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MARCH 2015 OUTLOOK

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WHAT ARE HIGH-YIELDING CANOLA GROWERS DOING?

Two growers explain how fertilizer rates, good seed, timely weed control and taking time to achieve good stand establishment are key factors in achieving above-average canola yields.

Bernie McClean farms near Medstead, SK
Photo: Jay Whetter

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The Editor's Desk

Jay Whetter

Bin commencer

In the early chapters of his book "Champlain's Dream," David Hackett Fischer describes explorer Samuel de Champlain's home region of Saintonge in Western France. Fischer lists some common Saintonge sayings from Champlain's day. One was "Qui va chap'tit, va loin." He who goes gently, goes far.

Another, which immediately made me think of seeding canola and stand establishment, was "Pour bin finir, o faut bin commencer." To finish well, start well.

Fischer writes that Champlain followed these practical maxims all his life. In his explorations and encounters of the early 1600s, Champlain would prepare carefully, act prudently, and work directly toward his objective.

With canola — a crop we're still exploring, you could say — fields that look poor in May and June can provide surprising yields because healthy plants compensate with more branches and longer flowering. However, we are discovering that while canola yields can be "good" no matter how badly we screw up the seeding job, odds for a "great" yield and higher profits increase with a uniformly-emerging stand of seven to 10 plants per square foot.

Meta-analyses by Murray Hartman in Alberta and Steve Shirtliffe in Saskatchewan show that stands of fewer than four to five plants per square foot can't reach their yield potential. Targeting seven to 10 early in the season makes it possible to end the year at or above that minimum threshold.

Yes, it costs more money to produce a better stand. Seed, time and good machinery are required investments. But including these practices in a long-term management plan should produce an overall average increase in profit. Here's how: A competitive stand may not need more than one in-crop herbicide. It can withstand more insect pressure than a thin stand, potentially reducing insecticide costs. Fungicide for sclerotinia stem rot management is easier to time, increasing its effectiveness and reducing the need for split applications. A uniform stand of seven to 10 plants matures more evenly, making harvest timing easier, and with fewer immature side branches, green counts will be lower. Higher yield enhances the profit potential.

I enjoyed my conversations with Jim Herder and Bernie McClean for the cover article in this issue of *Canola Digest*. One thing I noticed is how closely these guys follow best management practices, especially when it comes to stand establishment. Herder, for example, has a good drill, he doesn't scrimp on seeding rate and he concentrates on accurate placement. "It comes down to physics," he says. "You have to go slow to do a good job."

Champlain could not have said it better. I didn't ask Herder about his ancestry, but I'll bet he has a little Saintongeois in his genes. Next time I talk to him, I'll say, "Pour bin finir, o faut bin commencer, eh Jim?" If he says, "Mais oui!" I'll know I'm right.

*For more on stand establishment, see the Canola Council of Canada's new video, "Canola stand establishment: A grower Q&A", posted at **www.youtube.com/canolacouncil**.

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As of January, canola acreage estimates for Canada in 2015 ranged from 19 million to 21 million. With increased crush capacity in Canada and, assuming average yields, a small canola acreage increase could keep the canola market reasonably tight for next year.

By Marlene Boersch

Canola market outlook

Canadian crop production in 2014 was very different from 2013, in both yield and quality. This was certainly true for canola and, while the official production number was pegged at 15.555 million tonnes in the latest Statistics Canada report, discussion about the production outcome rages on behind the scenes. Add to this a lingering uncertainty about the level of last year's carryout stocks and record export shipments year-to-date, and the implications to the market in terms of availability and sourcing price for the second half of the crop year become apparent.

Using a high 2.363-million-tonne stock number, the December 19, 2014 Agriculture and Agri-Food Canada (AAFC) Principal Field Crop Report (based on Statistics Canada numbers) shows total supply this year at 18.043 million tonnes, which is 0.577 million smaller than last year's supply. At the same time, private trade supply estimates seem to range from 17.7 million tonnes to only 15.4 million, based on lower production and lower carry-in numbers than Stats Can estimates. These private trade numbers signify a much bigger shortfall relative to last year's supply.

Given such big discrepancies between balance sheet numbers, any analysis on the forward canola market has to take a stand on the statistics. Mercantile Consulting Ventures' numbers are on the lower end of the supply scale based on market behaviour and farmer surveys about yield and carry-in stocks. [Editor's note: Mercantile is the author's company.] For example, many farmers indicate a relatively high sales level compared to production and, as of week 22, Canadian Grain Commission handling data indicates that producer deliveries at 6.8 million tonnes are 0.424 million ahead of last year, in spite of the smaller production than last year (by all counts).

Similarly, bulk exports at 3.7 million tonnes are 0.501 million ahead of last year's exports to date. Domestic crush is nine percent behind last year, but given the reopening of the LDC plant in Yorkton, SK, and the increase in crush capacity at Cargill in Camrose, AB, the crush numbers should catch up again. The ICE canola futures also reflect tightness in supply in the inverses that have developed over the past while. Given the tight numbers, we anticipate the March to May inverse to increase further forward.

CANADIAN CANOLA PRODUCTION AND EXPORTS (2009-2014 CALENDAR YEARS)

	2014	2013	2012	2011	2010	2009
PRODUCTION (TONNES)	15,555,100	17,965,800	13,868,500	14,608,100	12,788,600	12,898,100
HARVESTED ACRES	19,953,100	19,790,100	21,743,800	18,753,800	16,945,900	16,101,700

EXPORTS (TONNES)	2014	2013	2012	2011	2010	2009
SEED EXPORTS	9,672,858	6,933,426	8,333,049	7,887,838	7,469,674	7,630,183
OIL EXPORTS	2,329,392	2,260,746	2,664,262	2,487,547	2,175,354	1,509,579
MEAL EXPORTS	3,463,904	3,293,039	3,447,380	3,112,938	2,472,245	1,751,458

Supply factors

Examining forward demand numbers in this scenario is thought provoking as well. In its December 2014 report, AAFC is still projecting canola export demand at 9.2 million tonnes for the crop year and crush at 7.2 million tonnes, to show carryout stocks of 1.5 million. But in the tighter supply scenario, Canada will only "be able to" export 7.5 to 8 million tonnes and crush 7 million domestically to end up with tighter carryout stocks of 0.9 to 1.3 million. This tighter scenario creates an entirely different market environment for farmers as export demand and crush may be determined by available supply as opposed to demand and the market does not have to buy marginal demand.

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A tight supply situation may also allow the canola market to temporarily decouple somewhat from the overall oilseed and soybean scenario, which is vulnerable to relative oversupply and a benign soybean harvest in South America. In fact, the recent USDA report lifted soybean in Brazil by another 1.5 million tonnes to 95.5 million. Without a problem in South America, the soybean market has become very exposed to the downside.

One aspect of the canola supply chain has changed over the past few weeks. Rail legislation last year forced railroads to increase rail capacity allocated to grain, and this has resulted in significantly higher year-to-date exports for virtually all grains, oilseeds and pulses. Canola exports into week 22 are 16 percent ahead of last year.

This legislation was to expire on November 29, 2014. It was extended to March 28, 2015, although required shipments per week for each carrier are much lower than they were up to November 29. Weekly railcars loaded since November 29 dropped from around 11,000 to only 6,544 in week 23. This development could slow the export pace going forward and the weekly tonnages moved will need to be watched as we move through the winter months.

Canola meal exports

Canadian canola meal exports have been fairly steady over the past three years. The bulk of Canada's canola meal exports still supply the U.S. feed ingredient market, with a considerable portion entering the dairy industry in California. Canola meal works in California because of relatively cheap freight costs, so that the delivered canola meal costs calculate favourably against delivered soybean meal values. California imported 1.18 million tonnes of Canadian canola meal in 2013, and had imported 1.2 million tonnes as of November 2014.

Total canola meal exports for the calendar year 2014 were 3.46 million tonnes. In 2014, 95.8 percent of Canadian canola meal exports went to the U.S. China has also been an important market for canola meal. Canadian canola processing facilities are currently undergoing registration requirements with China's Ministry of Agriculture, thus restricting meal exports in 2013 and 2014. However, China crushes a lot of Canadian canola domestically, putting canola meal into the Chinese market through that avenue.

The crop year ahead

Looking toward the next crop year, the discussion about the direction of new canola acres in Western Canada has started. As of mid-January, opinions ranged from around 19 million acres to as high as 21 million.

Those who estimate on the lower end emphasize farmers' concerns about increasing disease levels last year that led to expensive crop protection measures and lower yields, relatively high seed costs and increasing soybean acres in Manitoba. Steady acreage proponents cite rotational considerations, while aggressive acreage estimates are based on a decent start to seed sales and positive farmer attitudes towards canola due to excellent usage levels for the current crop.

Mercantile Consulting expects a modest increase in acres at this stage. Given the increasing crush capacity in Canada and assuming average yields for now, a small increase in acreage would keep the canola market reasonably tight for next year. This may lead Canadian exporters (who are also our domestic crushers) to cover domestic needs before getting too aggressive on the export markets.

For now, the opportunity for canola farmers is their stand towards new crop canola contracts or the November ICE contract. The tight carryout stocks will be very important, as we move towards harvesting a new crop. With a tight carryout and canola business on the books for the fall, there should be little reason for the November contract to show a discount to July. ●

Marlene Boersch is with Mercantile Consulting Ventures Inc. in Winnipeg. She wrote this outlook January 15, 2015.

EXPANDING THE MEAL MARKET

While 95 percent of Canadian canola meal currently goes to the U.S., the Canola Council of Canada (CCC) and its stakeholders work to promote canola meal's value and create open access in other important markets. China is one. While meal exports to China have been almost non-existent for the past two years due to regulatory trade barriers, the CCC continues to see China as a major market for canola meal. In 2014, the first Canadian canola meal exporter was approved under China's new registration process.

Vietnam and Thailand have consistently remained in the top five markets for Canadian canola meal, and they have filled the number two and three positions the past two years. To help with market development, the CCC is currently engaging with consultant Lesley Nernberg, a previous CCC employee who currently resides in Bangkok, Thailand and is well integrated into the local feed industry. Along with Brittany Dyck, canola meal manager at the CCC, Nernberg is working through a market analysis in both countries in order to begin promoting Canadian canola meal in the most strategic and effective way to increase the value of our product. ●

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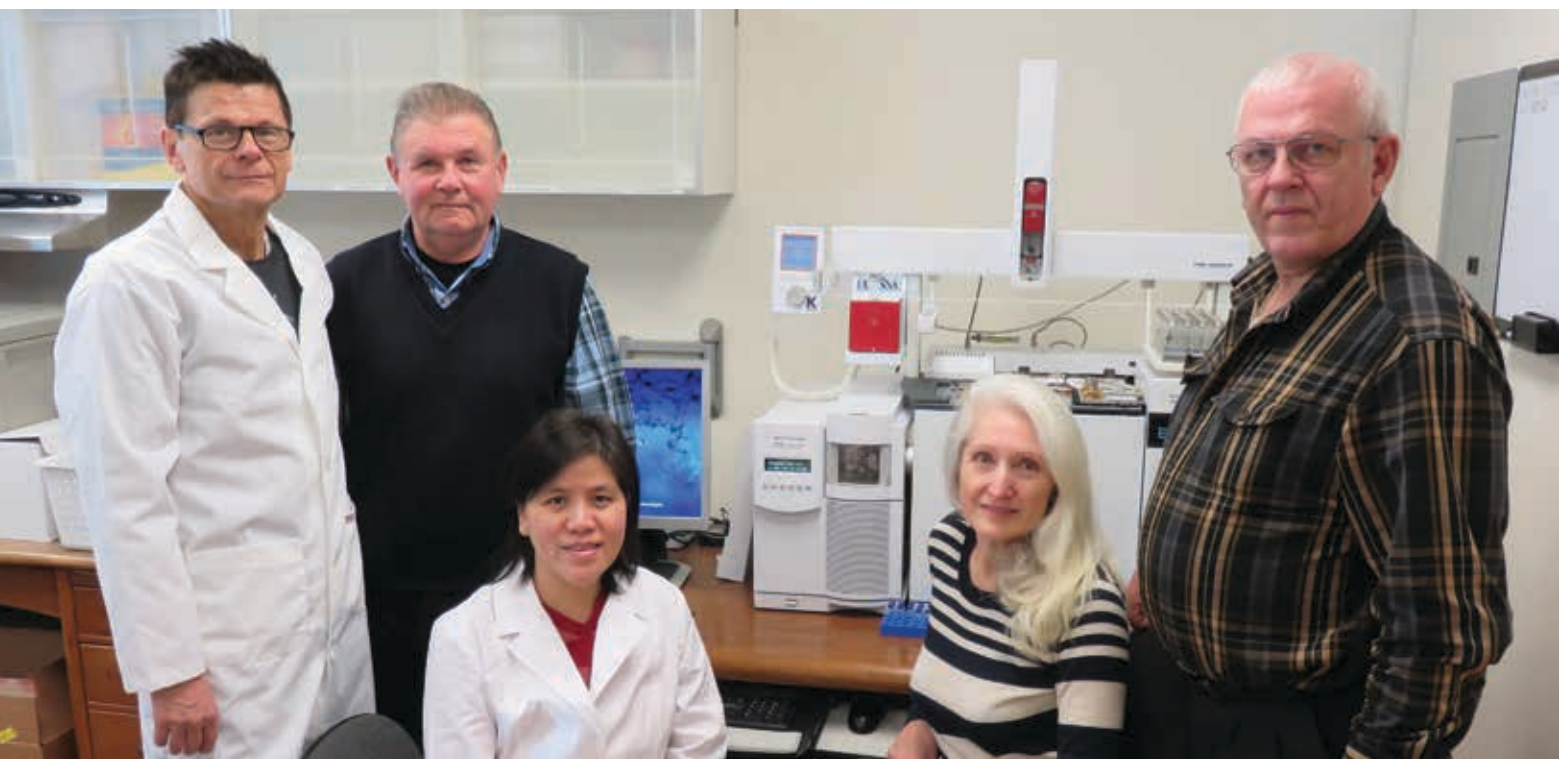
International standards for pesticide residues would be preferred, but more countries are introducing their own standards. Canada's canola industry has to be alert and nimble to adjust quickly to new rules among key markets.

