

Canadian Organic Farmers



This landmark case is of particular interest to Canadian organic farmers for several reasons, generally because they think that it could set a precedent for how much control giant biotechnology companies can have over farmers. Specifically, the case is of interest as growing biotechnological innovations make it increasingly difficult for farmers who practice traditional or organic methods of farming to be competitive. Furthermore, if accidental contamination by the alleged carelessness of the company and those using its technology can lead to the kind of repercussions felt by a farmer like Mr. Schmeiser, this could have huge implications both for organic farmers and those who choose not to use genetically modified plants in their farming practices.

Article from “Monsanto Assault on U.S. Farmers Detailed in New Report” by Craig Culp, January 13, 2005:¹

The Center for Food Safety released today an extensive review of Monsanto’s use and abuse of U.S. patent law to control the usage of staple crop seeds by U.S. farmers. The Center (CFS) launched its investigation to determine the extent to which American farmers have been impacted by litigation arising from the use of patented genetically engineered crops. Monsanto vs. U.S. Farmers details the results of this research, discusses the ramifications for the future of farming in the U.S. and outlines policy options for ending the persecution of America’s farmers.

“These law suits and settlements are nothing less than corporate extortion of American farmers,” said Andrew Kimbrell executive Director of CFS. “Monsanto is polluting American farms with its genetically engineered crops, not properly informing farmers about these altered seeds, and then profiting from its own irresponsibility and negligence by suing innocent farmers. We are committed to stopping this corporate persecution of our farmers in its tracks.”

The report finds that, in general, Monsanto’s efforts to prosecute farmers can be divided into three stages: investigations of farmers; out-of-court settlements; and litigation against farmers Monsanto believes are in breach of contract or engaged in patent infringement. CFS notes in the report that, to date, Monsanto has filed 90 lawsuits against American farmers in 25 states that involve 147 farmers and 39 small businesses or farm companies. Monsanto has set aside an

¹ <http://www.percyschmeiser.com/MonsantovsFarmers.htm>

annual budget of \$10 million dollars and a staff of 75 devoted solely to investigating and prosecuting farmers.

“Monsanto would like nothing more than to be the sole source for staple crop seeds in this country and around the world,” said Joseph Mendelson, CFS legal director. “And it will aggressively overturn centuries-old farming practices and drive its own clients out of business through lawsuits to achieve this goal.”

The largest recorded judgment CFS has found thus far in favor of Monsanto as a result of a farmer lawsuit is \$3,052,800.00. Total recorded judgments granted to Monsanto for lawsuits amount to \$15,253,602.82. Farmers have paid a mean of \$412,259.54 for cases with recorded judgments. Many farmers have to pay additional court and attorney fees and are sometimes even forced to pay the costs Monsanto incurs while investigating them.

“Monsanto is taking advantage of farmers with their marketing and their threats and lawsuits,” said Rodney Nelson, a North Dakota farmer sued by Monsanto. “It’s hard enough to farm as it is. You don’t need a big seed supplier trying to trip you up and chase you down with lawyers.”

Farmers even have been sued after their fields were contaminated by pollen or seed from a previous year’s crop has sprouted, or “volunteered,” in fields planted with non-genetically engineered varieties the following year; and when they never signed Monsanto’s Technology Agreement but still planted the patented crop seed. In all of these cases, because of the way patent law has been applied, farmers are technically liable. It does not appear to matter if the use was unwitting or if a contract was never signed.

Various policy options supported by CFS include passing local and state-wide bans or moratoriums on plantings of genetically engineered crops; amending the Patent Act so that genetically engineered plants will no longer be patentable subject matter and so that seed saving is not considered patent infringement; and legislating to prevent farmers from being liable for patent infringement through biological pollution.

Excerpt From Canadian Court trial news:²

Monsanto is the lightning rod for protest amongst environmental groups. When anti-GM activists gather, Monsanto is their target. When they protest, it’s Monsanto they want to stop. The campaign has not only dramatically slowed the growth of the GM industry; it has also cast Monsanto in the role of villain at a time when it is struggling financially. They sold off about \$4 billion worth of subsidiaries in the last two years to reduce debt.

