers the most competitive price. The farmer should also understand and manage local basis as a part of the overall pricing plan and lock in the futures/board price (through the elevator if preferred) separately. Additionally, the farmer can incorporate financial positions in the futures or options markets. However, these financial positions will only be a temporary substitute for a physical cash position to be sold at a later date. Remember, these are not speculative trading tools for the producer.

Should a producer price his crops in the cash market, the futures market, or use options? Which one of these tools is better? This question is similar to asking if a hammer is always preferred over a screwdriver. No one method is the best all the time. However, the more tools a producer has at their disposal, the more alternatives to match the appropriate tool to the current market conditions and their farm’s risk tolerance.

Regarding financial alternatives, using basic options strategies can provide “price insurance” for a producer who may not necessarily feel comfortable with futures markets. Option strategies can be helpful for all farmers when the price is attractive, but especially when there are concerns over the volumes of production (i.e. weather impacts). It is important to note that all futures and options trading involves substantial risk of loss and therefore may not be suitable for all investors. A producer should consult their account representative to ensure that trading is appropriate for their scenario.

The agribusiness world is evolving into a new and dynamic marketplace where the understanding and execution of solid risk management practices will become a necessary process for every grain producer.

Given the recent changes in the structure of the Canadian Wheat Board (CWB), it is important to mention that the Canadian farmer is in control of the marketing of other crops such as wheat and barley. If farm data and market prices are in a workable form, crop profitability can be more easily accessed throughout the year, and a more informed decision can be made on what crop to plant based on competitive market prices. Additionally, cash market values can now be used to dictate storage decisions. The farmer can actually track and execute storage decisions based on profitability and not simply use storage to accommodate the delivery requirements of the CWB.

Canadian agriculture is changing in many ways. A high priced and volatile environment has rightfully renewed interest in developing a more sophisticated approach to marketing. At the same time, technological advances have made the use of computer software to track and even execute marketing strategies a reality that will soon be a necessity. The growth in productivity of the farming community has been exponential on the production side. Now is the time and opportunity for further increases in productivity to come from the many advances in marketing strategies and technologies mentioned here.

Remi Schmaltz is the General Manager at Decisive Farming (www.decisivefarming.com) and can be reached at 403-519-7707 or remi@decisivefarming.com. John Snell is Senior Vice President at FCStone, LLC, a wholly owned subsidiary of INTL FCStone Inc. (www.intlfcstone.com), and be reached at 312-373-8250 or john.snell@intlfcstone.com.
BEHIND EVERY GREAT YIELD IS A SERIES OF GREAT CHOICES.

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.
Contract Nexera™ canola before November 29th.

$1,000 SIGNING BONUS!

Sign your Nexera™ canola production contract for a minimum of 500 acres before November 29th, 2012 – and get a $1,000 signing bonus. For more information, contact your local contractor or Nexera retailer.
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.
FALL GROWER MEETINGS ACROSS ALBERTA

Be sure to attend the Alberta Canola Producers Commission (ACPC) regional grower meeting in your area this fall. Speakers will be addressing a variety of topics including agronomy, marketing and farm management.

Pre-register for the meeting in your area and you could win a three day pass to the FarmTech 2013 Conference in Edmonton. One winner will be selected at every regional meeting.

For complete details, visit www.canola.ab.ca and check your mailbox for the fall issue of Alberta Canola Connections.
ACPC REGULATORY REVIEW

Every five years the Alberta Canola Producers Commission (ACPC) is mandated to review the regulations that allow the ACPC to exist and lay out what it can and can’t do. This is one of those years, and the current regulation expires in May of 2013. This gives canola growers in Alberta an opportunity to provide input about what the ACPC does and the authorities it has under the Marketing of Agricultural Products Act (MAPA).

The regulations describe how directors are elected, how the service charge is collected and refunded, and what types of activities the ACPC can get involved in. Our ability to fund research, conduct market development programs and provide growers extension and educational opportunities all come from this regulation. A link to the ACPC’s authorizing regulations can be found on the website at www.canola.ab.ca/about. Changes to the regulations are approved at the Commission’s AGM being held in Edmonton during FarmTech on January 29, 2013.