By Richard Kamchen

Customers ramp up pesticide residue testing

Canadian canola export customers' demand for pesticide residue testing is becoming more prevalent, and that means farmers need to ensure their canola crops will meet the requirements of export customers.

Brian Innes, Canola Council of Canada (CCC) vice president of government relations, says overseas buyers are increasingly applying their own national standards for pesticide residues as opposed to simply using science-based standards of the Codex Alimentarius Commission, the international food



IMS Marine Surveyors & Analytical Laboratories in Burnaby, BC, tests shipments for pesticide residue. From left to right: chemist Darek Duch, Volodymyr Bondarev, chemist Polly Rivera, vice president Tatiana Hoddevik and president Jostein Hoddevik.

standards agency of the Food and Agriculture Organization of the United Nations and the World Health Organization.

"More countries are developing their own systems and are more interested in what the residue levels for pesticides are in the commodities that they consume and import," says Innes.

This in turn makes it more important for the industry to ensure the products exported meet regulatory and customer requirements around residue levels, he says.

The CCC acts as a coordination point for the value chain to meet customer demand. Its "Keep it Clean" and "Spray to Swath" programs represent its proactive communication with canola growers.

Keep it Clean urges canola farmers to use pesticides at the correct rate, timing and pre-harvest interval, and to avoid using unregistered pesticides or those with unacceptable residues. The website **www.keepingitclean.ca** also instructs farmers to follow canola storage recommendations, including ensuring bins are clean and free of treated seed. Among other things, farmers also need to avoid using malathion to prepare canola for storage or treat bins, because its residue can linger for up to half a year.

Spray to Swath's primary message to farmers on **www.spraytoswath.ca** is that they need to leave the required time between spraying and cutting, stressing export customers have strict regulations on the types of trace residues they allow in canola. The Spray to Swath Interval

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is the minimum days between when you apply pesticides and when you can swath or straight combine your crop. The site features a handy calculator growers can use to quickly calculate how long to wait for each product.

When it comes to international maximum residue limits (MRLs), the CCC and the grains and oilseeds industry in general have two main goals: aligning standards across jurisdictions; and ensuring an absence of standards isn't an impediment to trade.

"So if there's a zero tolerance — zero can't be met — is there some sort of mechanism to defer to Codex, for example?" says Innes. "If Codex has a level but China and Japan do not, does that mean that the default level in China is zero, or is there a default level that can reasonably be met?" In Canada, for example, the default is 0.1 parts per million (ppm) for pesticides that do not have an established MRL.

While different MRLs in different countries can make the testing process more complex, Innes emphasizes that the important point is whether there are standards in place or not. With standards in place, exporters know what to expect.

"We are trying to align processes country to country, but the more important issue is certainty," Innes says.

When countries do introduce their own national standards, they notify the WTO. The CCC's job is to monitor what happens in international markets and ensure that if there are changes, the industry can meet those new requirements.

Rules can change quickly

China, Canada's biggest export buyer of canola, is one country introducing its own national MRLs for pesticides. Canada exports 90 percent of the canola it produces, and about 30 percent of total output is exported to China. Innes says China's heightened requirements are symbolic of what's happening in the world.

China's updated pesticide management list for 2013 represented significant change. The Ministry of Agriculture of China and the General Administration of Customs released a new list that came into effect in January 2013, adding five pesticides and adjusting the harmonized commodity tariff codes for 27 pesticides. The new list included over 1,100 pesticide active ingredients and 16 formulations.

> "It was a difficult time for everybody — not only for IMS Marine Surveyors Company, but for exporters, and for brokers. Everybody was in shock over the new requirements from customs."
>
> —Tatiana Hoddevik (commenting on China's new pesticide residue rules)

Tatiana Hoddevik, vice president of IMS Marine Surveyors & Analytical Laboratories in Burnaby, BC, suggests the industry was caught off guard by the changes. "China Customs came with new rules, and it was unforeseen," she says.

Especially problematic was the urgency, as a shipment of canola oil that was traded and loaded on ships in December 2012 suddenly had to be validated under the new rules upon arrival in China in January 2013.

"It was a difficult time for everybody — not only for IMS Marine Surveyors Company, but for exporters, and for brokers. Everybody was in shock over the new requirements from customs," Hoddevik says, adding China Inspection and Quarantine's (CIQ) new testing regulations were eventually pared down to 15 ingredients, including nine pesticides.

Hoddevik notes that Canada and the U.S. don't even use some pesticides that China was asking to test for. She says China's environmental concern and new testing demands were introduced so quickly, laboratories scrambled to instantly comply with the complete CIQ testing requirements.

"The critical point was to urgently obtain very expensive equipment and validate official methods on the canola matrix for all new individual ingredients in the critically minimum time," she says.

There continues to be more demand for testing, and the IMS lab is constantly involved in it. Since August 2014, China has expanded the CIQ regulatory list for customs by up to 17 items, 11 of which are pesticides and other additives.

In anticipation of new demands in international trading, IMS expanded its laboratory with analytical chemistry techniques and instruments. It has also developed and validated methods to test canola oils, as most of the available testing methods were designed for other types of vegetable oils, and weren't validated on the complex matrix of canola oils, Hoddevik says.

"Our worldwide customers such as Richardson, Cargill, Bunge and ADM have a complete service at Vancouver Terminal for the supervision of their loading vegetable oils on-board the vessel, and for the certification of the product according to international trading rules," Hoddevik says.

Richard Kamchen is a freelance agricultural writer based in Winnipeg.

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Here's a sneak preview of new varieties and traits that canola seed companies will demonstrate in the upcoming growing season.

By Warren Ward

Canola seed technology update for 2015

Most canola seed companies use field trials to demonstrate new varieties and features. Visiting these trial sites, attending crops tours and talking to specialists on hand can help growers make good seed purchasing decisions for next year. Here is a look at some developments in the canola seed industry for 2015. (Companies are listed alphabetically.)

Bayer CropScience

Bayer CropScience plans to have an extensive network of over 100 replicated Demonstration Strip Trial (DST) locations in 2015. The DST program delivers local performance data on InVigor hybrids relative to their competitor's varieties. Bayer will also educate growers on their pod shatter reduction technology through their Harvest Management DST program in 2015. Harvest Management DSTs will highlight the risks and benefits of various harvest management techniques, including delayed swathing and straight cutting canola. Improving harvest management is one of the agronomic areas that will help achieve the Canola Council of Canada's (CCC's) target average yield of 52 bu./ac. by 2025, says James Humphris, manager of oilseed crops traits for Bayer CropScience. Lastly, Bayer has launched the InVigor Performance Driven Tour in 2015, which is an interactive learning centre that will make stops at agriculture shows across Western Canada. This multi-space trailer environment gives participants an interactive, behind the scenes view of InVigor canola hybrids.

Canterra Seeds

Canterra Seeds continues to add to their canola variety line up for 2015. It plans to launch CS2000, a broadly adapted high-yielding Roundup Ready hybrid. Shaan Tsai, product development manager for oilseeds and pulses with Canterra Seeds, says CS2000 has been found to show intermediate reaction to the 5x clubroot pathotype, and is resistant to conventional clubroot pathotypes. An intermediate reaction to a clubroot pathotype means that 30 to 70 percent of the plants will show clubroot infection symptoms, which is not as good as resistant varieties (less than 30 percent infection), but better than susceptible varieties (greater than 70 percent infection). Canterra Seeds is also working to bring new varieties to market that have improved blackleg and pod shatter tolerance.

Cargill

Cargill will continue to conduct Victory Performance Trials (VPTs) in 2015. These field scale trials will be located across Western Canada to test variety performance using participating growers' best management practices. Throughout the 2015 growing season, Cargill plans to host new and existing customers to demonstrate Cargill's high oleic supply chain. Through these meetings, Cargill will connect end use oil customers with canola growers to foster a better understanding of the entire value chain from canola production to how the end use customer utilizes the canola oil.

Crop Production Services (CPS)

CPS will have over 60 trial locations throughout Western Canada, says Bruce Harrison, director of research and development for Crop Production Services Canada. These trials will be located from Southern Manitoba up to the Peace River Region, and will be available for both retailers and farmers to visit. CPS continues to concentrate its breeding efforts on improved herbicide systems and disease resistance. In its 2015 breeding program, CPS will evaluate hybrids with multi-genic clubroot resistance, as well as hybrids with improved blackleg resistance. Check with your local CPS representative for specific details on locations and tour dates.

Dekalb

Dekalb plans to conduct over 200 market development trials in 2015. In conjunction with these trials, tours will be held where Dekalb representatives will discuss canola production, optimizing the performance of Dekalb hybrids and products in the Dekalb

HELP FOR THOSE FINAL SEED DECISIONS

If growers still have seed decisions to make, results from the Canola Performance Trials (CPT) can help. CPTs are a source of non-biased, replicated canola variety information. For more information, visit **www.canolaperformancetrials.ca** to get yield and other performance results for 2011 to 2014. ●

portfolio. Dekalb will be introducing the new variety 75-65 RR in 2015. This medium maturity variety is rated R for blackleg, while demonstrating good standability and pod integrity, as well as competitive yield with market leaders. Dave Kelner, canola product manager for Dekalb, says 75-65 RR is a good candidate for straight cutting based on straight cut strip trials conducted in 2014. For more details talk to your Dekalb retailer or visit dekalb.ca.

Dupont Pioneer

Dupont Pioneer is currently working on interim registration of two new canola hybrids for 2015. Both hybrids will be featured on tours with Pioneer Hi-Bred sales representatives in 2015. One is a high yielding variety designed to reduce harvest losses, while the other is the first to exhibit protection from both sclerotinia stem rot and clubroot. Dupont Pioneer also brought five new hybrids to the market in 2014, which will all be available again in 2015. Pioneer hybrid 45S56 RR has the built-in Pioneer Protector sclerotinia resistant trait, is rated MR for blackleg, R for fusarium wilt, and has good standability and great yield potential, says Mark Kuchuran, DuPont Pioneer's marketing communications manager for Western Canada. The others are 45H33 RR, which contains the built-in Pioneer Protector clubroot resistant trait, D-Series D3155C, also clubroot resistant, 45H76 and 43E03.

Syngenta

Syngenta will highlight seed products, seed care and crop protection products as part of their 2015 Learning Center Sites. These sites will host numerous tours and activities throughout the 2015 growing season. Please contact your local Syngenta representative for more information on the Learning Center Site nearest you.

Syngenta will also have two new hybrids in 2015: SY4157 and SY4105 (registration pending). Both varieties are Genuity Roundup Ready hybrids. SY4157 is suited for mid to long season zones and is rated R for blackleg. SY4015 is Syngenta's first hybrid to incorporate clubroot resistance, and is well suited across Western Canadian growing season zones. Syngenta will also have a new seed-applied insecticide called Fortenza available for purchase on pre-treated canola seed in 2015. Fortenza provides early season cutworm control, and combines with Helix Vibrance to protect canola seedlings from pests such as flea beetles, cutworms and diseases such as rhizoctonia, pythium and fusarium. ●

Warren Ward is an agronomy specialist with the Canola Council of Canada, and he was the CCC lead for the Canola Performance Trials program in 2014.

With a new injection of GF2 funds, the Canola Council of Canada is taking global activities to the next level.