Farmers that are against genetic engineering are angered that Monsanto’s crop management and disease resistance plans offer nothing to those who do not wish to use genetically manufactured seed.

² <http://www.ddh.nl/duurzaam/duurzaamlijst/archief1/msg00297.html>

Excerpt from Science Creative Quarterly by Corinne Cluis, Issue Two: September to November 2006:

Rounding up the Schmeiser Case: Benefits and Liability Issues of Transgenic Crops

For thousands of years, it has been common practice for farmers to keep the best seeds from their fields for the next growing season. This has allowed them to develop breeds of high quality, high yields and nurture those adapted to the local conditions. Trading seeds with other farmers is also a secular tradition that is important for maintaining a diverse genetic background within a field. So when Percy Schmeiser, a 59 year old Saskatchewan farmer, inadvertently found that some of his canola plants that boarded a local road, were resistant to a herbicide purchased to get rid of the weeds growing around telephone poles, he did what millions of farmers had done before him: he collected some seeds and added them to his pool of grains of highest quality for future growing seasons. To his surprise, a year later, he received a letter stating that the biotech company Monsanto was suing him for \$300,000 due to the unlicensed use of its herbicide-resistant canola. Consequently, this began a 6 year judicial battle that became a principle symbolic cause for farmer's rights, that also set the ground for Canada's position toward genetically modified (GM) organisms [1] [2].

Essentially, the conflict revolved around the use of Roundup Ready canola, a new special line of GM plants released by the agrochemical company Monsanto. This particular canola was designed to be resistant to the herbicide Roundup which is chemically based on a compound known as glyphosate, also produced by Monsanto. When Roundup is sprayed on undesired weeds, glyphosate penetrates inside the plant cells and works to block the activity of an enzyme called EPSPS. This enzyme is involved in the synthesis of certain amino acids that are essential for plant protein production and therefore are crucial for growth and survival. In essence, the presence of glyphosate rapidly leads to the death of the weed. Furthermore, one of the greatest advantages of this system is that EPSPS, the enzyme inhibited by glyphosate, is present in plants and bacteria but not in animals. As a result, the Roundup herbicide is harmless to any human or wild animal that may consume it. In fact, because of its efficiency and its specificity, Roundup is one of the most widely approved herbicides around the world [3].

Roundup Ready *plants* (which include soybean, corn, canola and cotton) were also developed in conjunction with the herbicide in the 1990's, and are essentially made to be resistant to glyphosate. This consequently allows farmers to get rid of undesirable weeds by massively spraying their fields with the benefit of no worry of killing their own crop. To obtain such plants, Monsanto's scientists first found a species of bacteria that harboured an EPSPS enzyme that not only continued to perform its role in amino acid synthesis, but that was also resistant to glyphosate treatment. They then isolated this EPSPS gene and modified it accordingly so that it could function effectively in plants. Finally, this modified EPSPS gene was then inserted into a plant genome, and characterized extensively so that researchers were convinced that: first, it performed its synthesis role efficiently; and second, it confer Roundup resistance to the transgenic plant.[4].

Of course, laid down in such simple words, the whole procedure appears remarkably straightforward. However, in reality, the Roundup Ready plants resulted from many years of

research and development by Monsanto's scientists. Consequently, it seems reasonable that Monsanto was now hoping to get paid back for the time and money invested in the development of such useful plants. But unfortunately for them, plants are not like prescription drugs or other patented devices, where consumption occurs only once - they are a living organism that reproduce and set seeds, and these in turn can be grown again to obtain exactly the same plant, with the same patented gene. In order to ensure that they can enjoy the full benefit of their product, Monsanto makes sure that farmers sign a Technology Use Agreement (TUA) upon purchase of the Roundup Ready seeds. The TUA is a license that allows farmers to use the Roundup Ready technology with a number of rules to be followed. For instance, the farmer is not allowed to save Roundup Ready seeds for replanting or for inventory, nor will he be permitted to give out seeds to other farmers. To enforce this contract, Monsanto regularly samples fields to check for unlicensed growth of Roundup Ready canola. The company even has a toll-free phone line where people can call to report suspicious use of Roundup Read [1] [2].