If you have any questions or concerns please bring them forward at the upcoming regional meeting or contact ACPC general manager Ward Toma or the ACPC office at: 1-800-551-6652.

FARMTECH

FarmTech, Canada’s premier crop production and farm management conference, returns to the Edmonton Expo Centre at Northlands January 29-31, 2013.

The theme for FarmTech is “Global Perspectives...Local Knowledge.” This year’s amazing lineup of speakers will deliver 60 concurrent sessions focused on the latest in technology, environment, agronomy and management.

The keynote speakers for 2013 are:

- Banquet speaker Ron MacLean, host of CBC’s Hockey Night in Canada
- David Chilton, author of The Wealthy Barber series and co-star on CBC’s Dragons’ Den
- Todd Hirsch, senior economist at ATB Financial
- John Izzo, author, motivational speaker and business advisor
- Stuart Barden, an international farmer who left Australia to begin farming in Kenya

This year we are pleased to welcome back to Canada Thomas Mielke, the executive director of Oil World, who will provide two global oilseed market outlooks to choose from during the concurrent sessions.

There are several canola agronomy sessions on the FarmTech 2013 agenda. Neil Harker will discuss high yield canola research while Bob Blackshaw will provide an update on stand establishment research. Canola Council of Canada agronomist Clint Jurke will lead a canola disease update that covers blackleg, clubroot, sclerotinia and aster yellows.

The FarmTech Conference is hosted by the Alberta Canola Producers Commission, the Alberta Pulse Growers, the Alberta Barley Commission, the Alberta Wheat Commission and the Alberta Seed Growers Association.

For more information on the FarmTech Conference visit www.farmtechconference.com or follow @farmtechevent on twitter.

The Alberta Canola Producers Annual General Meeting will be held during FarmTech at the Edmonton EXPO Centre on Tuesday, January 29, 2013 at 2:45 p.m.
REPORT TO OUR GROWERS

2012 was a challenging year for farmers. While canola prices remain high and seem to edge a little bit higher each month, the toll that weather, insects and disease had on the crop left many farmers disappointed with harvest. Aster yellows, sclerotinia and blackleg were evident in fields across the province and this made the timing of swathing and combining more difficult. There are likely some producers who fed their crop for 50 bushels per acre only to see rain, insects and disease chip away slowly at that planned yield. Average yield will be down this year, but increased seeded acres will keep the total crop volume high. This is good for our export markets that appear to want a steadily increasing amount of the canola Saskatchewan farmers grow.

In mid-September, on behalf of SaskCanola and in conjunction with the provinces of Saskatchewan, Alberta and British Columbia trade missions, I travelled to China and Japan and met with Japanese and Chinese dignitaries and business people. Everyone was interested in our canola oil, meal and seed. Even though the popularity of this oil and its place in human nutrition is well understood, it is important our customers understand our commitment to providing great products to the global marketplace. For this reason, being in their country and telling our story is always a priority. Just like Coke doesn’t stop advertising even though it’s number one year after year, we need to continue to share our message of sustainable farming and healthy products.

This year the Canadian Western Agribition is hosting a Grain Expo and we will be there! Come see us in the Queensbury Salon, on November 20 and 21, 2012. Our booth will be welcoming farmers and a speaker sponsored by SaskCanola will be discussing the past year in canola farming.

Please mark your calendars for the SaskCanola Producer Conference and AGM which will be held Thursday, January 10, 2013 at the Saskatoon Inn. We plan to have speakers and presentations that will encourage and support your crop production and farming needs and bring you up to date with what SaskCanola has accomplished on your behalf in 2011-12. Check our website www.saskcanola.com for Conference and AGM information as well as registration. Following the conference, plan to stay for the Canola reception and meet your friends from the farming community, and chat with the board and staff of SaskCanola.

In closing, from our office to your home, we wish you and your families a very happy holiday season and the very best in the new year.

Catherine Folkersen
Executive Director

www.saskcanola.com
SOIL PH – IS THIS OUR PROTECTION AGAINST CLUBROOT IN SASKATCHEWAN?

