

## **Glyphosate Tolerant Alfalfa and Sustainable Livestock Production** **Submission opposed to the deregulation of glyphosate tolerant alfalfa.**

Submitted to the USDA on behalf of Beyond Factory Farming, February 2010.

The USDA is considering deregulating genetically engineered glyphosate tolerant alfalfa (also known as Roundup Ready Alfalfa). This would lead to the unconfined release of the plant into the North American environment.

Beyond Factory Farming is a national organization in Canada that promotes socially responsible livestock production. Socially responsible livestock production ensures that the costs of livestock production are not externalized onto neighbours and the public, and also ensures that livestock production promotes positive social values such as health, biodiversity, water quality, community economic development, animal welfare and fair livelihoods for workers and farmers.

The deregulation of glyphosate tolerant alfalfa in the United States threatens socially responsible livestock production in Canada as well as the United States.

Beyond Factory Farming supports certified organic farming, particularly mixed farming that includes livestock, as well as the certified organic production of feed crops. Beyond Factory Farming also promotes grass-fed livestock production, also known as pastured beef, pork and poultry.

If glyphosate tolerant alfalfa is grown commercially in the United States it will inevitably cross-pollinate with non-genetically engineered alfalfa which is grown on conventional and organic farms, as well as with feral alfalfa which grows wild in ditches, wilderness areas and abandoned fields. Alfalfa is insect-pollinated by both domestic pollinators (leaf-cutter bees, honeybees) and wild pollinators. Cross pollination will occur as a result of foraging activities of pollinators. Seed produced as a result of cross pollination will carry the DNA of glyphosate tolerant alfalfa, and will confer the trait on its progeny.

The contamination of non-genetically engineered alfalfa crops will result in the eventual contamination of alfalfa seed stock, through cross pollination and/or admixture. Since the use of genetically engineered seed is prohibited in certified organic agriculture, it will become increasingly difficult to impossible for farmers to find seed which does not contain genetically engineered DNA. Further, the farmers will risk cross-pollination of their crops from neighbouring contaminated stands and roadside plants. Organic certification rules require that farmers take measures to eliminate any contamination from genetically engineered plants that may occur on their farms. In practice, this will mean that in order to maintain organic certification, alfalfa will not be able to be grown on organic farms.

Without alfalfa being grown on organic farms, there will be a severe loss of feed for certified organic livestock and dairy production. Alfalfa is an important, nutritious feed, particularly in northern areas where feed must be stockpiled as hay for the winter months. The alfalfa plant is able to fix atmospheric nitrogen and convert it into a form of nitrogen useable by plants through a symbiotic relationship it has with certain soil bacteria that colonize its roots. Alfalfa is thus able to increase soil fertility, which improves productivity of farmland. The nitrogen that alfalfa makes biologically available is also converted to plant protein within the plant itself. This is why alfalfa is such an important feed crop for meat and dairy animals which have high protein requirements.

Canadian consumers are increasingly turning to certified organic foods. The growth in the organic sector is approximately 20% per year. Organic meat and dairy is an area poised for even greater growth as processing capacity is developed. In addition there is a high proportion of imported organic food

from the USA. The introduction of genetically engineered alfalfa will reduce volume and the range of products that can be sold organically, as the loss of organic alfalfa will have a severe impact on the viability of organic dairy, beef, and pork production.

Canadian consumers of grassfed beef and pork are health conscious and environmentally conscious. The strong points for pastured meat include its higher proportion of healthy fats and its environmental benefits, such as biodiversity, erosion-prevention, and carbon sequestration resulting from year-round cover – all of which occur when land is grazed rather than cultivated. The infiltration of glyphosate tolerant alfalfa into these lands would compromise the product's health claims, reduce the sector's customer base, and lead to a smaller market and smaller land base for this type of environmentally friendly animal husbandry.

Canadians are concerned about the impacts of deregulation of glyphosate tolerant alfalfa in the United States for two main reasons: contamination of alfalfa through imports to US hay and seed, and simultaneous deregulation of genetically engineered alfalfa in the Canadian jurisdiction.

Canada's process for approving (deregulating) genetically engineered crops has several stages. Health Canada must approve crops for food and feed safety, and the Canadian Food Inspection Agency (CFIA) must approve crops for environmental release. Canada requires crop seed varieties to be registered through the CFIA before they can be sold or used to grow a commercial crop. No variety of glyphosate tolerant alfalfa seed has yet been registered in Canada, so it is still illegal to grow or sell glyphosate tolerant alfalfa in Canada.

Canada's regulatory system has been strongly criticized by farmers for not taking into account the impact of genetically engineered varieties upon markets. There is a strong movement of farm organizations seeking a reversal of Canada's environmental release of glyphosate tolerant alfalfa. Monsanto and Forage Genetics International have stated their intention to commercialize glyphosate tolerant alfalfa in Canada and the United States simultaneously. Therefore, it is important to us to ensure that deregulation does not occur in the USA, as it would promote the fast-tracking of variety registration, leading to deregulation of the crop in Canada as well.

Because glyphosate tolerant alfalfa has been approved for health safety and environmental release it would be possible for hay produced from glyphosate tolerant alfalfa from the USA to be imported into Canada if the crop is deregulated in your country. It is very important to protect the integrity of Canada's alfalfa, and thus our certified organic farms, by preventing contamination by imported hay, which may contain viable seed. If American hay contains genetically engineered alfalfa Canadian farmers may need to implement a de facto boycott of risky imports.

We strongly urge you to deny the application to deregulate glyphosate tolerant alfalfa in the United States. The negative impacts of deregulation are broad, significant, far-reaching, and irreversible. The beneficiaries of deregulation are not disadvantaged, and their interests should not be put ahead of those of the larger population and future generations.

Sincerely,  
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