

GENETICALLY MODIFIED ORGANISMS (GMOs)

BACKGROUND

What is a GMO? A GMO is a biological organism, e.g., a plant or animal, in which one or more genes (molecular structures responsible for protein production) have been altered through genetic technologies in order to give it one or more novel traits. For example, rather than using pesticides to protect corn crops from an insect pest such as the European corn borer, it is possible to insert a gene from a bacterium into the corn itself, thus giving the plant the ability to fight the pest.

GMOs on the rise. GMOs are becoming more and more widespread; we have seen an increase in the use of biotechnologies in agriculture over the past few years. One of the factors underlying this trend is the potential to increase agricultural production while reducing the use of pesticides. This trend is seen in Quebec as well, although the use of biotechnologies (specifically GMOs) is less common here than in the United States. A major non-GMO soy production and distribution network is however developed in Québec for exportation markets, especially for Asia.

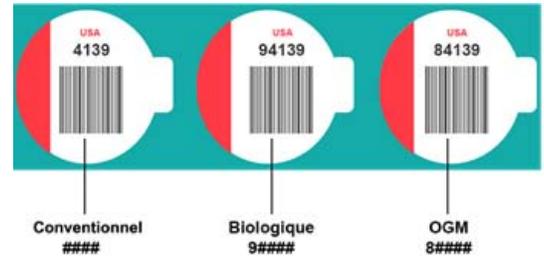
Our approval process. In Canada, the Canadian Food Inspection Agency (CFIA), in conjunction with Health Canada and Environment Canada, is responsible for controlling the development and marketing of GMOs. The CFIA assesses the potential environmental risks and safety for animals that eat the food. It issues import permits and oversees field trials, release, and variety registration. Health Canada is responsible for assessing the safety of all foods for human consumption, regardless of whether these foods have novel traits, whether they are genetically modified (GM), and whether they are of animal, plant, or other origin. The federal government's approval process may take up to a decade.

Approval does not necessarily mean commercialization. Not all GMOs that are developed and that receive approval necessarily make their way to the market. Every GMO must comply with certain acts and regulations before it can be commercialized. Even so, a GMO that is approved for commercialization may not be commercialized in the end because of market- or climate-related factors.

GMOs for animal or human consumption? In Canada, there are currently 12 GM plant species that have been approved for commercialization. Commercialized GM canola, corn, and soy are mostly intended for use as animal feed. The products derived from these crops (oils, flours, starches, etc.) may still be found in foods intended for human consumption, although these do not necessarily contain traces of GMOs.

Because of commercial practices and market considerations, there are no GM fruits (apples, strawberries, blueberries, etc.) or vegetables (lettuce, carrots, cucumbers, potatoes, etc.) currently found on grocery shelves. Seed suppliers made GM sweet corn available to Quebec farmers in 2012, but most decided not to grow it because of consumer concerns.

The inside scoop... When fruits and vegetables are sold either in bulk or individually, they will often have a sticker with a numerical price look-up (PLU) code. This code, used all over the world, allows the retailer to determine the price at the checkout counter. But in addition to the price, the code gives us information about how the food was grown. Conventionally grown fruits and vegetables are labelled with a four-digit code (XXXX), organic ones have a five-digit code with a leading 9 (9XXXX), and transgenic products have a five-digit code with a leading 8 (8XXXX). So far, only one GM fruit has been commercialized and may have a code beginning with 8: a kind of papaya grown in the United States (Hawaii).



Source: http://www.ogm.gouv.qc.ca/utilisation_actuelle/cultures_ogm.html

CHALLENGES AND ISSUES

Prudence and precaution. While GMOs have certain agricultural advantages that cannot be ignored, it is still important to exercise prudence and precaution. These kinds of technological are leading farmers to reflect on how GMOs affect the development of their sector. The UPA has therefore adopted a cautious attitude towards this new technology—an attitude that evolves as new knowledge and discoveries are brought to light.

Increased investment in public research. We currently do not have sufficient data to judge the potential risks associated with GMOs. For this reason, expects the federal government to invest more in research that will provide a second opinion for comparison with data from the private sector, and to establish an independent peer-review process involving Canadian and foreign researchers. This would give producers greater autonomy from seed and biotechnology companies while at the same time building their capacity to supply all markets (conventional and GMO).

No to GM alfalfa. For the UPA, the decision of whether or not to approve a GM product must be made on a case-by-case basis using nationally and internationally accepted scientific data, and by considering the actual benefits to farmers. The UPA opposes the commercialization of GM alfalfa because of the impact it could have on the organic sector, in which no GMOs at all are permitted. The introduction of GM alfalfa, a fast-reproducing perennial, in certain areas could contaminate faraway organic alfalfa crops via the transportation of pollen by insect pollinators.

Yes to labelling. The UPA recognizes consumers' fundamental right to have access to information on the products they purchase. Although labelling of GM products is a complex task that poses a number of problems in terms of enforceability (acceptable threshold, detection, traceability, etc.), there is federal legislation that guarantees mandatory labelling in the case of known and proven risks. The UPA is in favour of mandatory labelling provided that the cost is not borne by farmers and that labelling standards apply to imported products as well.