By Pat Flaten, SaskCanola Research Manager

Over the past year some great research has provided a more complete picture of the strength of the relationship between soil pH and clubroot in canola. Much of the previous information has led us to think that more alkaline soils (higher pH) will be effective in protecting us against clubroot – this might not be the case, given recent findings.

A combination of scientists, students and staff with the Universities of Alberta and Guelph, Agriculture and Agri-Food Canada in Saskatoon, and Alberta Agriculture and Food near Edmonton, has looked at this from different angles. One study looked at contaminated fields while the other used controlled greenhouse conditions.

Contaminated field study

The first study looked at all the Alberta fields identified with clubroot through an annual disease survey over five years (2005-2010). The primary area of disease has been the acidic (low pH) soils of the Edmonton area and this area continues to expand. Within the survey, 267 fields showed recognizable plant root symptoms and these were the soils used for studying the pH relationship.

Researchers at the University of Alberta asked the question: “When clubroot is identified in the field, is the incidence and/or severity related to soil pH?” The researchers found that severity (measuring both how bad the roots looked and how many plants were diseased in the field) was somewhat related to soil pH in 2005-2008 but by 2009 and 2010, disease severity was not related to soil pH.

When all of the data is pooled from five years, there is indeed a weak relationship between soil pH and clubroot. The stronger relationship is with tight crop rotations such as canola-canola or canola-cereal-canola (which favour buildup of the pathogen) and adequate early season soil moisture (see Figure 1).

Greenhouse study

Given the field evidence, what if we were to create different soil conditions, then add some clubroot to see what happens? In this controlled greenhouse experiment, clubroot levels were highest at pH ≤ 6.5 and declined as pH increased, indicating that clubroot levels are likely to be lower in fields with pH > 7.0 compared to those at lower pH. However, although severity was reduced, clubroot was not eliminated by higher soil pH. Even at a soil pH of 8.0, clubroot can still be severe if other conditions are right.

The greenhouse study results, in Figure 2, clearly show the effect of soil pH and temperature on clubroot disease severity in a susceptible canola variety. When conditions are optimal for infection – that is when there is a high spore load, continuous soil moisture and warm temperatures – clubroot can be as severe as 50 percent, and yield limiting even at a higher soil pH of 8.0. The data also shows that with higher soil temperatures, severity increases and magnifies any soil pH effect.

The summary provided by this broad group of scientists (Kasinathan et al) is that while higher soil pH may afford some protection against clubroot, it is unlikely to be enough on its own to prevent the occurrence of severe symptoms when poor rotations are practiced and environmental conditions are favourable for the pathogen. As such, it is likely that clubroot will continue to spread from central Alberta, where lower pH soils are prevalent, to other regions of the Prairies where alkaline soils prevail.

![Figure 1. Alberta field survey results including fields with recognizable root symptoms, 2005-2010. Relationship between soil pH and clubroot severity (Index of Disease) and disease incidence in susceptible canola varieties (T. Cao, V. Manoli and S. Strelkov, University of Alberta, 2012).]

![Figure 2. Relationship between soil pH, soil temperature and clubroot disease severity in a susceptible canola variety grown under controlled environmental conditions (Kasinathan, H. (2012). Influence of pH, temperature, and biofungicides on clubroot of canola. M.Sc. Thesis, University of Guelph, ON.).]
CANOLA DAY

The Manitoba Canola Growers Association (MCGA) will hold its annual “Canola Day” on Tuesday, January 15, 2013 – the first day of Manitoba Ag Days (January 15-17) in Brandon, MB.

Our first speaker will be Angela Brackenreed, agronomy specialist with the Canola Council of Canada (CCC). Brackenreed will give an overview on how canola production went this season in Manitoba. Her presentation will include potential causes for the poorer canola yields and some possible remedies. She will also cover the range of stresses that affected canola in Manitoba including aster yellows, blackleg, sclerotinia, lack of moisture, excessive heat and insects.