By Gail Granger

Investment to increase demand and improve access

How canola is talked about and regulated half a world away can have a profound impact on the profitability of the crop here in Canada. To ensure those global influences are building blocks instead of barriers, the Canola Council of Canada (CCC) is undertaking extensive market development and market access work.

"When you consider that 90 percent of Canadian canola is exported, it's easy to see why marketing is such a vital investment in the future of our industry," says CCC President Patti Miller. "We know the world wants more of what the Canadian canola industry can provide, and we're capitalizing on those opportunities."

That's why the CCC is investing significantly in canola market development and market access — leveraging value chain contributions to obtain an injection of $9.5 million from Agriculture and Agri-food Canada's AgriMarketing Program (AMP). When combined with CCC spending, the federal government's AMP contribution under Growing Forward 2 means that a total of $19 million is being invested over five years.

Here's an overview of what's in store.

Spreading the good news about canola

One of the first orders of business is to expand the range of canola marketing tools and the network of partners and spokespeople who are spreading the good news about Canadian canola to consumers around the world.

The CCC has had great success promoting canola's advantages in partnership with leading chefs, respected

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SUPPORT FOR TWO STRATEGIC PRIORITIES OF KEEP IT COMING 2025

52 BY 2025

$19 million investment through GF2 AgriMarketing Program

A $9.5 million investment by the Canola Council of Canada will leverage matching federal government support through the Growing Forward 2 AgriMarketing Program. The total funding of $19 million will be channelled toward two of the three strategic priorities of Keep it Coming 2025, the industry's strategic plan for the next decade.


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organizations like the American Heart Association and experts in nutrition, fitness, cardiovascular health and diabetes control. Now, AMP funding will help the CCC continue to create strong partnerships with credible influencers who speak with authority on the positive attributes of canola oil in key markets around the world.

"We know the best way to deliver this information to consumers is through people they already know and trust," says Bruce Jowett, CCC vice president of market development. "We're building an international network of trusted ambassadors for our products, and we're backing them up with multi-lingual CanolaInfo websites and recipe collections, plus more scientific evidence of canola's advantages."

The CCC is also continuing to close the value gap between canola oil and canola meal. More livestock feeding trials will be launched, building on successful demonstration projects in China's dairy and aquaculture industries. "Canolamazing" promotions in the U.S. will continue to expand awareness of canola meal's benefits in the dairy industry and beyond.

"We aren't just affected by the volatile forces of nature. We can also be hit by unforeseen blows like a blackleg quarantine, damaging misinformation or simply a lack of awareness of our products. It's up to us to take care of those risks, and we have a sound plan to do it."

—Patti Miller

Driving demand through market intelligence

These marketing activities are being fine-tuned through a bigger investment in market research. With AMP funding, the CCC is taking a closer look at consumer attitudes in the most important canola-buying countries.

"The information we gather will reveal the best ways of reaching out to different segments — for example, the most appealing kinds of recipes to feature, the most powerful words to use and the selling points that will really resonate," Jowett says. "We'll be able to take a more targeted and sophisticated approach in our big markets."

Additional research will also shed light on the dynamics of promising new markets for Canadian canola, like India and South Korea. By diversifying the customer base, the CCC hopes to make the industry less vulnerable to any trade disruptions in canola's "big four" export markets of China, the U.S., Japan and Mexico.

Agriculture Minister Gerry Ritz announced during CropSphere in Saskatoon in January that the federal government will invest up to $9.5 million to support canola market access and development activities.

Breaking down trade barriers

All of these market development efforts would be diminished without the ability to keep the doors to international markets open. With this in mind, the CCC is continuing to make a sizeable investment in market access activities.

The AMP funding will support on-going work in canola-specific trade concerns like blackleg mitigation, as well as multi-sector issues involving biotechnology, residue limits and sustainability standards.

"It takes face-to-face communication to work through these questions with trading partners and the international agri-food community, and that requires funding," Miller says. "As the issues become more complex, it becomes even more important to build trust through personal connections."

She says the Canadian canola industry's long and harmonious relationship with Japan, its longest-standing trade partner, is the perfect example. The CCC has facilitated face-to-face meetings with the Japanese Oilseed Processors Association twice a year, ever since the trading relationship began more than three decades ago.

The CCC will also tackle the extensive behind-the-scenes work that is necessary to make the industry's needs heard when new regulations and trade agreements are negotiated and developed.

"These are investments in predictability, which is an important factor in the profitability of all parts of our industry, from farm to port," Miller says. "We aren't just affected by the volatile forces of nature. We can also be hit by unforeseen blows like a blackleg quarantine, damaging misinformation or simply a lack of awareness of our products. It's up to us to take care of those risks, and we have a sound plan to do it." ●

Gail Granger is a writer and communications consultant based in Winnipeg.

FIVE SIMPLE TIPS TO
GET YOUR CANOLA READY FOR EXPORT

- Use pesticides at the correct rate, timing and pre-harvest interval
- Do not use unregistered pesticides or those with unacceptable residues
- Always follow the canola storage recommendations
- Grow blackleg resistant varieties and use practices that reduce infection
- Do not grow de-registered varieties

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Keep it Clean!

This important message brought to you by: canolacouncil OF CANADA

Four Alberta grower organizations, including Alberta Canola Producers Commission, will launch a pilot project this month to see how well Alberta growers stack up against major sustainability standards in the global food market.

By Karla Bergstrom

Alberta growers test their sustainability

There are a lot of things Alberta farmers do right when it comes to sustainability, but a new project will put their readiness to the test. The Alberta Canola Producers Commission (ACPC) is working with the Alberta Barley, Alberta Wheat and Alberta Pulse Growers commissions on the Alberta Crops Sustainability Certification Pilot Project to see how well Alberta growers are positioned to meet the sustainability standards that many global food companies are adopting.

Sustainability is no longer a niche market. It will become a sales requirement, and a cost of doing business – along with supply and quality. Together, these commissions hope that by taking on this pilot project in Alberta, they will lay the groundwork for sustainability practices in Canada, positioning Canada as a leader among exporting countries.

Consumers are demanding more "sustainable" food — food produced with attention to environmental protection, care for agriculture workers and economic sustainability for farmers globally. In response, global food companies, including Unilever, Kellogg's, General Mills, AB InBev (Anheuser-Busch) and McDonalds, have developed sustainability requirements or key performance indicators (KPIs) that reflect how they plan to meet consumers' demands. Some of these, including Unilever's, will become mandatory as early as this year.

Farmers are an important step in the process, since they have the biggest environmental footprint in the supply chain. Consumers are closely scrutinizing farming practices. The commissions hope that, by taking on this pilot project, the "early bird gets the worm" approach will help keep and possibly expand global markets for Canadian crops.

What is the pilot project?

The idea for the pilot project came out of the new Canadian Roundtable for Sustainable Crops, which includes representation from all major crop commodity groups, as well as end users and agriculture companies. Alberta Barley and Alberta Wheat put forward the concept, and invited ACPC and Alberta Pulse Growers to join them.

"I see this project as a collaborative effort of all four crop commissions," says Erin Gowriluk, government relations and policy manager for both Alberta Barley and Alberta Wheat. "All four crop commissions have committed time, resources and ideas to ensure the project is a success."

The four commissions have selected a few dozen growers to participate in an audit of their practices. The audit will examine how well Alberta growers stack up against three major sustainability standards. Control Union, a global auditor that specializes in sustainability measurements, has been hired to run the audit, which will begin in March.

This project will help growers better understand how consumer demands translate to their farm operations and assess their readiness for meeting these requirements. Most importantly, it will contribute to the conversation about agriculture, food and sustainability. The organizations involved will also be able to bring forward suggestions from growers to help influence policy.

"We know it's a good news story and we can't wait to tell it. But in order to do so in a meaningful way, we want to better understand what consumers are looking for, and what they want to know more about," Gowriluk says. "This project will assist us in doing that."

This project builds on the canola industry's current certifications in the European and U.S. biofuels market, says ACPC general manager Ward Toma.

"This is not new to the canola industry, but we see continued market opportunities for those who take the lead on sustainability initiatives," Toma says. "We look forward to working with our industry partners here in Alberta to ensure our products are always at the forefront of consumer demand."

Karla Bergstrom is policy analyst with Alberta Canola Producers Commission. Karla will speak about this sustainability pilot project at the Social License Conference in Leduc March 12, 2015. Growers are welcome. Call 310-FARM or 780-454-0844 for more information or 1-800-387-6030 to register.

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It starts with the new 9R/9RT Series Tractors. The new industry-exclusive HydraCushion™ Suspension System levels out power hop and road lope so you're more productive in some of the most challenging terrains. And a 10-engine hp increase on all models – a lineup with up to 620 hp and 115 gal/min (435 litres/min) of hydraulic capacity – lets you push through jobs easily. Simply put, they're ready for anything.

Check out the 1870 Air Drill and 1910 Air Cart. Armed with exclusive ConservaPak™ openers, the 1870 provides accurate separation of seed and fertilizer and precise depth control to give you even emergence and maximum yield. Go with a 1910 Air Cart (250-550 bu.) featuring new SectionCommand™, available on both new machines and as a field conversion attachment

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for hydraulic drive carts. Old or new seeder, all farmers will now benefit from reduced skips and overlaps to get greater crop maturity when harvest arrives. There's also the input savings. When you have as expensive an upfront cost as canola seed, it's not fair to say, 'Every little bit helps,' because there's nothing little about it.

Time to spray? Then it's time for the R4045. It's as big on uptime – thanks to the large, 1,200-gal. tank (4,542 litres) – as it is on productivity, courtesy of 120-foot booms that cover more acres in fewer passes. Plus, an impressive 346 ponies promise to give you the torque rise and engine responsiveness to handle tough fields.

Harvest is here: so what's it going to be? The W150 Windrower or the S-Series Combine? There's no wrong answer. A W150 with 400D Draper is a perfect choice if you wish to swath first, allowing you to match the speed of reels and belts to your ground speed. The 400D's true-width cut of up to 40 feet excels at even-crop feeding, even in tough canola. Or use an S-Series to straight cut, now equipped with the new tough small grains package, promoting 20% more throughput. As for loss level, this package serves up to 10% of added capacity to cover you when conditions just aren't ideal.

From the top of the cycle to the bottom, the road to canola success isn't black or gold. It's green, because ... **Nothing Runs Like A Deere™.**

1870 Air Drill

Canola in the tank
means money in the bank

When it was time to harvest his canola crop last year, Henning Wubbe, owner of Wubbe Farms Limited, La Riviere, Manitoba, remembered that the previous dry year had resulted in a lot of canola going out of the back of his combines. So he took advantage of a John Deere FarmSight service that his dealer, Greenvalley Equipment, was offering.

"With the initial tests, we had 2.71 bushels going out the rear end in canola and by the time the product specialist left, we were under a bushel to the acre," Wubbe says. With 2,000 acres in canola, "That was close to $40,000 (CAN) in market price, so it was a substantial savings. It was well worth it."

To learn more about Henning's story, and others, visit JohnDeere.ca/RealStories. Then go see your dealer about putting together a John Deere FarmSight solution for your operation.

JOHN DEERE

The Canola Council of Canada co-chairs the 14th International Rapeseed Congress, July 5 to 9, 2015 at TCU Place in Saskatoon.

By Patti Miller

Canada to host "Olympics of the canola industry"

The International Rapeseed Congress (IRC) is like the Olympics for canola and rapeseed. It brings together the best scientists to take on our toughest challenges and our biggest opportunities in canola and rapeseed production and utilization. Like the Olympics, it happens every four years in different cities around the world.

The name may seem old fashioned to Canadian canola growers, but rapeseed is still grown in many parts of the world. Europe produces "oilseed rape" (OSR) similar to canola. Traditional rapeseed with high erucic acid and glucosinolates is a major food crop in China and India. The Congress brings together researchers, government and industry managers, policy analysts, food and feed company representatives, grower association staff and directors, and many others to share important advancements and discuss challenges common to both canola and rapeseed.

The Canola Council of Canada (CCC) sent four representatives to the previous meeting, held in Prague, Czech Republic, in 2011. They came back with new ideas on harvesting canola, especially European technology for straight combining, and on blackleg management in Australia, to give just two examples.

With the event on home soil this time, the CCC is co-chairing with Ag-West Bio. I am co-chair of the steering committee with Wilf Keller, president and CEO of Ag-West Bio. Curtis Rempel, CCC vice president of crop production and innovation, is also on the committee. Along with CCC agronomy director Clint Jurke and CCC oil nutrition research manager Lisa Campbell, we are part of IRC 2015 finance and sponsorship, program and communications committees. Many CCC members are sponsoring the event.

General topics include genomics and molecular biology, plant breeding strategies, crop protection and agronomy, seed quality and utilization, nutritional value of oil and meal, and economic and policy issues with regard to regulatory systems and international trade.

While the event is designed for scientists, growers are welcome. Those who attend can learn more about what is happening with canola "behind the scenes", pick up information on global developments in agronomy, crop protection and crop management, and talk directly to researchers about their ideas and challenges.

