



A terminator looms over the land

Biotech seeds threaten the basis of human agriculture

By ELEANOR BOYLE

Many Canadians are wary of genetically engineered (GE) food. So they might be surprised to learn that our federal government has been quietly lobbying for biotechnology companies to introduce the most controversial yet of GE experiments in food production.

Representatives from Canada and other countries are now gathered at a United Nations meeting to discuss the future of so-called terminator seed technology. Designed to make plants sterile after one harvest, the technology would force farmers to buy new seeds from the biotech company each year.

It sounds incredible that a technology would be considered that would require farmers to constantly come cap in hand to the multinational seed companies. But being considered it is. And the Canadian government has been among those working to undermine a de facto moratorium on the technology.

That angers critics who say terminator seeds would give biotech companies money and power and monopoly control over parts of the food supply, and threaten cultures, livelihoods and the environment worldwide.

The latest round of the debate is occurring in Curitiba, Brazil, where members of the UN Convention on Biological Diversity are engaged in two intense weeks of meetings that end Friday. Among issues being discussed is the convention's standing recommendation that governments deny field-testing of sterile seed technology pending scientific assessment.

Reports from Brazil in the past few days suggest that the recommendation may be upheld. But terminator opponents know that such victories are often temporary, and are campaigning for individual countries to ban the technology — as India and Brazil already have.

The moratorium has been supported by many countries, including in Europe and Africa, and by non-governmental organizations (NGOs) and environmental and civil society groups. This month's gathering was called "critical" by

Lucy Sharratt, coordinator of the Ottawa-based International Ban Terminator Campaign. "Canada, Australia, and New Zealand have been working to try to overturn the moratorium," she said in an interview. "This is the meeting that will see whether they succeed."

The United States is not a party to the biodiversity convention. But the U.S. Department of Agriculture co-holds a key patent on terminator, and wants the Canadian government to argue its position.

Officially, Canada is neutral on terminator and other Genetic Use Restriction Technologies or GURTs. Robert McLean of Environment Canada, head of this country's delegation, says decision-makers are "cautious" and just want to see the science. "Canada neither promotes nor opposes GURT technology, but pursues a fact-based or an evidence-based approach," he said in a phone interview before flying to Brazil. McLean also said federal officials oppose a ban on new technologies, preferring assessment case-by-case.

The case-by-case approach mirrors the position of biotech companies, which Sharratt calls evidence of "pervasive industry sympathies" among government regulators who should objectively assess novel technologies. Indeed, the Canadian Food Inspection Agency website refers prominently to "the potential benefits of GURTs." And an internal government document circulated last year supported "the evaluation of novel varieties, including those with GURTs, for field-testing and commercial use."

Terminator technology is currently not allowed to be field-tested in Canada, though a government website lists more than 200 approved field trials for other genetically modified plants, from canola in Alberta to corn in Ontario. Field-testing a new product might seem benign, but critics say it will be impossible to prevent contamination of conventional crops once such GE plants are in the environment.

Although many Canadians support biotechnology in theory, they are nervous about possible hazards, Ottawa admits on its Biostrategy website. As for genetically engineered food, "there are strong reservations among significant pockets of the population about the potential risks involved."

In the debate over terminator, the stakes are high. On one side are multibillion-dollar corporations such as Syngenta, DuPont, Delta & Pine Land and Monsanto spending large sums and wanting to protect their investments by being granted monopolies over seeds, chemicals, and other products. They say new technologies give farmers more choice, that genetically engineered seeds are superior, and that terminator seeds will not contaminate the environment because they can be made sterile.

On the other side is a worldwide collection of indigenous people, farmers, NGOs and advocacy groups. They oppose a technology that would forbid farmers from saving and re-using seeds, a foundation of human agriculture for almost 10,000 years. They say a system of sterile seeds would undermine small-scale agriculture and its locally adapted plants. They argue that terminator may still contaminate other crops because control mechanisms, even on purportedly sterile seeds, are imperfect. They also point out that, because gene interactions are complex and scientists do not fully understand them, genetic engineering has unpredictable consequences.

Lastly opponents argue that terminator technology appears designed to enrich companies and them give them undue control over the necessity of life that is food.

Biotech companies want us to believe that this is a scientific debate, open only to a qualified few. But whether to promote GE food is not simply a scientific discussion. It is about values and the kind of society in which we want to live — and all of us have a right to take part. To get involved, go to www.banterminator.org.

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