Our next speaker will be David Drozd of Ag-Chieve, who will present a canola marketing update. A former grain farmer and commodities broker, Drozd founded Ag-Chieve and has been helping Western Canadian farmers sell their crops for more since 2002. Ag-Chieve uses technical analysis to forecast markets and advise clients when action is required. What will 2013 bring?

Our featured speaker will be David Chilton, author of The Wealthy Barber which sold an astonishing two million copies in Canada. Over the years, Chilton also published the bestselling cookbooks Looneyspoons, Crazy Plates and Eat, Shrink & Be Merry! with authors Janet and Greta Podleski. Adding no value but taking a third of the profits, guilt finally overwhelmed Chilton and he left the sisters’ business in 2007. His true professional passion, however, remains the field of personal finance, where he tries to mix humour and common sense to help people handle their money more wisely. A frequent guest on national TV and radio shows, and a much sought-after speaker, Chilton lives just outside Waterloo, Ontario.

MAKING THE MOST OF TODAY’S WIRELESS DEVICES

FCC and Manitoba Canola Growers Association invite you to learn how to make your wireless device work smarter for you. You’ll get insight into social media, applications beyond email, markets and weather, and the language of wireless communications.

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Time</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 4</td>
<td>Portage la Prairie</td>
<td>6 – 9 pm</td>
<td>Canada Inns 2401 Saskatchewan Ave. W</td>
</tr>
<tr>
<td>Dec. 5</td>
<td>Neepawa</td>
<td>10 am – 2 pm</td>
<td>Viscount Cultural Centre 293 Mountain Ave.</td>
</tr>
<tr>
<td>Dec. 5</td>
<td>Dauphin</td>
<td>6 – 9 pm</td>
<td>Super 8 Dauphin 1457 Main St.</td>
</tr>
<tr>
<td>Dec. 6</td>
<td>Virden</td>
<td>11 am – 3 pm</td>
<td>Royal Canadian Legion 530 8th Ave. S</td>
</tr>
<tr>
<td>Dec. 6</td>
<td>Brandon</td>
<td>6 – 9 pm</td>
<td>Victoria Inn, Salon 1, 3550 Victoria Ave.</td>
</tr>
</tbody>
</table>

Dates and locations subject to change. Reserve your place at this free event, plus one place for a family member, friend or business partner.

www.fcc.ca/learning | 1-888-332-3301
People, Passion & Partnerships:

QUESTIONS WITH MCGA DIRECTORS ED REMPEL AND BRIAN CHORNEY

By Wendy Elias-Lopez

MCGA president Ed Rempel from Starbuck, and vice president Brian Chorney from Selkirk, live and farm equal distances from Winnipeg, but in complete opposite directions.

Their differences and similarities don’t end with their geographic locations. They both ran and won their first MCGA election in 2004, and have been involved with MCGA ever since. Their unique characteristics have proven to be beneficial for MCGA. One mutual attribute is certain – a strong passion for agriculture that will lead the MCGA board well for the next two years.

Ed Rempel, MCGA President

Ed Rempel has been farming since 1981 and has worked hard to build up his farm in Starbuck. He is the first to admit that farming is a cold and hard business – “but it wasn’t always that way” he quickly adds. As he ponders his farming career, he recalls many treasured moments that ended up making a huge difference in his career.

Question: What characteristics are important as a director of MCGA?

Ed: There are two: a willingness to learn and a willingness to serve. There is no question that if you have the willingness to serve any agriculture organization, you have the opportunity to grow personally; that’s the exciting part. You’re exposed to a lot of very talented people in your industry and to different thought processes.

Question: What are you passionate about?

Ed: That’s easy – I have two great hobbies. I love action adventure movies. Two of my favourite movies are Star Wars and Dr. Strangelove. My other passion is all forms of motor racing. In particular I am hooked on drag racing. It is spectacular to watch and thrilling to take part in. I own a racecar that I race at the old airstrip in Gimli. I haven’t raced yet this year but I’m hoping to make the last meet of this year.