Keith Downey, one of the "Fathers of Canola," will deliver the opening plenary. Dr. Downey helped develop the first canola varieties, bred from rapeseed using traditional plant breeding techniques.

Maurice Delage, Saskatchewan farmer and former president and CEO of Aventis Crop Sciences in North America (now Bayer CropScience), is also on the agenda.

Other featured speakers include Stephen Strelkov, professor of plant pathology at the University of Alberta, Yongming Zhou, director of China's Key Laboratory of Rapeseed Genetics and Breeding, and Udo Heimbach, deputy director of the Institute for Plant Protection in Field Crops and Grassland in Braunschweig, Germany.

Dr. Strelkov is well-known in Western Canada and around the world as a leading specialist in clubroot. Dr. Zhou's major interests are trait genetics and the development of novel germplasm through genomics and biotechnology. He will discuss genetic improvement and production of rapeseed in China. Dr. Heimbach's research areas include integrated pest control, the effects of pesticides on soil dwelling arthropods, the evaluation of insecticide efficacy and harmonization of European pesticide regulations.

Ideas and information will be shared through keynote lectures, concurrent sessions on major topics, workshops on special issues and posters covering a wide range of subjects. The Congress also includes networking, private meetings, and field and research facility tours. The event attracts hundreds of delegates from around the world.

For more information, visit the IRC 2015 website at **www.agwest.sk.ca/events/26** or email the event coordinators at **irc2015@agwest.sk.ca**. On Twitter, follow **@agwestbio** and use hashtag **#IRC2015.** ●

Patti Miller is president of the Canola Council of Canada.

Dr. Kevin Folta from the University of Florida is a leader in communicating science and breaking down myths about biotech.

By Sandi Knight

Folta alleviates fear of science

Dr. Kevin Folta spoke to home economists, dietitians, students, food bloggers, consumers, farmers and industry members in Manitoba in October, explaining the science and dispelling myths about biotech.

Agriculture and food production are in the spotlight now more than ever and GMOs are on the hot seat. But the science is often misunderstood.

Dr. Kevin Folta, horticulture professor and research scientist from the University of Florida, spoke about communicating science at the Manitoba Canola Growers Association's event "Does science belong on my plate?" held in Winnipeg in October.

Speaking to home economists, dietitians, students, food bloggers, consumers, farmers and industry members, Folta broke down the science, dispelled myths and alleviated any fears one might have over how our food is produced.

He began by addressing the trepidation consumers feel about genetically modified organisms (GMOs), despite not knowing exactly what they are or how they work. He asked the group if they knew how many crops currently use this technology. The answer in October was eight — corn, canola, soybeans, cotton, alfalfa, papaya, sugar beets and squash. FDA approval of Simplot's Innate potatoes in November 2014 makes nine.

Folta explained that "transgenic", rather than GMO, is a more accurate description, meaning plants contain a gene inserted using recombinant DNA technology. This is a precise extension of conventional plant breeding but changes only one to three genes instead of 10,000 to 800,000 that can change through conventional breeding. And it takes less than five years to develop as opposed to five to 30 years through conventional breeding.

He also described how genes are transferred. It is a straightforward and effective process, not at all resembling the "frankenfood" images often seen on the Internet. It is tested and safe – in 18 years not one case of illness or death has been related to GMOs.

While the technology may be relatively new, Folta reminded us that humans have been manipulating plant genetics for more than 10,000 years. As the world's population increases, moving forward in developing genetics and production methods will generate better quality and increased yields on the same land-base with fewer inputs. Resistance is one limitation, but this can be overcome.

Many consumers want "natural" food, but Folta advised that nothing we eat is natural. It has all changed from its original form.

The public is hungry for knowledge, but torn as to whom to believe. Fear and risk are being manufactured and sold by so-called experts, he says. Correlation is being cited, rather than causation. Biotechnology is only part of the solution in feeding our growing world, but it shouldn't be opposed for invalid reasons.

FOLTA'S TABLE

	HYBRIDS (cross between two non-clonal plants)	POLYPLOIDS (whole genomes duplicated or added)	MUTATION BREEDING (chemical or radiation induced damage to DNA)	CROSS SPECIES BARRIERS (interspecific crosses)	TRANSGENICS (rDNA method to add a gene – "GMO")	CISGENICS (rDNA method to add a gene)
EXAMPLES IN COMMON FOODS	Almost everything	Strawberries, wheat, bananas, brassicas, others	Some bananas, pears, apples, rice, yams, mint, others	Pluots, tangelos, some apples, rice, wheat	Much corn, canola, soybeans, cotton, papaya	Coming soon
TRANSFERS GENES FROM ONE SPECIES TO ANOTHER	Yes, sometimes	Yes, often	No	By definition	Yes	No
OCCURS IN NATURE	Yes	Yes	Yes, transposon movement, mutation from environment	Yes, rare, seldom fertile	Yes. Agrobacterium, other horiz. trans.	N/A
HUMAN INTERVENTION	Yes, for crop improvement	Can be induced chemically to improve crops	Yes, to introduce variation for crop improvement	Yes, for crop improvement	Yes, for precision crop improvement	Yes, for precision crop improvement
NUMBER OF GENES AFFECTED	10K to >300K, depending on species	10K to >800K	No way to assess	10-300K	1-3	1-3, usually 1
KNOW WHAT GENES MOVED OR AFFECTED DO	No	No	No	No	Yes	Yes
KNOW WHERE AFFECTED GENES ARE IN GENOME	No	No	No	No	Yes	Yes
PLANT PATENTABLE	Yes	Yes	Yes	Yes	Yes	Yes
DOCUMENTED ADVERSITY	Yes	??	???	Yes	No	No
ENVIRONMENTAL ASSESSMENT	No	No	No	No	Yes	Will see
ORGANIC ACCEPTABLE	Yes	Yes	Yes	Yes	No	No
TIME FOR NEW VARIETY	5-30 years	>5 years	>5 years	5-30 years	<5 years	<5 years
DEMANDING LABEL	No	No	No	No	Yes	Will see

Dr. Kevin Folta developed this table to provide a snapshot of breeding techniques.

The most sobering part of his presentation was learning about available solutions being blocked because of misinformation, fear and activism.

Strawberries could be grown without fungicides by allowing a single gene in the strawberry to be "turned up" all the way, he says. Biotech "golden" rice, rich in vitamin A, could prevent blindness and death. Root disease could be stopped in cassava, a nutrient rich root vegetable. Drought-resistant corn could be grown. The allergy gene in peanuts could be "turned off". Black spot and wilt could be prevented in tomatoes. Oil content and quality improvements could be made in soybeans and canola. Diseases could be stopped in grapes, eggplant and citrus crops.

While this technology sits on a shelf, the benefits to farmers, consumers and the environment are being delayed. Most striking are solutions to drought, famine and disease in developing nations not being implemented because of activism from first world countries where food is abundant, plentiful, affordable and safe.

As a farmer, I believe if all concerned consumers had the benefit of attending this informative event, the debate over how our food is produced would stop. The evening was invaluable as a resource for advocacy. If those of us in the industry share our stories and answer questions, perhaps we can help advance science and reason to ensure productive steps continue to be taken to improve agriculture methods and food production around the world. ●

Sandi Knight is a farm-based freelance writer from Macdonald, MB. For more from Kevin Folta, visit www.kfolta.blogspot.ca.

Bernie McClean

Two growers explain how fertilizer rates, good seed, timely weed control and taking time to achieve good stand establishment are key factors in achieving above-average canola yields.

By Jay Whetter

Good land and good weather definitely help when it comes to canola yields, but agronomic management also plays a significant role. Finding out what works and what doesn't and what pays and what doesn't are necessary steps if Canadian canola growers are to achieve the Canola Council of Canada (CCC) goal of 52 bu./ac. average yield by 2025.

"This is something we'll have to work on together," says Curtis Rempel, vice president of crop production and innovation with the CCC. "Part of that means applying and advancing current research that supports best practice recommendations. Part of it means continuing to survey growers to find out what correlates to top yields. And part of it means engaging with high-yielding growers to see what they're doing to achieve their yields while maintaining or improving profitability."

Bernie McClean, the newly elected SaskCanola director from Medstead, SK, reported average canola yields of just over 50 bu./ac. to crop insurance in 2014 and 49 bu./ac. in 2013. For comparison, the crop insurance average for the five most popular canola hybrids was 42.4 bu./ac. for McClean's risk zone in 2013.

"We don't have great soil by any means — we have clay and rock — but we have a good climate for canola," McClean says. "Rainfall is not normally a limiting factor and we don't have high heat."

How to improve your yield average

Crop nutrition is one key to McClean's yield results. He leaves nothing to chance when it comes to fertilizer rates. "You can't pay for hybrid seed and use the same fertilizer rate you use for Polish or open-pollinated varieties. Hybrids need the inputs to reach their potential," he says, adding, "I don't think I'm there yet in terms of getting the economic potential out of these hybrids."

An experience with one field in 2014 added further support to his thinking. One field yielded only 38 bu./ac., pulling his average down from what would have been the mid-50s. A soil test after harvest showed the field had run out of nitrogen — and he knows why. He had cut back nitrogen rates because he seeded the field in early June. "I was worried the crop wouldn't mature in time," he says. "In hindsight, I should have applied the full recommended rate."

McClean has been pushing up fertilizer rates the past few years. In 2010, he applied an average rate of 100 pounds of nitrogen, 25 pounds of phosphate and 27 pounds of sulphur per canola acre, all of it in a liquid band outside the seed row. In 2013, he increased his total phosphate rate to 40 to 45 lb./ac., including 15 lb./ac. in the seed row. By 2014, his overall fertilizer rates for canola were 130 to 140 pounds of nitrogen, 45 to 50 pounds of phosphate and 30 pounds of sulphur. However, the late field — the low yielder — got only 95 pounds of nitrogen.

McClean also ran a boron trial on his farm in 2014, as soil tests were "very deficient." He put four strips in one field, adding 0.3 lb./ac. of boron at a cost of $7 per acre to his liquid blend for those strips. "Results were inconsistent," he says. "Two strips paid well, one provided a small return and one was negative." He will repeat the trial for two more years before deciding whether to include boron as regular practice.

Stand establishment is a key practice for him. A decade ago, he had been using a floating-hitch cultivator to seed canola. "With the rolling hills, the variable seed depth across the seeder was driving me crazy," he says. "I would literally be sick in the bush each morning worried about my seeding job. I would wear out my jeans crawling around checking openers and seed depth."

He started looking at independent opener systems in 2007, and in 2010 he bought a Seed Hawk. "Having each opener run independently gives me the consistent seed depth I need," he says. "Since then, I haven't worn out a single pair of jeans crawling around on the ground. And that was the year my yields really started to improve."

As for seeding date, he'd like to have all his canola seeded by May 10, but it rarely works out that way. He often starts around May 10 and tries to have most fields wrapped up by May 20.

His rotation lately has been close to 50 percent canola, with oats, CPS red wheat, peas and barley filling out the other acres. That mix may change. Root rot has become an issue with peas on his farm, and dealing with malt grade barley is more difficult the past few years, he says. He may cut back on barley and try faba beans instead of peas.

McClean is "very fussy" with early weed control. "With Roundup Ready canola, I prefer to spray no later than the 5-leaf stage. With Liberty Link, I'm always on the early side."

He sprays every acre with fungicide to manage sclerotinia stem rot. "I look at fungicide as crop insurance," he says.

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"You can't pay for hybrid seed and use the same fertilizer rate you use for Polish or open-pollinated varieties. Hybrids need the inputs to reach their potential. I don't think I'm there yet in terms of getting the economic potential out of these hybrids."

—Bernie McClean

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"I spend $50 per acre on seed and $100 to 120 per acre for fertilizer. I don't want to risk losing the crop to sclerotinia."

When swathing time rolls around, McClean waits as late as he can. "I never swath at less than 60 percent seed colour change. I'm probably close to 70 to 80 percent," he says. He swaths a lot at night or early in the morning to limit shattering in the most mature pods. He plans to straight combine a few acres in 2015 for the first time.

McClean credits a couple factors in his farm life for helping him see the hidden potential in his crops. One is the group of peers he met through local retailer Cavalier Agrow's "King of Canola" competition. Each year, farmers enter one field to see who produced the highest yield. The competitors then network to talk about what they did, what paid off and what didn't.

Cavalier also runs trials through its business region, and documents all results. "It does take time to build a relationship you can trust, but we now have that," McClean says. "Now I'm part of a whole group of farmers who work together as almost one, making a big area into a small community."

The second factor was his experience as a custom grain hauler, meeting farmers all across the Prairies. "While standing with the farmer watching the load go in, I thought, 'Are we going to stare at it, or talk about it?'" he says. He opted to talk. "When I look back, I realize those conversations and the ideas they generated have become a competitive advantage for me."

