



## **New Rules Help to Keep Food Pure**

*Simon Terry\*, in NZ Herald, 29 September 2004*

As many premium markets firm up on their unwillingness to accept even a trace of genetically modified content in food, New Zealand's ability to meet this demand has quietly taken two important steps forward.

There is both a new means to screen out GM contamination in seed imports and new international rules which the Government has decided to adopt that will assist with such GM-related risks.

Because New Zealand has no commercial production of GM food, the biggest risk of contamination entering the food production chain is through imported seeds.

Just two years ago a GM plant researcher from the Crop and Food Institute argued that New Zealand would probably need to stop importing seed if it wanted to maintain zero tolerance to GM contamination.

The alternative advanced by promoters of GM agriculture was so-called tolerance limits. These would allow seed consignments to pass Ministry of Agriculture border inspections if they were found to be GM-contaminated, but were still below a certain threshold level.

However, the zero tolerance standard was kept in place and all forms of seed have continued to be imported. That the three confirmed incidents of contaminated seed since 2002 have all involved varieties of corn (maize and sweetcorn) is not surprising given that they account for 95 per cent of the area under crops identified by the Ministry of Agriculture as meriting border testing for GM content.

This concentration of risk in corn seed imports is part of what makes an innovation by one of the leading seed companies so significant.

Pacific Seeds has developed new practices that directly check GM contamination in maize by planting American seeds in glasshouses, then leaf-testing each plant to select ones to breed seed from. In this way the company's Gateway programme weeds out contaminated breeding stock while still supplying a price-competitive product.

This spring growers will have the choice of buying Gateway maize from Pacific Seeds, and the same system can also be used for other crop varieties. The wider significance of Gateway is that it demonstrates a method that any seed producer can use because there is nothing proprietary about the fundamental insight that Pacific Seeds has made use of.

At the same time, food producers have extended their quality assurance practices, using bigger sample sizes and testing at more points in the overall food production chain. While the single Ministry of Agriculture border test uses about 3200 seeds, exporters are routinely using 10,000 seeds and sometimes 50,000 to improve detection above the ministry's 95 per cent confidence limit. Why so much effort?

One of the nation's largest food producers has plainly stated to the ministry that "the implications for any GM contamination, real or perceived, anywhere in our supply chain, or even just anywhere in New Zealand, are potentially damaging for all of our business, such is the level of sensitivity of many of our customers to this issue".

Federated Farmers maize growers' spokesman Colin MacKinnon has similarly observed that, "The way our markets are, the majority of our customers require GM-free maize".

Such food producers will be helped in their efforts to check GM contamination by the Government's decision to ratify the Cartagena Biosafety Protocol. This protocol to the United Nations Convention on Biodiversity establishes a mechanism for prior notification and informed consent before a nation agrees to import living GM organisms.

If seeds or viable GM foods are to be shipped to New Zealand by any of the 107 countries that have so far ratified the protocol, notification will be required. While New Zealand has significant approval requirements for intended shipment of live GMOs, Cartagena promises two important upgrades.

The first relates to unintended GMO content in shipments. Under Cartagena, the burden of proof is shifted on to the party shipping food or feed to identify if it "may contain" live GMOs. Thus it will not be down to the Ministry of Agriculture alone to anticipate which imports carry this risk.

The second, and linked, benefit is the plan to develop liability provisions under Cartagena. While the design of these provisions is yet to begin, the intention is that they will provide redress if a shipment containing live GMOs causes damage.

That could reasonably include losses from the undeclared presence of trace GM content in an imported ingredient that leads to rejection of the final product. This was the circumstance that last year resulted in a Gisborne food producer suffering a \$500,000 loss when 0.05 per cent GM content was detected in a corn product destined for Japan.

While those backing New Zealand to eventually grow and export GM foods see such liability provisions as a risk, the smart money is on the nation adopting other means of improving food production that do not rely on GM techniques. Many of these are already far outpacing their GM counterparts in the marketplace and offer innovation consistent with New Zealand's clean, green branding.

Because the Cartagena liability provisions are the subject of long-running international negotiations, the domestic focus will tend to be on further proposals for tolerance limits on seed imports. Thresholds are strongly sought after by GM plant developers because it makes commercial GM cultivation seem less of a hurdle if other food producers already suffer from routine and randomly distributed contamination.

What proponents of GM agriculture must increasingly contend with is that thresholds are not inevitable. There are alternatives available at no or low cost to the economy, ones that can preserve our status in a world increasingly willing to pay for pure food.

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