

Lining up against GM wheat

Farmers, Canadian Wheat Board largely united in opposing Monsanto's application to market 'Roundup Ready' genetically-modified wheat

By Jason Warick, Saskatchewan News Network

NEAR ABERDEEN -- Marc Loiselle drives his family minivan through a course of country dirt roads surrounded by green fields of maturing wheat swaying in the wind.

He turns into a field and stops the van near a particular small plot he discovered earlier this summer.

The wheat in this plot -- about the size of two tennis courts -- looks the same as any other. But it's ringed by a five-metre wide border of corn, a crop rarely grown in Saskatchewan. There's a 25-metre border of canola around the corn.

A final border of dirt separates the plot from the neighbouring wheat fields.

There are no signs to explain this curiosity. The only marker is a tiny wooden stake at the far end of the plot with some letters and numbers written in black ink.

A farm hand approaches Loiselle and the reporter and photographer accompanying him. When told that the visit is part of the research for a newspaper article, he is friendly but quickly returns to his tractor and declines to be photographed.

Loiselle, who farms nearby at Vonda, explains that this is one of the 29 secret locations across the Prairies testing genetically-modified (GM) wheat.

This and other GM wheat plots are symbols of a multi-billion dollar battle between agribusiness giant Monsanto and the growing legion of farmers, environmentalists, and health organizations fighting to block the sale of Monsanto's GM wheat in Canada.

The Canadian Wheat Board and others say releasing GM wheat could cause Europe, Japan and other markets to close their doors to all Canadian wheat, devastating a Prairie farm economy already suffering under the mad cow crisis.

"Farmers don't want it. Our customers don't want it. There's nobody that wants this," said Canadian Wheat Board chair Ken Ritter.

Monsanto officials say there's no need to worry. They promise not to sell any GM wheat until markets accept it, and are continuing their tests. The federal ministries of health and agriculture are considering whether to grant Monsanto's application to sell its "Roundup Ready" GM wheat to farmers.

But the federal Agriculture Department is also a partner with Monsanto on GM wheat development, and stands to make millions in royalties if it's approved.

"Our image as the breadbasket of the world is in jeopardy," said Loiselle, as he walked around the perimeter of the GM wheat test plot. "It would be ridiculous to approve this."

Few images are as fundamental to Saskatchewan's identity as a waving sea of wheat, or a proud farmer atop his or her combine at harvest time. Wheat is a major part of this province's culture and history. It's the only image on its licence plates.

The GM wheat controversy is primarily economic, but the special place wheat holds makes this debate a highly emotional one. Even the question of revealing the location of the test plots is highly contentious.

The GM wheat plot near Aberdeen is being grown on private farmland under what Monsanto calls a "third-party co-operators contract." The farmer rents his land to a private research firm, which collects data for three years on the GM wheat plot. That data is then passed on to Monsanto.

GM wheat test plots are also being grown at federal Agriculture Department research stations in partnership with Monsanto in several locations such as Scott, 180 kilometres west of Saskatoon.

The locations of most other test plots remain a mystery to almost everyone except Monsanto, the landowners, and the federal government.

This secrecy is unacceptable, putting the rights of a corporation ahead of farmers and rural residents, say critics.

The Saskatchewan Association of Rural Municipalities (SARM) passed a nearly unanimous resolution this year demanding that the locations of the plots be revealed. The neighbouring farmers and rural municipality should also be notified before a trial plot is established, it states.

Farmers have the right to know what is being grown in the fields next to them, especially since no one knows how far GM wheat pollen can drift, said SARM director and Sturgis-area farmer Jim Hallick. "We are afraid of contamination," he said.

Monsanto spokesperson Trish Jordan said that disclosure of the plot locations is "not a requirement and we don't think it needs to be."

Jordan and Monsanto Canada president Peter Turner said confidentiality is essential to ensure the research remains untainted.

Turner also points to vandalism of GM plots by activists in Europe, and the graffiti on the crop centre at the University of Manitoba, where GM wheat research is under way.

Federal Agriculture Minister Lyle Vanclief could not be reached in spite of repeated interview requests for this story, but a letter he wrote in June to SARM sides with Monsanto on the test plot issue.

"The tests themselves are not secret, only their exact location," Vanclief wrote. "It is in the public interest that the exact location of the trials remains confidential."

Loiselle and his wife Anita run an organic farm at Vonda, about a 15-minute drive from the GM wheat test plot. It's been hard for Loiselle to find time lately for his chores, or for commitments such as his kids' swimming lessons.

He's taking calls and hosting visitors from around the world as an official with the Saskatchewan Organic Directorate (SOD), which is suing Monsanto to block release of GM wheat. SOD is also suing Monsanto for the alleged damage to the organic farming industry caused by the introduction of GM canola several years ago.