An Alberta perspective

Jim Herder farms near Sylvan Lake, AB, another good canola growing region. In 2011, his canola averaged around 70 bu./ac., with his top five fields at 86 to 88 bu./ac. In his risk zone, the crop insurance average for the top five most popular canola hybrids was 45.2 bu./ac. in 2011.

His average has fallen since then, largely due to the weather. In 2013, hail hammered 80 percent of his canola fields after what had been "a perfect July," Herder says. After the hail, disease set in and August was dry. "Some fields were really bad, with yields in the low 30s," he says. His overall yield was in the low 40s.

In 2014, he had only eight inches of rain through the growing season — about half of normal — and July was hot, with frequent highs of 30°C or more. Heat during flowering is a known yield robber for canola. He also had an 80-acre field with 90 percent hail damage. Some fields yielded 60 to 65 bu./ac., but his average was 50 to 52 bu./ac. "With one hailed field at 20 bu./ac., it takes an awful lot to bring your average back up," he says.

Herder's farm is at around 3,000 feet of elevation, so it's generally cool — which is good for canola — and he usually gets "timely and ample" rain in a season. But climate alone does not explain his results. Close attention to nutrient management and other best practices are at the core of his success.

"I have worked with the same agronomist for the past 15 years," he says. "At the beginning, I tried disproving what she would recommend for me, but I couldn't. So now I just follow what she says."

His fertility program is based on soil test recommendations. "I want to maximize yields, and I've pushed my agronomist for years to increase fertilizer rates, but she holds me back. There is a good balance between us," he says.

He insists on using crop nutrition sources that are proven to work. "The crop doesn't care what the source is, as long as the nutrient is there when the crop needs it," he says.

Herder also applies manure from his feedlot. He calculates the nutrient equivalent in the manure when setting fertilizer rates so he doesn't over-apply.

The ultimate goal, he says, is to maximize production and profitability on his 2,700 acres. "I'm a bushel farmer, not an acres farmer," he says. With fewer acres than many other farms, that allows him to pay more attention to detail and to take it slow.

He has a "good drill" and seeds at 3.5 to 4 mph. "It comes down to physics. You have to go slow to do a good job," he says, giving a construction analogy. "You'll never see a guy packing a road at 10 mph."

He aims to have every seed in the top 1/4" and doesn't worry whether he's seeding into moisture. In his area, the moisture will come, he says. "I believe seeding depth and speed makes a difference. Seed too deep and the canola plant is stressed right off the top," he says. "That stress takes away yield."

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NEW STAND ESTABLISHMENT VIDEO

CANOLA WATCH

The Canola Council of Canada has a new video demonstrating the importance of strong stand establishment for yield and profit. This video, called "Canola stand establishment: A grower Q&A", and all other CCC agronomy videos are posted at **www.youtube.com/canolacouncil**.

Canola growers, agronomists and retailers will also want to subscribe to the free agronomy newsletter, Canola Watch. Sign up at **www.canolawatch.org**. ●

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Herder also aims for a high plant stand. "We're not trying to save on seed. We get 11 plants per square foot most of the time."

At harvest, everything is straight combined. "It's not a fast process for canola," he admits. "We have a couple of old combines, we look after them well, and harvest slowly."

Herder does test plots every year with Pioneer Hi-Bred, and these plots show him the yield potential of canola and help him identify limiting factors. "Each canola grower has to know what they're dealing with. Not all land is the same. Not all conditions are the same," he says. "But the genetic potential is there to achieve higher yields."

Survey: What are top yielders doing?

In 2011, the CCC commissioned a survey of 996 canola growers to see how production practices can influence yield results.

The survey included factors such as seeding, swathing and tillage, the type of equipment used, chemicals applied and past crop history. It also asked about weather and soil characteristics.

Elwin Smith, the Agriculture and Agri-Food Canada (AAFC) research scientist who helped build the survey and analyze the results, says past research has shown that seeding earlier, applying herbicides at an earlier stage of growth and applying more inputs will result in higher yields. However, he says, in a survey with so many variables and based on just one year, it was not easy to sort out cause and effect. After an extensive statistical analysis of survey results, the agronomy factors that had a clear impact on yield in 2011 were:

- Applying 90 lb./ac. of nitrogen fertilizer produced yields 1.2 bu./ac. higher than applying 65 lb./ac.
- Fertilizer rate decisions based on soil tests produced 2.1 bu./ac. higher yields than decisions based on past experience.
- Fertilizer rate decisions based on soil tests produced 6.5 bu./ac. higher yields than decisions based on fertilizer cost.
- Swath timing based on seed colour change produced 4.1 bu./ac. higher yields than swathing based on plant colour or field colour.
- An early to normal seeding date produced 3.6 bu./ac. higher yields than late seeding dates (after May 22).

Environmental conditions were the top influencers in 2011. Growers who reported "good" or "excellent" moisture conditions yielded 11.9 bu./ac. higher than growers who claimed "poor" conditions, and growers who reported "good" or "excellent" temperatures at flowering had 14.1 bu./ac. higher yields than growers who reported "poor" temperatures at flowering. Being in the Brown soil zone instead of conventional canola growing regions in the Black and Grey Wooded zones accounted for a 2.5 bu./ac. drop in yield when all other factors were eliminated.

Curtis Rempel expects that, as the CCC advances toward 2025 and its 52 bu./ac. goal, this survey will be repeated. "As the data set builds, we will be able to draw more confident conclusions about practices that contribute to higher yields," he says. "Those conclusions, along with known and new controlled research projects, will continue to solidify our agronomy recommendations when it comes to yield and return on investment for inputs and production practices."

"Each canola grower has to know what they're dealing with. Not all land is the same. Not all conditions are the same. But the genetic potential is there to achieve higher yields."

—Jim Herder

Meanwhile, top growers will keep pushing. "I still think we can reach 60-bushel canola averages up here," says Bernie McClean in northwest Saskatchewan. In fact, that's his target yield for 2015. He will crank up fertilizer rates to 150-45-0-30 at the high end and 120-50-0-35 at the low end to achieve that goal. ●

Jay Whetter is the editor of Canola Digest.

WANT TO TALK ABOUT YOUR YIELDS?

The two growers in this article are in traditionally good canola growing regions. For an upcoming article, we would like to feature growers achieving average yields of 50 bu./ac. or more in the Brown and Light Brown soil zones or in other challenging situations. Is that you? If you'd be willing to share your production practices in an upcoming article, please contact Jay Whetter at whetterj@canolacouncil.org or 807-468-4006. ●

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Some growers in the southern Prairies looking for a legume crop to broaden their canola-wheat rotations have turned to soybeans. Soybeans have their risks, especially with the Prairies' shorter season, but these growers have been willing to take the risk.

By Jay Whetter

Marcel van Staveren

Canola and soybeans

Marcel van Staveren

Creelman, SK

Marcel van Staveren started growing soybeans three years ago, but the foundation for his decision was poured in 2008 — the beginning of the wet cycle in southeast Saskatchewan. "Our annual moisture was excessive, and beans are known to handle moisture better," he says.

Van Staveren had other motivations, too. He wanted to keep a legume or pulse in rotation, and peas and lentils were becoming less reliable. Pea yields on the van Staveren farm had fallen from a fairly consistent 45 to 50 bu./ac. to around 35. They were also seeing more black medic and prickly lettuce, weeds difficult to control in pulse crops.

Around the same time, the van Staverens decided to reduce their eight-crop rotation to "make our lives easier and focus on what we do best." They went with canola and durum, and added soybeans on the legume side.

Van Staveren seeds canola into soybean stubble. Based on limited experience, he says canola has a much higher rate of emergence on the darker soybean stubble, but notes that the past couple years canola has also been seeded later and into high moisture — two factors that can greatly increase canola emergence.

After three years, his soybean results have been mixed. His average yields were 25 bu./ac. in 2012, 28 bu./ac. in 2013, and a "disappointing" 25 bu./ac. in 2014. Van Staveren had been hoping for continued improvement, but 2014 was another wet spring, so seeding didn't start until mid-May. One soybean field was planted in early June, and then hit with heavy frost on September 11. It yielded only 17 bu./ac., pulling down the average.

The positive is that his soybean fields seeded before May 24 yielded in the 30s. "That's what's keeping us interested," he says.

Van Staveren plans to continue with soybeans, but he remains "cautiously optimistic." The benefits, he says, are that he gets to participate in the oilseeds market with a legume crop, and soybeans give him an alternative in the face of high nitrogen prices. It also spreads out harvest, which means he may be able to reduce his combine fleet.

He grows some older RR1 soybean hybrids, but has also tried new generation RR2 hybrids. Being able to apply up to two litres per acre in RR2 soybeans is a benefit for control of round-leaved mallow and scentless chamomile, he says.

Rick Vaags
Dugald, MB

Rick Vaags has grown canola and soybeans together in his rotation for the past 15 years. His original motivation was excess moisture. "Beans can handle a lot more moisture — and not just compared to canola. They're better than most other crops," he says.

Soybean seed costs per acre are generally higher than canola, but fertilizer costs are much lower. He applies inoculant with the seed, but no other fertilizer. Soybeans can fix their own nitrogen.

Vaags's rotation is canola, then winter wheat, then soybeans. The wheat

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Rick Vaags

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crop gives him the opportunity to control volunteer canola. On occasion he will put beans on beans. "It's better than canola on canola, and gives us a chance to take advantage of beneficial rhizobia that built up in the first year."

"I don't see challenges growing canola and soybeans together."

—Rick Vaags

Vaags hasn't had any wrecks with soybeans. "We've had yields in the low 20s, but we can cover our costs of production with that yield," he says.

Soybeans create a "beautiful seedbed" for canola the following year, he says. They don't produce the residue cover that wheat, oats and corn produce, he adds, and Roundup Ready soybeans keep the field clean for canola. "I don't see challenges growing canola and soybeans together."

In an early spring he says he might put in more canola, and in a late spring he may back off on soybean acres. He likes to seed canola the first week of May, and holds off until after May 10 to plant beans.

Glen Ebel

Medicine Hat, AB

Glen Ebel has been growing soybeans on irrigated land for the past three years. His farm is two-thirds dryland and one-third irrigated, but except for a few dryland trials, he's kept soybeans on irrigation. "They seem to need that August rain," he says.

Ebel started growing soybeans because he wanted to maintain a rotation that includes canola, cereals and legumes. He replaced peas with soybeans because he was having trouble getting peas to yield because of disease and lodging problems. He continues to produce alfalfa as well. "I believe in the benefits of a fuller rotation for disease management and soil condition," he says.

He grows Roundup Ready soybeans, rotated with Clearfield or Liberty Link canola. He solid seeds soybeans with his drill, and uses a flex header to harvest. "I use the flex header on everything," he adds.

Glen Ebel

"We have a ways to go before we have ideal soybean varieties for our area. There's a lot of work to be done."

—Glen Ebel

Soybeans remain a challenge in terms of yield potential. "We have a ways to go before we have ideal soybean varieties for our area. There's a lot of work to be done," he says. "But when we started growing canola our yields were 25 bu./ac., so I'm positive we'll see research that brings improved results for soybeans."

Marnie McLean

Oak River, MB

Marnie McLean has been growing soybeans since 2006. The McLeans were looking for another high-value crop to add to their rotation, and really wanted a pulse crop to lower overall nitrogen costs and provide benefits for soil tilth.

"It has worked really well so far," she says. "We've had no crop failure yet — knock on wood — and soybeans are easier to grow than peas." Disease issues combined with poor harvestability in their area have weighed down their enthusiasm for peas.

McLean says they have had years with lower soybean yields, but chalk those up to learning experiences. Their current crop formula has them attaining or exceeding provincial average soybean yields, she says.

"Ultimately, I think having soybeans in the rotation will help growers keep producing big canola crops," she says. Disease management is one reason, she says, but notes that sclerotinia is common to both canola and soybeans, so soybeans do not provide a break from that disease.

"Another consideration is that soybeans prefer some rain in August to finish and pump up that yield. That's usually about when we want the fields to dry up for wheat and canola harvest."

—Marnie McLean

Marnie McLean

Rotating herbicide tolerance systems is necessary, McLean adds. "Roundup Ready volunteer canola in Roundup Ready soybeans is not a problem to be taken lightly," she says, "But there are numerous control options from various herbicide groups either pre-emergence or in-crop, and we're fortunate to have the other herbicide tolerance systems to control some of the volunteer pressure that way."

Soybeans in the rotation also spread out the harvest, which provides increased combine utilization, she says.

"Cons for beans would be that we have a fairly tight seeding window from the time the soil temp is right to when it is getting late by the calendar," she says. "Also, some specialized equipment is needed to maximize results."