This very phone line resulted in a tip that led to Monsanto investigating the Schmeiser farm. In 1998, they found that 95-98% of the canola grown on his farm was unlicensed Roundup Ready canola. Schmeiser said that in fact, he never wished to grow Roundup Ready. To his defense, Schmeiser argued that the GM canola seeds ended up on his field by accident, probably by falling from a truck. Because he did not know that he was growing Monsanto seeds and in fact, never even sprayed his fields with Roundup, he therefore was not infringing Monsanto's patent. On Monsanto's side, the argument was that it was highly improbable that Schmeiser did not know about Roundup Ready canola, given its popularity and the publicity around it. They claimed that Schmeiser willingly grew Roundup Ready without a license, and that by harvesting and selling the resulting grain, he made a profit from which Monsanto should have benefited [1, 2, 5]. These claims, arguments and counter arguments continued for 6 years, involving hearings in front of three different courts. Finally, in May 2004, the Supreme Court of Canada ruled against Schmeiser, stating he had violated the company's rights by growing the GM plants without a license. However, the court also overturned a previous judgment that ordered Schmeiser to pay back the sales profit to Monsanto and to pay for the company's legal fees [5, 6].

Despite its controversy, the Supreme Court's decision is likely to make history because it is one of the first to debate intellectual property on genetically modified plants. On a somehow similar matter, the same court had ruled in 2000, against the patenting of the so-called "Harvard" mouse. In that case, the judges refused to grant a patent to Harvard University for the development of a transgenic mouse with special characteristics that could be of great use in cancer research [7]. Despite the fact that it took years of research to obtain the mouse, the court stated that such a higher form of life could not be patented. During his trial, Schmeiser used this particular case to suggest that despite Monsanto's holding of a patent for the gene responsible for glyphosate resistance, it could not claim to have property rights on the *plants containing the patented genes, when the plants themselves are not being used to exploit the benefits given by the gene*. However, the Supreme Court ruled that since Monsanto holds a patent for a gene inside canola seeds, it therefore also has full control over the use of the plant [2].

In practical terms, one could say that this is not very far from having a patented plant. As a result, the court has set the groundwork for a system where a biotech company can claim rights

and royalty payments on any organism that bears their patented gene, whether it is in the possession of someone who is aware of it or not.

Perhaps more interesting, is the notion that with such a strict level of control over the benefits from its products, biotech companies should in turn also be accountable for the damage, even accidental, caused by their products [8]. In the case of GM plants, the engineered trait can easily escape out of the company's control through a variety of mechanism such as seeds inadvertently spreading out in neighbouring fields or through cross-pollination with non-GM plants of the same species or not. This creates the potential for numerous liability issues. For instance, the wide use of transgenic canola in western Canada has made it practically impossible for organic farmers to propose certified GM-free canola. The market losses resulting from this are estimated to \$100,000 to \$200,000 a year, without taking into account potential growth of the market resulting from growing consumer concerns about GM food [8]. In this respect, two organic farmers had filed a lawsuit on the behalf of all Saskatchewan certified organic farmers against the biotech giants Monsanto and Aventis for the damage caused by the release of transgenic canola. In the same manner, the European Union had recently banned Canadian honey from its imports because of the inability of the producers to guarantee that it does not contain pollen from GM plants not yet approved in Europe [8].

In many ways, the growing place of GM crops in our agricultural system poses the same kind of problem as music sharing programs on the internet for the music industry. In that both technologies exploded before the legislation system could even understand what they were exactly. From the Schmeiser case and the growing number of legal imbroglios created by the use of patented transgenes in agriculture, it appears clear that there is urgent need for new regulations concerning benefits and liabilities of GM plants. In particular, biotech companies should take significantly more responsibility towards the plants they release on the market and set up stricter procedures in order to contain their products. Furthermore, public institutions and governments should establish clear legislation on GM crops that effectively enforce the intellectual property right of biotech companies, but that also prevents damage on the environment and on non-GM markets.

