

GM Fish and Chips? Already an Australian Staple!

JENNIFER MAROHASY

IN A slavish genuflection to self-appointed consumer guardians, Australian governments are currently placing barriers in the way of commercial food production based on GM crops.

This is in spite of the fact that Australians have been eating fish and chips cooked in cottonseed oil derived from GM cotton for over 5 years! But this fact has not stopped nationwide moratoriums on the commercialization of GM canola varieties (the source of most of the rest of our vegetable oil).

It is also in spite of the fact that Australia's Gene Technology Regulator concluded that a Bayer Crop Science variety of GM Canola is as safe to human health, safety and the environment as non-GM canola. This conclusion was made after six years of field trials, extensive evaluation and public consultation. It is also in spite of Food Standards Australia and New Zealand deeming this canola to be as safe to eat as conventionally produced canola.

Vegetable oil produced from GM cottonseed and GM canola is identical in chemical composition to non-GM oils because all genetic material is denatured in the refining process. Because the end products are chemically indistinguishable, the perceived health risk issues were always going to be issues of perception rather than reality.

Nor is there a basis for concern with cross-contamination in the field. A detailed study undertaken by the Cooperative Research Centre for Australian Weed Management showed that, even under the strictest

testing procedures, the requirements of anti-GM buyers would be met with the risk of pollen transfer between GM and non-GM canola crops shown to be less than 0.07 per cent.

The final official approval from the Office of the Gene Technology Regulator should have paved the way for the commercial planting of GM canola. However, moratoriums on the commercial planting of GM food crops recently introduced by State governments in Western Australia, South Australia, Tasmania, Victoria and New South Wales in response to the potential Federal Government approval for plantings of GM canola have prevented this. There is no moratorium in Queensland, but Queensland does not have a suitable climate for commercial canola production.

In the case of the NSW moratorium on GM food crops introduced in July this year, the legislation was supported by both sides of politics and the NSW Farmers Federation. Interestingly, in the associated media release, the Agriculture and Fisheries Minister said the passage of the bill was a victory for farmers and consumers. The Minister acknowledged that 'health, environmental and safety issues relating to GM food crops are already covered by federal regulations', but indicated that the moratorium was necessary because of marketing issues.

Although marketing has been repeatedly cited as a reason for the moratoriums, a report by the Australian Bureau of Agricultural and Resource Economics (ABARE) concluded that farmers would have no trouble selling GM grains (including

canola) overseas, and that exports of non-GM grains would not be harmed by fears of 'contamination'. The report indicated that GM producing countries (including Canada and the United States) dominate world grain trade, accounting for 79 per cent of world maize exports, 69 per cent of soybeans, 53 per cent of cotton seed and 42 per cent of canola. The percentage of the market held by GM producing countries is predicted to increase as the world area harvested to GM broad acre crops increases. Australian canola producers risk being shut out of these opportunities and losing market share.

At the forefront of the anti-GM canola campaign have been Greenpeace, the Australian Conservation Foundation (through their Gene Ethic Network) and a group of farmers known as the Network of Concerned Farmers. These groups have repeatedly and falsely referred to GM canola as the first GM food crop to be considered for commercial production in Australia. That the NSW Government gave in to their demands for a moratorium and at the same time provided exemptions for commercial cotton production on the basis that cotton is a non-food crop is hypocritical and highly misleading.

Fully 35 per cent of our vegetable oil is from cotton seed, and given that 30 per cent of the current cotton crop is genetically modified, it is reasonable to assume that about 10 per cent of our vegetable oil is derived from genetically modified plants. An increasing proportion of the cotton crop will be planted to GM cotton and a correspondingly higher percentage of vegetable oil will be GM derived. ▶

Furthermore, by ignoring cotton as an important source of vegetable oil and promoting GM canola as the first GM food crop, the NSW Government has played directly into the hands of those seeking to invoke the precautionary principle and instil public fear. The idea that something is 'a first' suggests that all decisions have been made on the basis of the hypothetical—on theoretical laboratory experiments and theoretical risk assessment reports.

Some Federal Government organizations also appear to be happy to play along with the pretence. The questions in the Biotechnology Australia surveys of consumer attitudes to GM food failed to make the distinction between foods containing GM material and food derived from a production system that involves genetic modification. But the Federal Government is not being transparent or consistent, failing to then take these issues into consideration when it devised its labelling rules—vegetable oil derived from GM cotton is exempt from GM labelling because the refining process destroys all GM material.

The confusion and hypocrisy surrounding the regulation of GM food and GM food crops is not confined to Australia. While the Europeans have a moratorium on the production of GM food crops, they import 6 million tonnes of soybeans per year from the United States, of which approximately 80 per cent is GM. This GM product is crushed with the soybean oil sold as vegetable oil for human consumption, while the remaining soybean-meal is typically fed to animals in feedlots. At the same time, through their aid organizations, the Europeans are seeking to maintain a moratorium on the planting of GM food crops in Africa, and some groups have supported boycotts that have effectively limited the distribution of GM food aid in Africa.

We don't have famine in Australia. In fact we have a diversity of abundant cheap food thanks in large part to science and our liberal democratic society—Australian farmers

have secure property rights and the opportunity to experiment and to develop modern farming technologies. Are we now about to regress on the pretext that we are unsure about the implications of a technology which we are already successfully using?

The anti-GM lobby is ideology driven, global and formidable. How did GM cotton achieve regulatory support for commercial field production? In the mid-1990s, the cotton industry was organized and united in its approach to the introduction of the new technology. There were no cotton growers publicly demanding

The reality is that over the last three years, Greenpeace and the Network of Concerned Farmers have run a relentless media campaign against the introduction of GM canola

supply-chain segregation between non-GM and GM cotton. The industry had secured its markets for both lint and cottonseed. In addition, the first plantings of GM cotton predated the launch of the anti-GM Greenpeace campaign and the formation of the Network of Concerned Farmers—at least in Australia.

The reality is that over the last three years, Greenpeace and the Network of Concerned Farmers have run a relentless media campaign against the introduction of GM canola. Over the same period the Biotechnology

Australia surveys have shown that the general public's concerns about GM foods have increased and this has been attributed to the campaigning. Yet both Greenpeace and the Network of Concerned Farmers must know that we are already eating vegetable oil derived from GM cotton! The conspiracy of silence is presumably to maintain the illusion that we are dealing with a new and unproven technology.

Anti-GM crusaders have successfully played to public concerns about GM foods to block the introduction of commercial plantings of GM canola. They have used the false pretext that GM canola would represent the first commercial GM food crop in Australia—when we produce just under 1 million tonnes of vegetable oil from Australian-grown cotton each year. Like vegetable oils derived from canola, this cottonseed oil contains no GM material because all proteins are destroyed in the refining process. Indeed, the parallels between cotton and canola are such that the success of GM cotton should have smoothed the way for the introduction and commercial planting of GM canola. Instead, Cotton Australia has played along with the conspiracy of silence and not spoken up and told the public that we have been eating fish and chips drenched in GM cottonseed oil for about 5 years. Presumably they recognize the global strength of the anti-GM lobby and fear a backlash. Yet, in reality, GM cotton has been a global success and is a real-life example of a GM food we are currently safely consuming while the Australian environment benefits from reduced pesticide applications.

So, according to the conspiracy of silence, when is GM food not GM food? When it is Australian vegetable oil derived from the successful non-food crop known as GM cotton.

Dr Jennifer Marohasy is the new Director of the IPA's Environmental Unit.

IPA

REVIEW