

# FARMERS BEFORE CORPORATE PROFIT

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## STOP THE RELEASE OF GM ALFALFA!

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### WHY IS ALFALFA SUCH AN IMPORTANT CROP IN CANADA?

Alfalfa, popularly called the “Queen of Forages”, is the most widely grown forage crop in Canada. It is grown on 30% of Canada’s farmland, 22% of Ontario’s farmland. It is usually grown in a mix with grasses and harvested as high-quality hay or haylage for dairy cows and other livestock. It also plays an important role in crop rotations on many farms by building both soil organic matter and soil fertility. Farmers in Western Canada have stable, lucrative export markets for alfalfa seed, including in Europe. As a high protein feed, nitrogen-fixer and soil builder, alfalfa is an essential forage crop on organic farms.

### THE THREAT FROM GENETICALLY MODIFIED (GM) ALFALFA

Alfalfa is a perennial plant pollinated by insects. An American company, Forage Genetics International, has applied Monsanto’s genetically modified Roundup Ready (herbicide-resistant) technology to alfalfa. So far, there are no varieties of Roundup Ready (RR) alfalfa registered for use in Canada, however, Canadian regulatory authorities approved GM alfalfa for health and environmental release in 2005. In this situation, as soon as a variety of RR alfalfa receives variety registration from the Canadian Food Inspection Agency (CFIA), it can be grown in Canada and can find its way to our food. All aspects of the variety registration process are classified as “Confidential Business Information”, meaning there is no public notice of requests to register varieties and no disclosure of when the process is underway.

On behalf of its members, including Forage Genetics and Monsanto, the Canadian Seed Trade Association (CSTA) is developing a “coexistence” plan for GM and non-GM alfalfa hay in Eastern Canada. According to the CSTA, a coexistence plan provides guidelines for seed and crop producers to follow so that farmers can continue to grow alfalfa for a diversity of markets. Industry representatives have said they will not release RR alfalfa in Western Canada because of concerns about the loss of alfalfa seed markets, but once a variety is registered by CFIA it can be grown anywhere in Canada. There are indications that CFIA may grant variety registration to one or more RR alfalfa varieties in 2013.

### ONTARIO FARMERS DO NOT NEED OR WANT RR ALFALFA

Farmers rarely spray hay crops, including alfalfa, with herbicides. So, why are seed companies pushing the registration and commercial release of RR alfalfa in Ontario?

- » The use of genetically modified organisms is prohibited on organic farms. Organic farmers in Western Canada lost their market for organic canola when Canadian canola seed stocks became contaminated with GM canola. The release of RR alfalfa will threaten the survival of organic farms in Canada.
- » Seed growers in Western Canada have important markets for their seed in Europe. Even if industry says it will only commercially release RR alfalfa in Eastern Canada, RR alfalfa will find its way west and will ruin the export markets of prairie alfalfa seed growers.
- » Seed costs have risen from less than 2.5% of total farm expenses in 1981 to over 4.5% today. This trend is fuelled, in part, by the increased use of gene-patented seed.
- » As more GM varieties of crops are registered, experience has shown that non-GM varieties become less available. As an example, in 2000 out of 120 registered varieties of canola, 80 % were non-GM. By 2007, only five varieties of non-GM canola were available.

