Position Paper on the Introduction of Genetically Modified Alfalfa

The Saskatchewan Organic Directorate (SOD) is opposed to the introduction of genetically modified alfalfa for the following reasons:

Organic standards prohibit the use of Genetically Modified Organisms (GMO's) for use in organic production. A crop with any detectable GMO contamination cannot be certified organic. Our domestic and international buyers require organic products that are GMO free.

1) All organic farmers use legumes as a soil-building component in their crop rotations. Alfalfa is a perfect legume for nitrogen fixation in the crop rotation for the majority of organic farms. To lose alfalfa in organic farm crop rotation would severely hamper our ability to maintain soil fertility and prevent soil erosion, which would harm the future of our soils health and sustainability.

2) Canadian organic livestock producers are in positioned for exponential growth. The release of GM alfalfa in Canada poses a threat to their ability to grow or buy GMO free hay or pellets. GMO free feed is necessary for the production of organic livestock. There is potential for huge damage to the organic hay, pellets and livestock markets.

3) If organic livestock production is adversely affected by the introduction of a genetically modified alfalfa, it goes without saying that the market for organic alfalfa seed for hay production would also be critically damaged.

4) There is a significant market, both domestic and export, for certified organic alfalfa seed for growing sprouts for human consumption. Consumers of alfalfa seed for sprouting prefer Canada's high quality seed and reputation for clean organic products. This is a constantly growing market. The potential annual market loss if genetically modified alfalfa is introduced is over a half of a million pounds of alfalfa seed.

5) It will be impossible to prevent the spread of GM alfalfa beyond the fields that it is planted in for the following reasons:

- Alfalfa seed is a crop that is pollinated by bees, primarily leafcutter bees, but also honeybees, several species of wild bees and wasps. Leafcutter bees are normally placed in nests in shelters in an alfalfa field at a rate of 20,000 bees per acre. A significant percentage of these leafcutter bees do not return to their shelters; they drift several miles away in search of better bloom, or are blown away in strong winds and in storms. Honeybees have a very wide flying range, up to 4 miles. The isolation distance to prevent transfer of the genes by insect pollination from GM alfalfa to non – genetically modified alfalfa would need to be several miles. However there is no mechanism for separating GMO and non-GMO growing areas, and alfalfa seed is usually produced in concentrated areas, so cross pollination and contamination would be inevitable.

- GM alfalfa for hay production will often be cut after blooming starts, giving an opportunity for bees and other pollinating insects to transfer pollen from the GM crop to other alfalfa seed crops.

- Alfalfa seed crops produce a percentage of “hard” seed that can germinate several years after the field has been ploughed up. This would mean that a GM alfalfa seed crop would have the potential of contaminating non-GM alfalfa crops planted even a few years later.

- Volunteer GM alfalfa, (either produced from roots or plants that have gone to seed during seed production, or in hay fields, pastures, wasteland or ditches) will be a source of contamination for several years after destruction of a GM alfalfa field.

- Accidental pollination from GM alfalfa hay fields that are allowed to come into bloom would contaminate fields several miles away. This contamination could affect alfalfa seed fields, and alfalfa allowed to set seed in ditches and field margins.

- Livestock manure or wild animal droppings could also spread GM alfalfa seed.

6) Conventional alfalfa seed that is contaminated by GM alfalfa will also be rejected for import by several countries due to their rejection of GMO crops, food and feed. Alfalfa seed production has been a strong sector in Canadian agriculture, and will suffer losses in its market both within Canada and as an export crop, if genetically modified varieties are introduced.

7) Canada is the world’s largest exporter of alfalfa pellets and alfalfa cubes. We export 350,000 cubic meters of alfalfa pellets and 250,000 cubic meters of alfalfa cubes. A large portion of this export market would be lost if the alfalfa cubes and pellets contained genetically modified alfalfa.

8) The biotech industry claim of reduced pesticide use has not happened. In fact the opposite has happened. “Independent reports from the US show that since 1996, GM corn, soybean and cotton have resulted in an increase in pesticide use of 55 million kilograms.” (Mail & Guardian online, January 10, 2006)

Canadian agricultural producers are going through desperate times in recent years, often only keeping the farm afloat by pouring one or two off farm incomes into the farm. The single bright spot in Canadian agriculture is the vigour and continued growth of the organic sector. Organic agriculture has been growing by 10% or more annually, since it became a market force in the early 1980’s. In the US organics is now an annual $10 billion dollar food sector. (The Western Producer, December 29, 2005)

In conclusion the Saskatchewan Organic Directorate recommends that the Government of Canada support organic agriculture in Canada, by rescinding approvals for environmental release and for food and feed safety of genetically modified alfalfa, banning the importation of GM alfalfa or GM contaminated alfalfa into Canada, and prohibiting testing, commercial release or any other introduction of genetically modified alfalfa into Canada.

Adopted by resolution by the Saskatchewan Organic Directorate, March 23, 2006.