Brian Chorney, MCGA Vice President

Brian Chorney is as passionate as farmers come. His love for agriculture shines through in all aspects of his life. He dedicates a lot of his time not only to his own farming operation but also to agricultural organizations such as Agriculture in the Classroom. He has served as a representative on the Canadian Canola Growers Association, the Renewable Fuels Association and the Canola Council of Canada. He was most recently appointed to sit on the board of the proposed billion-dollar fertilizer plant to be located in the Northern U.S.

Question: How did you first become involved with the Manitoba Canola Growers?

Brian: It was 2004 and the MCGA board elections were coming up. A couple of growers asked me if I would let my name stand in the election. I thought about it and decided yes I’d run for director. I won one of the seats in that election and have been involved ever since.

Question: What agronomic practices are you following so that growing canola remains sustainable on your farm?

Brian: Rotation for one. I use registered sustainable crop protection products and practice well-researched cropping procedures. I also grow export ready varieties and use sustainable storage procedures.

Read the whole article about Ed and Brian on the Be Well Blog blog.canolarecipes.ca. Also, sign up for the Be Well Newsletter and Be Well blog and enter to win a prize package.
By Angela Dansby

CanolaInfo dishes up divine recipes in 2012 media campaigns.

Each quarter, CanolaInfo creates a new recipe collection to showcase the health and culinary benefits of canola oil. These collections are “recipes” for successful media campaigns. This year’s first three quarters focused on heart-healthy dude food, street eats and homemade salad dressings. And 2012 will finish sweetly with skinny mini holiday desserts.

HEART-HEALTHY DUDE FOOD
In honour of Super Bowl season and American Heart Month in February 2012, CanolaInfo created a Heart-Healthy Dude Food Recipe Collection to encourage men to be more heart-smart with some of their favourite ingredients. Ten recipes made with canola oil, such as Fall-Apart Beer Brisket and Grilled Tuna Steaks with Cilantro and Basil, helped guys get their game on without putting their heart on the defense.

“Sometimes men take a fatalistic approach to heart health,” says nutrition consultant Christopher Mohr, Ph.D., R.D. “They think if someone in their family had heart disease, it’s over for them, but really, they can prevent it up to 80 percent of the time with a healthy diet and lifestyle.”

On the other hand, some men think they don’t have to worry about heart health because they’re active. Yet, cardiovascular disease remains the number one killer of U.S. and Canadian men, accounting for about one-third of all deaths. CanolaInfo’s dude food recipes found a middle ground for guys between taste and health, proving the concepts can co-exist.

“I don’t tell my patients to give up their favourite foods,” Mohr says. “I simply encourage them to make smarter choices, like substituting canola oil for solid fats or other oils and choosing lean cuts of meat, and to be mindful of portion sizes.”

DRIVING STREET EATS HOME
No other trend has parked itself at the forefront of the culinary world quite like food trucks, but these aren’t the stale doughnut and questionable hotdog stands of the past. New generation chefs have been giving up brick and mortar concepts to put their unique cuisines on four wheels. To “drive” such dishes into consumer homes, CanolaInfo partnered with four U.S. food truck chefs from coast to coast (Seattle; Chicago; Austin, Texas; and New York) to create the Street Eats Recipe Collection.

“I use canola oil in my kitchen because it’s ideal for nearly every culinary application.”

– Josh Henderson

Grilled Tuna Steaks with Cilantro and Basil
“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

– Robin Miller

“The economic downturn has driven the street food trend in recent years along with Americans’ love of all things fast and convenient,” says Josh Henderson, owner of Skillet Street Food in Seattle, Washington, and a graduate of The Culinary Institute of America.

“There are all of these wonderful chefs looking for a way to bring their creations to the masses and now with mobile kitchens, it’s easier than ever.”

Each food truck chef created two recipes for CanolaInfo based on their most popular selections. Recipes ranged from Roasted Beet Salad with Citrus Vinaigrette to Cheddar-Parmesan Poutine to Sinful Bliss Cupcakes with Sweetened Whipped Cream Frosting.

“I use canola oil in my kitchen because it’s ideal for nearly every culinary application,” says Henderson. “From my skillet to my gravy, it is very adaptable, letting other ingredient flavours shine without weighing them down.”