After GM canola was introduced in Saskatchewan, farmers stopped growing organic canola, citing contamination and rejection by foreign markets.

Loiselle and others have raised more than \$200,000 for this legal fight, including donations from Europe, Japan, and the United States. Farm groups and many others around the world are watching Canada's GM wheat debate with interest, particularly the Saskatchewan lawsuit.

The U.S.-based Organic Crop Improvement Association (OCIA) recently donated \$5,000 toward SOD's legal fees.

"It's a big issue. It's the first real attempt by small organic producers to protect their livelihood," spokesperson Brian Kozisek said in a telephone interview from OCIA's head office in Lincoln, Nebraska. "It will also set a precedent in the U.S. Our agriculture systems are closely tied."

There have been other court actions in the U.S. over GM crop issues, but never on the scale of the Saskatchewan lawsuit, he said. After visiting the test plot near Aberdeen, Loiselle explains that he has to get back to the farm and prepare for a German film crew making a GM wheat documentary in Saskatchewan.

The following week, he's meeting with former British Environment Minister Michael Meacher, who came to the province to voice opposition to GM wheat.

A delegation of Australian politicians also toured Saskatchewan and met with SOD earlier this year to study GM wheat and canola.

Loiselle said organic wheat is a relatively easy crop to grow, and can sell for twice as much as conventional wheat. "It's definitely profitable, and the demand is increasing," he said.

Loiselle is afraid that he and Saskatchewan's other 1,000 organic farmers won't be able to grow organic wheat if GM wheat is approved.

"Coexistence is impossible. Contamination will occur," he said.

Glen Neufeld, president of Saskatoon's Sunrise Foods International, said he will lose most of his buyers if GM wheat is introduced.

Sunrise markets and exports roughly \$10 million worth of Saskatchewan-grown organic grain every year. Organic wheat makes up the bulk of that business, and processors have said they'll look elsewhere if GM wheat is approved or grown in Canada.

"It would be devastating. Once it comes, it's all over," Neufeld said. "I don't hear farmers or anybody asking for this. We are going to be screwed."

Neufeld hopes the federal government puts a stop to GM wheat.

"Somebody needs to shut Monsanto down. Monsanto doesn't really care about the industry. They care about making the next big buck," Neufeld said. "Monsanto will continue to fight all the way. It will take every ounce of resistance to keep this out."

It's not just the organic farmers who are leery of GM wheat. The Canadian Wheat Board, SARM, and other groups took out large newspaper ads this summer under the headline "We're not ready for Roundup Ready wheat."

It asks Monsanto to withdraw its federal application.

"The negative economic and agronomic impact on Canadian farmers could be severe, even before Monsanto's product is commercialized," the ad states.

These groups, unlike the organic farmers, are not opposed to GM technology. But now is not the time for GM wheat, they say. A wheat board study earlier this year stated 82 per cent of its customers would not buy GM wheat.

Wheat board Chair Ken Ritter was asked which countries said they would accept GM wheat from Canada. The only country he could think of was Iran, and they would only pay the lower feed price.

The fear is that many countries will stop buying all Canadian wheat because our system would be seen as contaminated. This would have a severe impact on the farmers and the board, which sells almost \$3-billion of Canadian wheat annually.

"These customers are saying they'll take their business somewhere else, and they will. They can do it," Ritter said.

"Whether their demands are reasonable or unreasonable, the customer is always right."

Ritter said wheat board officials will meet soon to discuss their options, which include legal action.

A University of Saskatchewan study last year estimated farmers would lose \$185 million a year if GM wheat was introduced, while Monsanto would reap substantial profits from its new product, valued at \$7 billion by one of the study authors.

University of Manitoba plant sciences professor Rene Van Acker has worked with Monsanto on GM wheat trials, and has also written studies for the wheat board.

He said he's "not anti-biotechnology," but opposes GM wheat introduction.

Van Acker said there is much more work to be done before the product should be licensed.

"This is a huge issue for Western Canada, and there is a lot of risk. We have to be very careful here," Van Acker said.

"There are lots of reasons to pause here."

Most farmers, regardless of their opinions on GM technology, are also concerned about Monsanto's GM wheat application. A U of M Environment department survey of 400 farmers this spring showed more than 90 per cent oppose the release of GM wheat.

Jim Hallick, the Sturgis farmer and SARM director, said Monsanto must withdraw its application.

"It's the only reasonable thing to do. I don't see much reason for it," Hallick said.

Gordon Cresswell, a Tisdale-area farmer, said he'll wait to see if GM wheat is accepted by the world before he considers planting it.