References

1. Broydo, L., [The trouble with Percy](#). 2000, Mother Jones
2. Online, C.N., Percy Schmeiser's battle. 2004, CBC News Online.
3. Monsanto, Backgounder - [A story of Monsanto's glysophate herbicides](#). 2002, Monsanto.
4. [Monsanto, Roundup Ready corn: food and feed safety](#), Monsanto.
5. [Edwards, A., Monsanto v. Schmeiser](#). 2004, Centre for Innovation Law and Policy: Toronto
6. Kondro, W., Canada. Monsanto wins split decision in patent fight over GM crop. Science, 2004. 304(5675): p. 1229.

7. Kondro, W., Canada's supreme court rejects broadcaster's appeal on doctors' libel verdict. Lancet, 2002. 359(9312): p. 1132.

8. Smyth, S., G.G. Khachatourians, and P.W. Phillips, Liabilities and economics of transgenic crops. Nat Biotechnol, 2002. 20(6): p. 537-41.

Article from Greenpeace International, May 21, 2004:

Monsanto wins right to pollute

After years of fighting against bio-tech giant Monsanto, Percy Schmeiser, a Canadian farmer who Monsanto claims did not acquire a licence to grow his crop of canola, has lost his appeal in the Supreme Court of Canada.

In a 5-4 decision, the Canadian Supreme Court held that Mr. Schmeiser had violated Monsanto's patent by planting seed from GE canola that had been found on his farm the previous year.

"This is a sad day for farmers worldwide," said Pat Venditti, our Genetic Engineering campaigner in Canada. "Monsanto's canola has been contaminating the fields of Western Canada for years now, as there is no way to contain their transgenic pollution. Unfortunately, the Court has held that Monsanto can keep polluting farmers' fields and keep menacing them with costly lawsuits. Farmers should be able to keep their fields GE-free, but the Court has held that's a decision best left to Monsanto."

In 1997, Schmeiser discovered, while routinely spraying herbicide along a ditch, that some of his canola plants had become herbicide-resistant - contaminated by pollen from Monsanto's patented herbicide-resistant canola.

In August 1998, Monsanto launched a lawsuit against Schmeiser for patent infringement, alleging that Schmeiser had acquired and planted seeds containing patented genes without a license, and then sold harvested seed, thus infringing the company's patent. Mr. Schmeiser has become a globally known figure during his long legal battle with Monsanto.

Three main issues were deliberated by the Canadian Supreme Court:

- 1) The validity and scope of genetic patents - whether or not life forms may be patented.
- 2) What kind of use constitutes infringement? Schmeiser argued that since he never sprayed his plants with Monsanto's Roundup, and thus never took advantage of the crop's herbicide resistance, he never benefited in any way from the presence of Monsanto's patented material in his crops. In this case, Schmeiser argued that as he did not exploit Monsanto's invention, he did not infringe Monsanto's patent.
- 3) The "innocent bystander" problem. Schmeiser argued that where patented material passively and inadvertently mixes with personal property, the property holder should not be held

accountable to the patent holder. Instead, in such cases the innocent bystander should be protected by an implied license from the patent holder.

"Genetic contamination from genetically engineered canola is rampant," continued Mr. Venditti. "Monsanto has introduced an uncontrollable crop with no liability to farmers or the public. This ignores the widespread contamination being caused by Monsanto. The decision of the court essentially makes farmers liable to Monsanto for Monsanto's own genetic pollution. It means that Monsanto can reach into farmers' fields and steal their profits and livelihoods."

The decision follows two major setbacks for Monsanto, who announced last week they would back off on plans to commercialise GE wheat globally and GE canola in Australia after strong consumer and industry resistance to the crops. In a small win for Schmeiser, he will not be required to pay Monsanto for the seed or legal costs relating to the case.