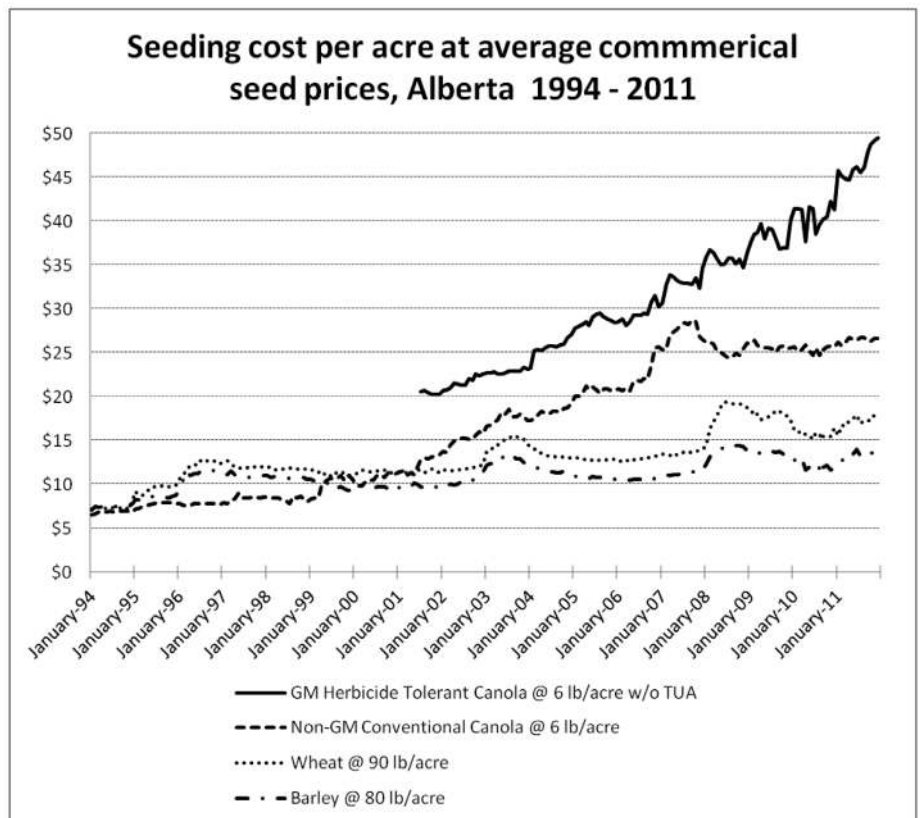
**COEXISTENCE OF RR ALFALFA AND NON-GM ALFALFA IS NOT POSSIBLE.** Alfalfa is an insect-pollinated, perennial plant meaning contamination is inevitable. Organic farmers, alfalfa seed growers and other farmers will lose both domestic and export markets if RR alfalfa is registered.

- » Seed costs for genetically modified varieties of crops are higher than non-GM varieties. The graph below shows the rapid rise in the price of canola seed in Alberta after GM canola was introduced. It also compares the seeding costs for canola versus wheat and barley, which are not available as genetically-modified seeds.
- » In addition to the seeding costs, farmers pay a technology use fee to the seed company which owns the patent on GM seeds. At \$15/acre, farmers would have paid at least \$261 million in technology use fees to canola seed companies in 2011.
- » Some farmers in Ontario save and sell alfalfa seed. National Farmers Union members, or their neighbours, save alfalfa seed in Renfrew, Grey, Perth, Huron and Lambton counties. Insects carry pollen from one alfalfa field to another. If a patented gene is found in farm-saved seed, the farmer risks being sued by the seed company which holds the patent on the seed and risks losing markets for non-GM alfalfa seed or other alfalfa products grown from the seed.
- » Ontario farmers already grow a number of RR crops, including RR soybeans and RR corn. Glyphosate (the active ingredient in roundup) is used extensively by conventional farmers to control weeds in these major crops.
- » Herbicides are rarely used on alfalfa when it is being established and harvested but glyphosate is commonly used to burn down (kill) alfalfa, prior to planting subsequent crops.
- » As a perennial crop with deep roots, alfalfa plants may survive and become volunteer 'weeds' in subsequent crops. At present, some farmers use glyphosate to control these volunteer alfalfa plants.
- » Glyphosate-resistant weeds, like giant ragweed and Canada fleabane are a reality for farmers in Ontario. RR alfalfa, another glyphosate-tolerant crop will accelerate the development of glyphosate-resistant weeds.
- » Farmers are already forced to bear the cost of adding additional herbicides to their sprayer tanks to control glyphosate-resistant weeds. Those costs will increase when they have to use additional herbicides to control volunteer RR alfalfa and more glyphosate-resistant weeds.

**RR ALFALFA WILL INCREASE ALFALFA SEED COSTS for farmers, put more profits in the pockets of seed companies and create new challenges for farmers saving their own alfalfa seed.**

**RR ALFALFA WILL MAKE IT HARDER FOR FARMERS TO CONTROL VOLUNTEER ALFALFA AND WEEDS while opening up more opportunities for chemical companies to sell herbicides to farmers.**

**RR alfalfa will give multi-national seed companies more control over Canadian farmers and our seeds. It will not benefit farmers but it will cost farmers money and markets.**



Source: Alberta Farm Input Prices, Government of Alberta

See CBAN's April, 2013 report – *The Inevitability of Contamination from GM Alfalfa Release in Ontario* for more information on how contamination will occur.

[www.cban.ca/alfalfaONreport](http://www.cban.ca/alfalfaONreport)