GET “DRESSED” FOR SUMMER

Last summer, CanolaInfo informed consumers how to “dress up” garden-fresh fruits and vegetables as mouth-watering sensations with homemade salad dressings. Making dressings is easy and pays off in terms of both taste and nutrition.

“Summer is a fantastic time of year to take advantage of farmers’ markets and enjoy fresh produce,” says Robin Miller, M.S., host of Food Network’s “Quick Fix Meals with Robin Miller,” who developed the CanolaInfo recipe collection.

“homemade salad dressings add so much flavour and can be prepared in minutes.”

According to the Centers for Disease Control and Prevention, fruits and vegetables contain essential vitamins, minerals and fibre that may help protect against chronic diseases. Compared with people who eat few fruits and vegetables, those who eat more generous amounts are likely to have reduced risk of chronic diseases, including type 2 diabetes, stroke, some types of cancer and perhaps heart disease.

CanolaInfo’s Get Dressed for Summer Recipe Collection showcased the bounty of fresh summer produce with recipes like Zucchini, Squash and Grape Tomato Salad with Basil Vinaigrette and Fennel-Orange Salad with Lemon Vinaigrette.

“‘There is no easier time of year to make a commitment to eating healthy than summer,’” says Miller. “‘With the abundance of fresh produce available, everyone has plenty of options to make delicious, fresh and nutritious dishes. Using canola oil in dressings allows the flavours of fresh ingredients to shine, while adding to their nutritional value.”

HOLIDAY SKINNY MINIS

The dessert table can be one’s own worst enemy during the holidays, but it doesn’t have to be. Indulgence and moderation go hand-in-hand with CanolaInfo’s Skinny Mini Holiday Desserts Recipe Collection. Now people can have their cake and eat it, too!

“It isn’t necessary to feel deprived of your favourite holiday desserts,” says Cheryl Toner, M.S., R.D. “Instead, shift your thinking about how much is enough. When you are living an active, healthy lifestyle most days of the year, there is room for a small holiday treat.”

CanolaInfo’s Skinny Mini Holiday Desserts Recipe Collection does portion control for consumers. It features bite-sized indulgences to limit calories, while satisfying a sweet tooth.

“Keep in mind that you don’t need to eat a whole piece of pie or chocolate bar in order to appease your craving,” says Toner. “Have a small bite, slow down and savour it. The skinny mini desserts offer just the right amount of holiday indulgence without guilt.”

Each skinny mini dessert has less than 200 calories and reduced saturated fat (2.5 grams or less) per serving. A few examples are Brownie Party Pops (see page 54) and Mini Peppermint Cupcakes.

“Classic holiday ingredients used in these recipes like chocolate, cherries, dates, ginger, pumpkin and peppermint will ring in the season,” says Toner. “Enjoy the flavours, as well as the sights, sounds and joy of the season.”

Total consumer media impressions from promoting these recipe collections in 2012 as of mid-September were over 1 billion. And the fourth quarter campaign will surely take the cake.

The complete recipe collections from CanolaInfo media campaigns are available at CanolaInfo.org. To receive recipes and other canola oil information on a regular basis, “like” CanolaInfo at Facebook.com/CanolaInfo and follow it at Twitter.com/CanolaInfo.

Angela Dansby is CanolaInfo communications manager based in Chicago, Illinois.
BROWNIE PARTY POPS

Chocolate lovers rejoice! These brownie pops are an irresistible combination of cocoa powder, semisweet chocolate chips and sprinkles in one little ball. Canola oil helps bind all of the decadent ingredients together.