They use a land roller on bean acres, given that the crop is combined with a flex header riding on the ground. "A precision seeder would have benefits, but I'd spend the money on a flex header first," says McLean.

"Another consideration is that soybeans prefer some rain in August to finish and pump up that yield," she says. "That's usually about when we want the fields to dry up for wheat and canola harvest."

This also provides built-in risk management, McLean adds: "If you get the rain, your beans are happy, but if you don't, your wheat is happy!"

"We will definitely continue to grow both canola and soybeans," she concludes. ●

Jay Whetter is the editor of Canola Digest. *Would you like to put your name forward to be part of a canola grower panel article? Contact Jay at whetterj@canolacouncil.org or 807-468-4006.*

SIGN UP FOR CANOLA WATCH

Canola Watch is a free agronomy email sent out each week through the growing season and each month through the winter. Canola management articles in the email are based on weekly conference calls with Canola Council of Canada agronomists, provincial canola specialists, and experts in weed, disease, insect and fertility management. You get all of that expert advise free, along with helpful photography and videos. View archived articles and sign up at **www.canolawatch.org**. You can also follow **@CanolaWatch** on Twitter. ●

When dry canola is cooled in the winter to below -15°C, leaving it alone to warm naturally in the summer seems to be the best treatment.

By Joy Agnew

Summer storage tips for canola

Storing canola on-farm for longer than a few months always makes producers uneasy, and for good reason.

In March 2014, a record amount of canola was still on-farm from the previous harvest and it was obvious that a large portion would remain in storage throughout the summer. The concern was that ambient heating during the summer would warm the grain at the edge of the bin and generate convection currents, resulting in moisture migration and spoilage. What was the best management strategy to deal with this? Leave it alone? Slowly warm the grain using aeration to even out the temperature profile? Turn the grain to even out the temperature profile?

To help answer some of these questions, the Prairie Agricultural Machinery Institute (PAMI) monitored the in-grain temperature and relative humidity in three bins starting in June 2014. One bin was left alone as a baseline, one bin had 700 of its 4,000 bushels removed and returned to the same bin ("turned") and one bin was aerated during the evening to slowly warm up the grain.

All three bins contained dry canola (average moisture content was six percent) that had been frozen during the previous winter by aerating when the ambient temperature was below -30°C. In fact, the temperature of the core of the bins was still as cold as -17°C when monitoring began on June 6, 2014 (see the diagram). Conditions in the baseline and aerated bins were monitored until the end of July and the turned bin was monitored until the end of October.

Key observations and implications

There was no noticeable moisture migration in any of the bins in June and July, so no spoilage or condensation was observed for any treatment. However, the lack of moisture migration may have been partially due to the lack of moisture in the canola (moisture content was six percent). Canola stored at a higher moisture content may be more susceptible to moisture migration during the summer.

The turned bin and aerated bin had some unstable conditions in July that could have resulted in spoilage. Unstable conditions resulted from warm seed being directly adjacent to cool seed. In the aerated bin, these conditions occurred as the warming front moved through the cool seed. In the turned bin, these conditions occurred because the warm seed at the top funneled down into the center of the bin during turning, leaving a warm core adjacent to cool seed. However, these unstable conditions did not result in noticeable condensation or spoilage.

If canola is uniformly cold going into spring and summer, it should not require aeration or turning to improve storage conditions. However, it should be monitored and a plan should be in place to move the seed if problems arise.

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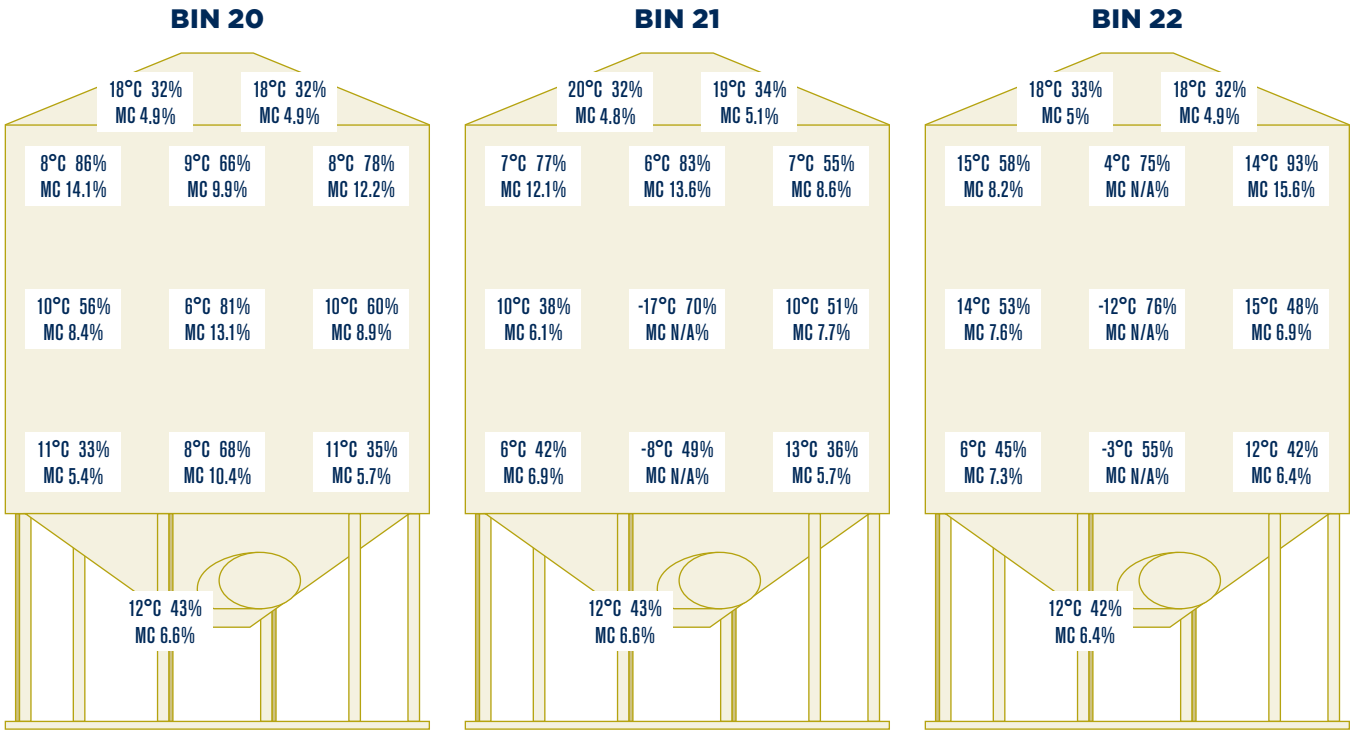

These diagrams shows the temperature, relative humidity and moisture content (MC) of the air around the seed as of June 6, 2014 (the start of the trial) for the turned bin (Bin 20), the aerated bin before the fan was operated (Bin 21) and the baseline bin (Bin 22).

The baseline bin had a large temperature difference (25°C at the edge and -3°C in the core) for most of July, but the temperature difference was gradual, resulting in generally stable conditions.

The temperature in the bin headspace fluctuated widely from day to night (reaching as high as 55°C), but the temperature of the grain at the top of the bin (within two feet of the headspace) did not fluctuate from day to night, illustrating the great insulating effect of canola.

Based on these study results, "leaving it alone" seems to be the best practice to minimize storage risk in the summer.

Grain storage expert Ken Hellevang, an extension engineer from North Dakota, supports this recommendation. Hellevang says it is best to "keep it as cold as possible for as long as possible," meaning: no turning or aeration. He agrees that this results in a large temperature variation between the edge of the bin and the centre of the bin, but it rarely results in condensation or moisture migration because the amount of water actually held in the grain is small.

So if grain will be stored in the summer, consider taking advantage of our cold winters and cooling the seed to below -15°C. Aerating grain with very cold temperatures should be done with caution, because moisture will be removed from the grain during cooling which can result in condensation in the headspace of the bin which will freeze and restrict airflow. "Super-cooling" of grain should be done in stages. Target a temperature drop of 10°C at a time. Ensure you have sufficient venting area in the headspace to allow moist air to escape.

KEY POINT

When storing canola over the summer, "leaving it alone" seems to be the best practice to minimize storage risk. Consider taking advantage of our cold winters and cooling stored canola to below -15°C. Target a temperature drop of 10°C at a time, and ensure you have sufficient venting area in the headspace to allow moist air to escape. ●

If canola is uniformly cold going into the spring and summer, it should not require aeration or turning to improve storage conditions. However, it should be monitored and a plan should be in place to move the seed if problems arise.

Thanks to the Canola Council of Canada and the grower associations in Manitoba, Saskatchewan and Alberta for providing funding for this project. ●

Joy Agnew is a grain storage researcher with the Prairie Agricultural Machinery Institute (PAMI).


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When weed management goes wrong, the product often shoulders the blame. But so many variables influence herbicide performance, including — as this case demonstrates — herbicide residue hiding where the grower never thought to look.

By Jay Whetter

Contamination station

Dan Orchard got a call from a colleague who needed help with a sensitive issue. "How personal are we talking here?" Orchard asked nervously, not sure what he was getting himself into. "A grower has a field of dead canola plants and he's wondering who's to blame," the colleague said. Whew, Orchard thought to himself. As a Canola Council of Canada (CCC) agronomy specialist, he was more comfortable with production matters than the personal stuff. "OK," he agreed. "Lay it on me."

The colleague explained that the grower had sprayed about 20 barrels worth of Liberty on InVigor canola. A few days later, canola plants started dying off in just one 80-acre part of a field. The rest of that field and all other fields were fine. The first thought was that Liberty in one of the barrels must have had something wrong with it. It was, after all, the seventh barrel that caused the problem — with no issues from the barrels before and no issues after. It was clear based on the damage pattern that it was a sprayer issue and started immediately after refilling.

Orchard and the colleague dug a little further into the facts. They asked about spraying conditions for the day, water source, and whether the tank sat full or partly full overnight before restarting the job. It seemed like the operation had been consistent all the way through. "Are you sure there's nothing else?" Orchard asked.

Then the light came on. The only thing that changed was that after the sixth barrel, the grower started using his chemical pump again. It had stopped working during spring burn-off season, and it was finally fixed. Orchard clarified: "Burn-off? With glyphosate?"

"Yes," the grower said. But he figured the chemical pump hardly holds any volume and couldn't be the cause. So Orchard, the colleague and the grower decided to test the theory. They filled the pump with water and measured what came out. It held four litres. Four litres of concentrated glyphosate mixed thoroughly into a tank to cover 80 acres works out to 0.05 litres per acre — or about one seventh of the typical spring burn-off rate. This is enough to smoke young canola plants. It did.

The field had about one living plant per five square feet. The grower turned under the crop. One to two plants per square foot can produce a reasonable

The only thing that changed was that, after the sixth barrel, the grower started using his chemical pump again. It had stopped working during spring burn-off season, and it was finally fixed.

Most canola plants in the 80-acre field were killed by the accidental glyphosate tank-mix. Those that survived looked like this. There was some regrowth, but not enough to warrant taking the field to harvest.

yield, but one per five square feet was a complete write off. By harvest, the cost of the mistake became clear. The grower's other fields yielded 50 to 60 bu./ac., so the 80-acre wipe out represented a $40,000 loss. Ouch.

"Come to think of it," the grower said in the end, "I do remember thinking the first few glugs coming out of the pump didn't seem the right colour for Liberty."

Clean out tips

As this experience demonstrated, herbicide contamination can come from unexpected places. The following tank cleaning checklist is from Tom Wolf with AgriMetrix in Saskatoon.

Be prompt and thorough.

Remove pesticide from mixing and spraying equipment immediately after use. The main areas of concern are the tank wall, sump, plumbing and filters — but don't forget about external pumps! First, spray the tank completely empty while still in the field. It's okay to cover previously sprayed areas — given that all herbicides must be crop-safe at twice the label rate to be registered by the PMRA — but reduce the rate to be certain. Second, add ten times the sump's remnant of clean water, circulate, and spray it out in the field as well. Repeat. These two rinsing steps will take care of the majority of the cleaning and won't take very long. Having a clean water tank on the sprayer and a wash-down nozzle makes this job easier.

Clean all components.