Warren Keading, a seed grower near Yorkton at Churchbridge, said he's a "strong proponent of technology" and believes GM wheat is a good product.

He said it will allow Canada to grow better wheat than the rest of the world, giving farmers here a competitive advantage.

But the realities of the market are definitely a concern, and he'd "have some reservations" about growing GM wheat at this time.

Monsanto's wheat, like its canola, is "Roundup Ready." That means it can't be killed when sprayed with Monsanto's popular herbicide Roundup.

When the GM wheat field is sprayed with Roundup, all of the weeds die but the wheat remains.

This leads to better weed control, increased yields, and possibly other benefits such as increased protein levels, said Curtis Rempel, the person in charge of Monsanto Canada's business strategy.

There is more than one way to genetically modify a plant, said Rempel. One process, called mutagenesis, uses radiation to alter the plant. There is a mutagenic wheat variety already approved in Canada. Monsanto and some countries consider mutagenesis to be a form of genetic modification, although Canadian regulators do not.

Another method involves shooting microscopic gold-plated DNA out of a 22-calibre particle gun into a petri dish. The gold is used because it is an inert substance and won't interfere with the other reactions.

The third method, and the main one Monsanto uses to produce its Roundup Ready GM wheat, also occurs in a petri dish. Certain types of bacteria are introduced to cells in the dishes. After the bacteria "colonizes" the cell, Roundup is added to see if the cell survives.

If the cell lives, it is "Roundup Ready." It regenerates, and is eventually planted.

Critics of GM products, including Europe and Asia, say there are no long-term independent studies of health or environmental effects of GM products, and the responsible thing to do is wait until that occurs.

They say all kinds of unintended consequences could occur, and point to the example of StarLink corn. This GM variety, produced a few years ago by Aventis Crop Science, contained a protein thought to cause allergic reactions in humans.

It was approved in the U.S. for animal consumption only, but found its way into large numbers of taco shells.

Aside from the health and environmental concerns, some criticize the increasing control they say Monsanto is gaining over farmers and the world's food system.

Two federal agencies are evaluating the application by Monsanto to sell GM wheat.

Health Canada examines issues of food safety, nutrition, and potential for allergens.

The Canadian Food Inspection Agency (CFIA) looks at environmental safety, including the possibility of genes flowing to other plants in the ecosystem.

Phil Macdonald of the Canadian Food Inspection Agency's plant biosafety office said it expects to make a statement "very soon." It could be a final decision, but might simply be a progress report.

"It's really hard to say where that's going to go," Macdonald said.

"I know it sounds like bureaucratic weaseling but it isn't. These things are done on a case-by-case basis."

The five CFIA specialists studying GM wheat rely on data supplied by Monsanto, rather than collecting their own.

Macdonald said the CFIA would love to do its own research, but doesn't think Canadian taxpayers would be willing to fund the necessary staff and equipment.

The CFIA, which falls under Agriculture Minister Vanclief's portfolio, also had the power to evaluate the economic impact of a new crop.

In documents obtained under the Access to Information Act by **Quebec researcher Bradford Duplisea**, federal officials only realized they had this power a couple of years ago.

A 2001 e-mail among Ag Canada scientists stated that if there is a risk to markets, a new wheat variety "may be rejected regardless of merit in other traits."

A subsequent e-mail the same day noted that this clause has existed since 1990.

"So now we've got over ten years that we've had the power!!! I love it!" wrote the Agriculture Department scientist.

CFIA officials acted shortly after, removing the clause last year, enraging many groups, officials say.

Today, it's not clear whether anyone in the federal government will consider the impact on the Prairie economy.

Jamie Oxley, a policy official for Agriculture and Agri-food Canada, said they're not sure if they'll consider economics, but the issue is being studied.

"We're looking at what role the government should play," Oxley said.

He said Vanclief will ultimately decide what criteria is used.

Many groups are uncomfortable with the fact that Vanclief is in charge of regulating new crops through the CFIA, while his Agriculture Department officials are actively promoting and developing GM wheat.

Duplisea said the regulatory process is "totally scandalous."

"They're developing GM wheat with a company they're supposed to be regulating."

"The government and Monsanto meet in secret, and the public doesn't get to know what they talk about."

John Culley, director of intellectual property for Agriculture and Agri-food Canada, said the department will receive some of the royalties if GM wheat is commercialized in Canada.

Culley wouldn't give exact figures, but said it would be between one and 10 per cent of Monsanto's sales totals.

That could mean millions of dollars flowing from Monsanto into federal coffers.

"If it is ever released, we would earn a small return for reinvestment in our science programs," Culley said. Agriculture and Agri-food Canada is a solid supporter of biotechnology, investing roughly \$60 million per year."