INGREDIENTS

Brownies
½ cup (125 mL) canola oil
1-¼ Tsp (6 mL) vanilla extract
2 eggs
½ cup (125 mL) all-purpose flour
1-¼ cup (310 mL) granulated sugar
½ cup (150 mL) cocoa powder
¼ Tsp (1 mL) baking powder
½ Tsp (2 mL) salt
½ cup (125 mL) all-purpose flour
¼ cup (60 mL) semisweet chocolate chips

Pops
2 cups (500 mL) milk chocolate chips
1 Tsp (5 mL) canola oil

Optional toppings
candy sprinkles
chopped peanuts
coconut flakes
mini chocolate chips

Special equipment
32 candy/lollipop sticks (6-inch/15-cm)
plastic foam block to hold pops upright

INSTRUCTIONS

1 Preheat oven to 325°F (160°C).
2 Line bottom and sides of 9 x 9 inch (22 x 22 cm) baking pan with parchment paper or foil. Leave about 4 inches (10 cm) of overhang on two opposite sides. These serve as handles to remove brownies from pan in one piece, so there should be enough overhang to have a solid grip. Spray parchment or foil with canola oil.
3 In medium bowl, mix together canola oil, vanilla and eggs until fully combined. In large, separate bowl, whisk flour, sugar, cocoa, baking powder and salt together. Slowly whisk liquid ingredients into dry ingredients, stirring constantly. Fold in chocolate chips. Spread brownie batter evenly in lined pan.
4 Bake for 20 to 25 minutes. Cool completely on rack. Remove from pan and trim off any overly crusty parts.
5 Line baking sheet with parchment paper. Melt milk chocolate chips in double boiler. Add canola oil and stir until smooth. Dip one candy/lollipop stick into melted chocolate (this will help brownie adhere better to stick).
6 Once all pops are finished, place in refrigerator for about 30 minutes to set. When finished, store in an airtight container in refrigerator or cool place for up to one week.

Tip: White or semisweet chocolate can be substituted for milk chocolate as the lollipop coating. With white chocolate, you can use 2 drops of food coloring to change the colour of pops.

Yield: 32 brownie pops.

NUTRITIONAL ANALYSIS PER SERVING (excluding optional toppings)
Calories ........................................ 140
Total Fat ........................................ 8 g
Saturated Fat .................................. 2.5 g
Cholesterol .................................... 10 mg
Sodium ......................................... 45 mg
Potassium ...................................... 87 mg
Carbohydrates ................................ 19 g
Fibre ............................................... 1 g
Sugar ............................................. 1 g
Protein .......................................... 1 g
5525 CL CRUSHES NEXERA 2012 CL

BETTER YIELD, BETTER NET AND COMPLETE MARKETING FLEXIBILITY

5525 CL is a yield-leading variety in all canola production systems, delivering outstanding net returns while you retain complete marketing flexibility. Head-to-head in the 2011 Canola Performance Trials mid-season zone, 5525 CL out-yielded Nexera® 2012 by an average of 8 bu/ac1. The result: $50.36 per acre more in farmers’ pockets even after specialty oil premiums. With the freedom to market 5525 CL anywhere, and high net returns, 5525 CL crushes the competition.

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

brettyoung.ca • 800-665-5015

JON MONTGOMERY
2010 Olympic Gold Medalist – Skeleton
2008 World Championship Silver Medalist
You learned a lot from your father, including how to think for yourself. So when it comes to choosing a combine as efficient as your old man, the obvious choice is a not-so-obvious color. Only LEXION combines are available with the CLAAS Accelerated Pre-Separation (APS) System that lets you control threshing and separation speeds independently for greater efficiency and an average of one bushel per acre less grain loss* than other combines. Add in greater fuel efficiency and factory installed TERRA-TRAC stability, and you’ve got harvesting efficiency even your father would appreciate.

Ask your CLAAS dealer for a head-to-head comparison with your current color!

---

*©2012 CLAAS of America Inc. LEXION is a registered trademark of CLAAS KGaA mbH. Based on head-to-head comparisons from 2007 to 2011 using a Class 7 LEXION with either an 8-row or 12-row header versus Class 6-8 competitive combines with same size headers. Results showed an average total savings of 60% less time needed in the field, an average of .5 gallons per acre fuel savings and an average of one bushel grain savings per acre. Offer applies only to new LEXION combine harvesters purchased in the US or Canada. Offer begins October 1, 2012 and ends December 31, 2012. In lieu of cash discounts and subject to credit approval from CLAAS Financial Services. Offer cannot be combined with any other promotional offer. Equipment must be financed at least 24 months or early settlement penalties will apply. See participating dealer for details. Product and specifications subject to change without notice.