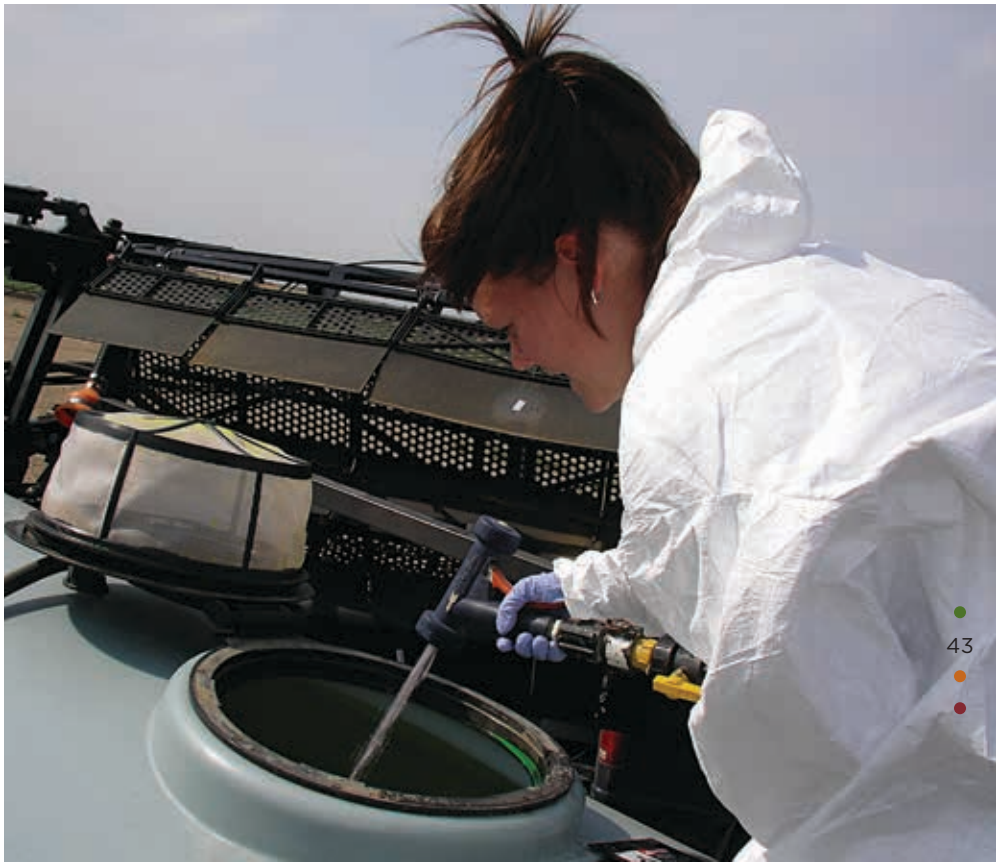
Tank wall and floor: Use a direct, pressurized spray to remove residues from tank walls and floor. Some steel tanks contain dividers and false floors, making it more difficult to access residues there. Make a special effort to ensure those areas are clean of sediment.

Sump: Spray out the tank to empty the sump as completely as possible (as outlined above). Any spray liquid or herbicide concentrate remaining in the sump area will be re-circulated in the sprayer.

Plumbing: Plumbing can contain a significant reservoir of herbicide residue, and the rubber hoses leading from the tank to the boom can contain several square feet of surface area. Pump clean water through the boom and pumps. Ensure that all return and agitation lines also receive clean water and all residue is flushed out.

Filters: Remove all filters and nozzle screens and thoroughly clean these with fresh water. Run clean water through the plumbing leading to the screens. Remember, all dry products and most liquid products call for screens no finer than 50 mesh on their labels.

Nozzle bodies: When cleaning a spray boom, rotate through all nozzles in a multiple body to ensure clean water reaches all parts of these assemblies.



Use a direct, pressurized spray to remove residues from tank walls and floor.

PHOTO: Tom Wolf

Use small rinses, but more of them.

Smaller repeat washes are a more efficient way to use rinse water. For example, three 30-gallon washes or two 70-gallon washes are as effective as a single 600-gallon wash.

Use tank cleaning adjuvants.

Ammonia raises the pH of the cleaning solution, which helps sulfonylurea (SU) herbicides dissolve. When decontaminating after use of an oily (EC) formulation, a wetting agent such as AgSurf will help you remove oily residue that may trap SU herbicide on tank and hose material. Commercial cleaners are available.

Dispose rinsate safely.

Always spray out the tank in the field. Do not drain it while stationary unless you are certain it is free of pesticide and that you are away from sensitive areas and waterways.

For more sprayer tank cleanout instructions, check your provincial guide to crop protection or search "sprayer tank" at **www.canolawatch.org**. ●

Jay Whetter is the editor of Canola Digest.

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ALBERTA Canola PRODUCERS COMMISSION

ABreport

2015 Alberta Canola Producers Commission Board of Directors

Back L-R Terry Young (Region 7), Stuart Holmen (Region 10), Marlene Caskey (Region 12), Greg Sears (Region 2 and Board Vice-Chairman), Renn Breitkreuz (Region 6), John Guelly (Region 5).

Front L-R Dale Uglem (Region 11), Lee Markert (Region 9 and Board Chairman), Kelly McIntyre (Region 1), Daryl Tuck (Region 4), Steven Marshman (Region 8), Raymond Blanchette (Region 3).

Three new directors

The 25th Annual General Meeting of the Alberta Canola Producers Commission was held January 27, during the successful FarmTech Conference in Edmonton. Prior to the event, director nominations were held in October with three new directors being acclaimed. Steve Marshman of Strathmore will replace Elaine Bellamy in Region 8, Dale Uglem of Bawlf will replace Jack Moser

FarmTech a success, as always

Many thanks to the FarmTech committee (and especially to our own Rick Taillieu) for the hard work and attention to detail that resulted in FarmTech 2015 being the best one yet. We know all attending delegates got great value from the diverse sessions that were available, and from the dynamic keynote speakers like Peter Mansbridge.

Thanks to all who attended our Annual General Meeting. We appreciate the interest, and we look forward to helping canola growers thrive in 2015. ●

in Region 11, and John Guelly of Westlock will replace Colin Felsted in Region 5.

After the AGM, Lee Markert of Vulcan was elected Chairman of the Board, with Greg Sears of Sexsmith voted to serve as Vice-Chair. A full list of committee Chairs and Board of Directors and their contact information can be found on www.albertacanola.com. ●

A message from the new Chairman – Lee Markert

First, I need to extend sincere thanks to our past Chairman Colin Felsted. He left behind big shoes to fill, as he was the model of diplomacy and pragmatism, and exhibited a great deal of dedication to the success of our industry and its growers. I am up to the challenge of continuing that momentum and I'm proud to be working with such a diverse board, represented by so many different backgrounds and perspectives, in order to do so. This diversity is very timely, in that we are seeing a vast array of issues emerging in the agriculture industry. Farm safety, sustainability, social license and more are all coming to the forefront, so I am privileged to work with a board so well versed in all aspects of these issues. ●

A farewell from Colin Felsted, past Chairman

I want to take this opportunity to thank the ACPC for the support and encouragement over the past six years while I served the board and canola growers of Alberta. It was a privilege to work in such a positive and innovative industry and organization; I particularly enjoyed meeting and working with people who shared my passion for all things canola and agriculture. I am proud to have been part of the growth of this industry, as measured in terms of increased yields, crushing, and the surpassing of the 15 million tonne production goal. I am sure this success can be attributed to the fact that canola is not only a profitable crop option for farmers, but also an affordable and healthy choice for consumers.

I would like to welcome Lee Markert in his new role as Chairman. His knowledge and commitment to industry will serve him well in this position, and he has already demonstrated strong leadership skills. The organization and growers are fortunate to have him. His youth brings a fresh perspective, which, combined with his industry experience, will help him lead the Board successfully. ●

SaskCanola

SKreport

SaskCanola welcomes Janice Tranberg as new Executive Director

SaskCanola is pleased to welcome a familiar face from the agriculture industry to our team. Janice Tranberg joined SaskCanola as the new Executive Director in January.

Janice brings a wealth of leadership and management experience to SaskCanola. She has a long history of success at various positions in the agriculture industry. Over the last year, she served as an Assistant Deputy Minister for the Saskatchewan Ministry of Agriculture. Reporting to the Deputy Minister, she was responsible for three branches: Crops and Irrigation, Agriculture Research, and Regional Services.

Prior to this, Janice served as the Vice President (Western Canada) for CropLife Canada (2007 to 2013). In this capacity, she focused on the direction, development, and implementation of the strategic plan to include parameters of government relations, advocacy, science and regulatory, committee and stakeholder leadership and engagement. Part of her role with CropLife Canada involved the management of the Council for Biotechnology Information Canada to communicate science-based information about the benefits and safety of agricultural biotechnology and its contributions to a sustainable food chain.

She holds a BSA and MS in Molecular Biology and Plant Pathology from the University of Saskatchewan, as well as a Horticulture Diploma from Olds College. Janice is originally from the Big River area.

"I am very excited to return to Saskatoon and join the SaskCanola team. The organization is a respected leader in the Canadian and global canola industry," says Tranberg. "I am passionate about this sector and believe canola has great opportunity for continued growth in consumers' diets and the business plans of growers. I look forward to working closely with SaskCanola's Board of Directors to implement their strategic plan, discuss issues with producers, and build strong relationships with SaskCanola's stakeholders."

Janice Tranberg

"We are very pleased that Janice has accepted the Board's offer to lead this organization," says Franck Groeneweg, Chair of SaskCanola. "Janice's extensive experience in fostering and managing relationships will be a tremendous asset in helping the Board and staff meet the challenges that today's competitive environment demands of Saskatchewan's canola producers." ●

Tax credits for Saskatchewan canola growers

The Scientific Research and Experimental Development (SRED) Program is a federal government program that encourages research and development by providing tax-based incentives. For 2014, registered producers may claim 19.2 percent of their levy contributions as a qualifying SRED expenditure on their federal tax return. In addition, farm corporations may claim 15.8 percent of their levy contributions as a qualifying expenditure towards the SRED program. For complete details, visit www.saskcanola.com or contact the SaskCanola office at 1-877-241-7044. ●

Franck Groeneweg

Dale Leftwich

SaskCanola board announces election results and elects leadership

Five nominations were received to fill four positions on the SaskCanola Board of Directors. An election subsequently took place by way of electronic voting, the votes were collected and tabulated by the Returning Officer Agriculture Council of Saskatchewan, and the results are in. Newly elected are Charlene Bradley of Stranraer, Bernie McClean of Glaslyn, and Lane Stockbrugger of Englefeld. Re-elected is Dale Leftwich of Esterhazy.

The new Board members assumed their Director responsibilities following SaskCanola's Annual General Meeting on January 14, 2015, held in conjunction with CropSphere at TCU Place in downtown Saskatoon.

Following the AGM, the SaskCanola Board of Directors elected Dale Leftwich as Chair for the upcoming year. Board member Doyle Wiebe was elected as Vice-Chair.

"I am pleased to accept the Chair position for SaskCanola," Leftwich stated. "I want to sincerely thank Franck Groeneweg for all of his hard work as Chair over the past year; his commitment to representing growers will be missed at the board table."

"I have sincerely enjoyed working with the SaskCanola board and staff and have every confidence that Dale will be a great successor," Groeneweg stated.

MEET YOUR AGRONOMISTS

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SAVE THE DATE

14th International Rapeseed Congress

Saskatoon, SK
July 5-9, 2015

14th International Rapeseed Congress
SASKATOON 2015

Scientists, students, government, industry, policy analysts, producer groups, and trade associations are invited to IRC 2015, the most comprehensive global forum for discussing issues and advances in canola/rapeseed R&D and commercialization of canola/rapeseed and derivative products. For more information, visit www.agwest.sk.ca/events/26.

SAVE THE DATE

Crop Diagnostic School 2015

Outlook, SK
July 28, 29, or 30

Manitoba Canola Growers

MBreport

Dalgarno receives Canola Award of Excellence

Bruce Dalgarno

Visionary, Genuine, Perseverance are a few words to describe Bruce Dalgarno and his commitment to the canola industry. But for Bruce, it's his passion that drives him to make a difference. His dedication to the canola industry was recognized on February 17, 2015, at the gala banquet at CropConnect in Winnipeg, MB. Bruce Dalgarno received the Canola Award of Excellence in front of fellow farmers and industry members.

Looking back on his 19-year involvement in the canola industry, he wouldn't change a thing. "It was a great experience, but really it was all the people that I met in the industry that made a difference on me," Bruce states.

He, along with past award winners Jim Green, Dawn Harris and Max Polon, were drivers behind the Manitoba Canola Growers Association (MCGA) implementing the check off system. And when the check off needed to be increased from $0.50 to $1.00, Bruce did it all again.

"Bruce Dalgarno is a leader who worked passionately for the farmers of Manitoba," states Ed Rempel, president of Manitoba Canola Growers.

Bruce always took the challenge, never wavering on what was the right thing to do. Over the years, Bruce was the chairman of the Canola Council of Canada and presidents of both Manitoba Canola Growers and Canadian Canola Growers. He was involved in the integrated pest management, which evolved to the pesticide harmonization project with Canada, U.S. and Mexico.

"It's hard to look back on his involvement in agriculture and narrow down all of the achievements. Bruce was always there leading the charge," says Bill Ross, MCGA executive manager.

Honorable JoAnne Buth worked with Bruce when she was at Canola Council. One of the qualities that she admired about Bruce was that "he sees a challenge and he does not give up".