"We are a major developer, a major user of biotech. It's huge," Culley said. "We support R&D that supports competitiveness in the Canadian agri-food industry and biotechnology is the cutting edge of science."

Farmers will be left behind if they don't embrace this technology, he said. "To not use that stuff, you might as well close down your operation. That is the science that drives innovation in the 21st century," Culley said.

This attitude shows the "clear conflict of interest" in Vanclief's portfolio, said Nadege Adam of the Council of Canadians.

Adam toured the Prairies earlier this year with other groups carrying an anti-biotechnology message. She said GM wheat rejection should be a "no brainer," but the government's judgment is affected by dollar signs. "The government has a vested interest in the market introduction of these products," Adam said. "The deck is stacked in favour of industry. Who is looking out for the farmers and the people?"

Adam said Monsanto can't afford to back down on GM wheat. The company lost nearly \$2 billion last year, and needs to get its wheat on the market. "Monsanto is on the ropes. They've been losing money hand over fist. They can't afford to wait," she said.

In interviews from Monsanto Canada's head office in Winnipeg, officials acknowledged the concerns over their GM wheat application. Company president and general manager Peter Turner said there "appears to be some fear-mongering" going on, but farmers and the public have nothing to fear. He said the Canadian government's regulatory system is one of the best and most respected in the world. That's part of the reason Monsanto sought approval here.

Turner said it makes no sense for Monsanto to withdraw its GM wheat application. Government approval will simply show Canadians and the world that the product is safe for the environment and for human consumption, he said.

Turner promised that none of its Roundup Ready wheat will be sold in Canada until Japan and European regulators say they'll accept it. Monsanto will also delay sale of its wheat until an effective system is in place to segregate GM and non-GM wheat.

"It's very simple. You're hardly going to introduce a product which compromises the whole Western Canadian wheat business," Turner said. "We depend on Western Canadian farmers for our living. Common sense dictates that we can't breach our commitments."

If Monsanto withdrew its application, Canadian farmers would not have the GM wheat option if Europe and Japan decide to accept it. Other countries such as the U.S., which is also evaluating a Monsanto GM wheat application, would have a competitive advantage over Canada, he said.

"When the doors open, (the U.S.) can supply Europe at a lower cost than Canada can. Canada would then have to wait two or three years for regulatory approval," Turner said.

Monsanto's future as a company depends on many factors, not just GM wheat, Turner said. If GM wheat is rejected, "the consequence is not overly dramatic" to the company's bottom line, he said.

As for the concerns of organic farmers, Turner agreed they have a "disparate view." He said it's the responsibility of the organic farmers to ensure their crops meet the expectations of buyers.

Organic farming standards are set internally, not by the government. Monsanto believes its duty is only to meet government requirements.

"What's difficult as a business to do is operate to other people's standards which are not duly authorized by the government," Turner said. "It's a position which we take very clearly as a company."

Turner wouldn't comment on the specifics of the Saskatchewan Organic Directorate lawsuit against Monsanto, other than to say he has faith in the Canadian legal system.

Two years ago, farm groups fought successfully to rid Canada of GM flax. The Triffid variety, developed at the University of Saskatchewan, already had Canadian government approval but was not being planted yet.

Flax industry officials, whether they opposed GM technology or not, raised many of the same concerns as GM wheat critics. They feared Europeans would see Canadian flax as contaminated, simply because of the government approval.

It didn't matter that none was actually in the ground. After a year of intense pressure, the U of S Crop Development Centre agreed to voluntarily de-register Triffid.

"It's disappointing, but the Crop Development Centre exists to help farmers," centre director Rick Holm said at the time. "It would have been irresponsible of us to fight to keep it on the market, and face the possibility of our farmers losing an export opportunity."

Monsanto spokesperson Trish Jordan said wheat and flax have to be treated as separate cases. She said Monsanto is concerned about farmers and their markets, but doesn't believe simple government approval will have a negative effect. Most groups were skeptical of Monsanto's promises, and don't think the future of the Canadian wheat industry should be left in Monsanto's hands.

"I'm not willing to take Monsanto's word on this," said Adam of the Council of Canadians. "All they need to do is pay a few farmers to grow this stuff and contamination will be set."

Back at his kitchen table, Marc Loiselle says he knows there's a lot of work ahead. The Saskatchewan Organic Directorate is attempting to certify its lawsuit as a class action. Monsanto will be handing its information to SOD before Sept. 15, and the certification hearing is scheduled for Feb. 2.

If a federal decision comes down before then, SOD will have to file an immediate application for a moratorium on GM wheat sales.

"Monsanto is poised to take complete control of our food system," Loiselle said. "If this comes, there's no turning back."