As a farmer and councilor for the R.M. of Harrison Park, Bruce is committed to his community and actively involved in many organizations. You will find him as a volunteer firefighter and a 4-H leader. Bruce continues to be connected to the MCGA by being a farm mentor with #CanolaConnect Camp that sees key influencers come to his farm and learn about what he does as a farmer.

Bruce farms with his wife, Carol, and his son, Andrew, in Newdale, Manitoba. They operate 3,600 acres of cereals, oilseeds, grasses and pedigree seeds.

MCGA presents the Canola Award of Excellence annually to a person or group who has contributed to the sustained growth and prosperity of the industry. The first award, presented in 2008, was given to Dr. Baldur Stefansson, also known as the Father of Canola.

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- Plan on attending a Canadian post-secondary institution within two years of graduation.
- Send your complete application to MCGA by ***April 30, 2015***.

The awarding of the scholarship will be based on academics, canola connection, school and community involvement, and essay submission.

Manitoba Canola Growers

For an application form and complete details, visit *www.canolagrowers.com*

canolainfo.org

China has 30 million tonnes of annual demand for edible oil and imports over half of it. This is why the Canola Council of Canada sees continued potential for export growth to China.

By Angela Dansby

China needs our healthy canola oil

With nearly 1.4 billion people, accounting for about 20 percent of the world's population, China needs a lot of edible oil — about 30 million tonnes of it. Already the world's top consumer of vegetable oil, China's appetite for it is currently increasing by nearly three percent per year.

This increasing demand for edible oil has been driven by a rapidly growing economy, higher incomes, urbanization and subsequent dietary changes, such as increased oil, meat and dairy consumption. That means China needs oilseeds for both humans and animals as it expands its meat and dairy industries.

"When you look at China's population, huge growth in its middle class and a market increasingly interested in health, canola oil and meal are a great fit," said Bruce Jowett, vice president of market development of the Canola Council of Canada (CCC). "The challenge is awareness. In order for people to use canola products, awareness and understanding of their benefits needs to be increased."

China imports about 54 percent of the oilseeds it uses to meet its needs, and produces only about half (14 million tonnes) of the oil it consumes. Imports will likely increase, because total planted oilseed area is predicted to decline in the next five years in favour of grain production. Plus the Chinese government is prioritizing "imports to stabilize domestic oilseed demand and diversify oilseed supplies by establishing a broad network of oilseeds and edible vegetable oil sources," according to an April 2013 study by Beijing Orient Agribusiness Consultants Ltd (BOABC).

It can afford them: "China's rate of economic growth over the past 30 years has been remarkable and has not been equaled by any other nation in modern times," the study noted. "The IMF forecasts that China's economy will continue to grow at an annual rate of 9.7 percent over the next five years to $12.7 trillion, accounting for 13.5 percent of the world's economic activity by 2017."

While the domestic rapeseed market in China is big, consumers in the BOABC study said they preferred the taste and texture of canola over rapeseed oil, and that health, safety and quality are priorities when choosing cooking oil.

These factors add up to a huge opportunity for canola exporters like Canada.

Chinese imports of Canadian canola

Canola is currently the number two imported oilseed and number three imported cooking oil in China, and most of it comes from Canada. In fact, Canada accounts for about 97 percent of canola seed and nearly 80 percent of canola oil imported by China.

In 2013, Canadian canola exports to China were 2.9 million tonnes of seed (crushed domestically for oil and meal) and 880,000 tonnes of oil, according to Statistics Canada. Over the past five years, canola oil has accounted for about seven percent of total vegetable oil imports according to *Oil World*. That small percentage is still a lot of oil — and growing.

Canola imports in China have been quite stable since the 2009-10 crop year, with the exception of 2010-11, when China quarantined canola seeds from Australia and Canada due to plant health

Rapeseed is a major crop in China, but Chinese customers are starting to appreciate the health advantages of choosing Canadian canola instead.

concerns over the fungal disease blackleg. The quarantine — still in effect to some degree — prohibited shipments testing positive for the disease from entering the country and restricted the processing of non-contaminated shipments to facilities outside of domestic rapeseed growing areas.

"The Canola Council of Canada will continue to focus on China to increase awareness, understanding and usage of canola oil and meal," Jowett said. "We will take on concerns or issues the market may have and address them as they arise."

The Chinese and Canadian governments are working together, Jowett noted. "It's a slow but successful process to reopen the market."

In turn, Canadian canola contributes to China's wealth and health. Its products contribute about $3.7 billion USD to the Chinese economy, according to a December 2013 LMC International study commissioned by the CCC. That's due to domestic transportation, crushing and processing of seed, as well as oil refining and bottling, plus employee wages for all of these activities. Of course, canola oil can reduce the risk of cardiovascular disease (CVD) when used in place of saturated fat — a fact that bodes well in a country with high rates of CVD and diabetes.

Canola benefits Chinese consumers

CVD in the form of stroke is the leading cause of death in China, affecting about 290 million Chinese adults. China is also one of three countries leading the world in diabetes numbers with 114 million diagnosed cases. People with diabetes are especially at risk for CVD; two out of three die from it and all tend to be affected by heart complications earlier in life than people without diabetes. As a result, having a heart-healthy diet and using an everyday cooking oil low in saturated fat is critical for Chinese consumers, especially because they use a lot of cooking oil. They use it at least once a day, and use as much as two to four litres per month.

"Given the prevalence of CVD and diabetes in China and consumers' significant use of cooking oil, canola oil is the ideal choice as an everyday staple," said Liu Na, senior nutrition expert in Beijing. "According to scientific studies, as little as 1.5 tablespoons of canola oil a day in place of saturated fat may help reduce the risk of heart disease. It's a simple change that Chinese consumers can make for a few *jiaos* per serving a day."

At the same time, these consumers are becoming increasingly interested in healthy foods and cooking oils. In fact, when it comes to oils, most are concerned about health, safety and quality due to a history of domestic scandals with adulterated and contaminated oils. Imported oils like Canadian canola oil are trusted more by consumers, according to BOABC's study.

Quality and food safety were the top two cooking oil brand attributes having the most impact on consumer purchasing decisions in BOABC's survey of nearly 1,000 primary grocery shoppers in Beijing and Shanghai. Most (70 percent) indicated that canola oil's health attributes would motivate them to purchase it and 67 percent said the oil's reputation for quality would influence

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CANOLAINFO PROMOTES GOLDEN OIL IN CHINA

China is the second biggest export market for Canadian canola products, consuming $2.94 billion worth of seed and oil annually. That said, the Canadian government and canola industry are committed to raising public awareness about healthy fats through CanolaInfo, the Canola Council of Canada's global promotion program for canola oil.

As of 2013, CanolaInfo began media outreach in China to inform Chinese consumers about canola oil and its benefits. In June 2014, CanolaInfo launched a website in Mandarin at **CanolaInfo.org**.

CanolaInfo strives to influence health-conscious families in Beijing and Shanghai to buy canola oil for health reasons; build a groundswell of support among nutritionists and preventive cardiologists; and convince the Chinese government to make way for greater imports of canola oil and seed as a means of driving better health among its citizens.

In Shanghai, CanolaInfo's goal is to attract trend-setters to canola oil in highly visible ways to start a word-of-mouth buzz among Chinese consumers. Shanghai is the country's hub of cultural influence, driving trends in Beijing and elsewhere.

Among health professionals, CanolaInfo is focusing on preventive cardiologists and nutritionists since they directly make dietary recommendations to consumers and have significant influence. Within China's culinary community, CanolaInfo is working with chefs to get canola oil into home kitchens and hopes to build interest among restaurateurs and their patrons in canola oil.

Working with traditional and social media, CanolaInfo strives to give consumers more reasons and occasions to switch to canola oil, drive traffic to its Mandarin website and increase readership of online content. ●

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them to buy it, trumping competitive price at 44 percent. Twenty-two percent said Canadian origin alone would prompt a purchase.

Valued health attributes include the fact that canola oil has the least saturated fat (seven percent). It has about half as much as other common cooking oils in China, including sunflower (12 percent), olive (15 percent), soybean (15 percent) and groundnut/peanut (19 percent). It's also valued as a good source of plant-based omega-3 fat. The majority of those surveyed said they regularly or often try to use cooking oil low in saturated fat.

Plus, "Canola oil is higher in omega-3 fat than other common cooking oils, so it's an easy way to get some of this often under-consumed nutrient in the diet," noted Liu.

Beyond fitting into a healthy Chinese lifestyle, canola oil is "at home" in the Chinese kitchen with its neutral taste, light texture, and high heat tolerance. It can be used in almost any culinary application — from vegetable dressings to stir- and pan-frying.

"I love cooking with canola oil because it's very versatile and allows Chinese ingredients to shine," agreed Da Cai, cookbook author and well known food blogger in Beijing. "The fact that it's healthy as well makes my decision to use it for my family and readers easy."

In fact, in BOABC's blind taste tests of eight oils with consumers, canola oil was ranked number one overall. Taste and viscosity (texture) were the top attributes cited. Canola oil was favoured above peanut, soybean, rapeseed, sunflower, olive and blended vegetable oils. Most taste-testers thought rapeseed oil was too strong in aroma and flavour and some did not like its dark colour. (Most rapeseed oil sold in China is classified as grade four; dark in colour and strong in flavour compared to canola oil.)

Given this positive outlook for canola oil, the Canadian government and canola industry are committed to raising public awareness about healthy fats through CanolaInfo, the CCC's global promotion program for canola oil, Jowett noted. As of 2013, CanolaInfo began media outreach in China to inform Chinese consumers about the benefits of canola oil. As of June 2014, CanolaInfo launched a website in Mandarin at CanolaInfo.org.

"China is a great opportunity for canola oil," Jowett said. "People are starting to become more health-conscious and they can see how it fits into their diet. With such a large population though, the challenge is sharing the message. It's going to take a lot of energy, hard work and resources to impact the Chinese marketplace."

"I love cooking with canola oil because it's very versatile and allows Chinese ingredients to shine. The fact that it's healthy as well makes my decision to use it for my family and readers easy."

—Da Cai, cookbook author and well-known food blogger in Beijing.

Canola vs. rapeseed

While China is a significant importer of canola products, it also grows a lot of rapeseed.

"Canola is often confused with rapeseed, but the two crops and their oils are distinctly different both compositionally and nutritionally," noted Jowett. "By an internationally regulated standard, canola oil is very low in erucic acid (less than two percent) whereas rapeseed oil can be as high as 40 percent with a different taste and appearance. Similarly, rapeseed meal is high in glucosinolates — bitter-tasting compounds — whereas canola meal has very little of them."

Rapeseed has a long history in China and its oil has been consumed there for decades. But as consumer preferences are moving toward healthier and more neutral tasting oils, rapeseed oil is declining in popularity. In fact, its share of the domestic market has declined from 38.8 percent in the 2000-01 crop year to 27.3 percent in 2011-12, according to U.S. Department of Agriculture statistics. That percentage is projected to decline further to 24.4 percent in 2013-14. BOABC predicted that domestic rapeseed oil production will likely plateau at 5.8 million tonnes by 2016-17.

In its survey, just four percent of respondents said they buy and use rapeseed oil most often among all available cooking oils. But when asked whether they had ever bought or used rapeseed or canola oils, 51.3 percent said yes for rapeseed and 5.8 percent said yes for canola.

Those choosing canola oil said quality and health were the dominant reasons. For rapeseed oil, reasons were divided among familiarity, healthier option, product availability and competitive price. Rapeseed oil is a traditional ingredient in Sichuan cooking, but it is not popular among Beijing consumers and its dark colour can be a turnoff.

Collectively, peanuts (28 percent), cottonseed (23.4 percent), rapeseed (23 percent) and soybeans (21 percent) account for the vast majority of land planted to oilseeds in China. Rapeseed plantings were estimated at 17.5 million acres in 2013-14. About half are in central China, 22 percent in the south and 17 percent in the east. Because of this, rapeseed oil is better known and used in these regions.

China growing its own canola, displacing rapeseed production in favour of healthier, more valuable oil and meal, isn't likely a solution either.

"China has 20 percent of the world's population but only eight percent of its arable land," Jowett noted. "The challenge is it has an emerging middle class interested in new types of quality foods, so it must look to imports for some."

He continued, "Recent government direction and policy is for the country to produce more wheat, rice and corn. Oilseeds are likely crops it will import to meet its needs. No doubt China will plant canola within its boundaries — this is positive as it helps China see the crop's benefits — but it cannot be self-sufficient in canola due to pressure for land from urbanization and other crops."

From heart health to light taste and versatility in the kitchen, canola oil is poised to become a "golden child" in China's rapidly growing edible oil market. ●

Angela Dansby is communications manager of CanolaInfo, the global canola oil promotion program of the Canola Council of Canada.

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