

Will the Greens Close Down New Zealand?

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REVERING FALSE GODS

The New Zealand Government may be on the verge of worshipping the Green Baal and throttling the nation's agriculture by banning biotechnology.

The implications of this are particularly profound for Australia. We share many regulatory, political and commercial institutions with New Zealand, not the least being a common regulatory oversight over food. Our economies are closely integrated and cultural ties are strong. In simple terms, New Zealand's decision to turn its back on the modern world would put pressure on Australia to consider doing likewise.

Preventing the approval of genetically modified (GM) foods has become the talisman of many activists around the world. They argue that the technology may be unsafe. They clothe their opposition to the technology behind the nefarious 'precautionary principle' (which would prevent any new technology in any industry). Other strings to their opposition bow include calls for full information (which would impose considerable costs) or claims about possible adulteration of organic crops.

In fact, genetic engineering is what humans have been doing with plants ever since we ceased to be hunter-gatherers. The modern technology which directly modifies plants' genetic structure is now commonly used across a range of foods, and totally dominates the production of two of the most common foodstuffs—corn and soybean. For ten years now, the USA has been a vast testing ground for the technology. This followed the Food and Drug Administration (among other regulatory bodies) certifying the plant adaptations as safe. 200 million Americans have been eating GM food every day for the past six years.

The result? On the one hand, not one death, not one hospitalization, not one tummyache. On the other, a vast lift in productivity as farmers were able to reduce pesticide usage. Future gains are in the offing from GM developments that allow water conservation, plant growth in saline areas, improved ripening characteristics, plant incorporation of vitamin additions and a host of other productivity and health improvements.

GM is, however, a potent symbol for the Green levellers opposed to all modern technology, other than that which allows them to network on the

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Internet and travel to demos. In Europe, radical Greens and their cohort consumers have been busy destroying experimental crops wherever they can find them. Not for them the scientific process of examining the evidence and determining future action in the light of it!

ALL EYES ON THE KIWIS

For the past two years New Zealand has been an improbable world centre for reviewing GM technology. The Green Party and the left-wing Alliance Party count many GM opponents among their supporters. For some of these the task is to undermine globalization (code for 'US domination'). Others see it as a

means to arrest economic progress and return us to the simpler, less changeable world to which they affect a romantic attachment.

A Royal Commission was established, at the Green and Alliance parties' behest, to sift through the scientific evidence and determine whether or not this new technology had a place in New Zealand.

Given the pivotal nature of agriculture to the prosperity of New Zealand, this should have been unnecessary. New Zealand, like Australia, cannot afford the luxury of low-tech, or lagging, agricultural methods. But such notions would never impress the Enemies of Progress, who saw two benefits in having a Royal Commission. First, it could be used as an excuse to justify a 'moratorium' on any developments and in-ground tests. Second, this (and the publicity it would bring) could be used to energize their supporters and spread scare campaigns. It was also thought by some that a Royal Commission might offer ambiguous findings or even be gullible enough to sympathize with their own views.

The Royal Commission was chaired by Sir Thomas Eichelbaum, a former Chief Justice with an impeccable legal and analytical reputation. It held nearly 60 days of formal evidential hearings, arranged public meetings, received nearly 11,000 written submissions from all over the world, heard 300 expert witnesses, and digested hundreds of thousands of pages of testimony and evidence.

The supporters of the technology wheeled in some of the world's most eminent plant biology scientists. Its enemies brought in the usual assortment of quacks and rhetoricians.

REVIEW

The latter group failed to impress the Royal Commission. It concluded that 'It would be unwise to turn our back on the potential advantages on offer, but we should proceed carefully, minimizing and managing risks'. The Royal Commission, therefore, totally rejected Green demands for no GM, let alone a ban on field trials. Indeed, the Commission said, 'Field trials are an essential part of risk/benefit analysis prior to any release into the wider environment. Without field trials it is not possible to assess safety...'

The Royal Commission also dismissed claims that GM crops and organic agriculture could not co-exist. This is especially important, because organic food fanatics have spearheaded the opposition to the new technology. While nobody should be denied a preference to pay more for food grown in a particular way, those people should not be allowed to impose their own preferences on the rest of us. This is especially pertinent for food—turning our backs on modern techniques and technologies would mean a threefold cost increase. Indeed, organic agriculture would not be able to feed the world's present population.

Having lost the debate before the umpire—the Royal Commission—did the opponents of GM come to terms with its future? Not a chance!

Even before the sounds of the Royal Commission's decision had ceased echoing around the newsrooms, the opponents of GM were regurgitating the same myths that the Royal Commission had discredited. These include:

- L-Tryptophan produced by GM bacteria causes death. This case was forcefully promoted by Steven Druker of the Alliance for Bio-Integrity, an organization that sponsors Yogi flying. In fact, Tryptophan became popular in the 1980s as a dietary supplement to treat insomnia and depression. In the US, a faulty batch of the products was released causing some 37 deaths and over 6,000 people to be disabled or otherwise affected. This had nothing to do with genetic modification.
- A gene transfer from GM rapeseed

to bacteria in the gut of a bee was alleged to pose potentially dangerous transfers of GM material. Some evidence of this was alleged by a German research project, but *Nature* and other peer-reviewed scientific journals have rejected the offer to publish the research, considering it to be inconclusive. Greenpeace, which publicized the story on German television, cross-examined Dr Klaus Amman on the matter before the Royal Commission. Dr Amman told the Commission that there have been at least 100 experiments conducted to test for a horizontal gene transfer from a higher organism like

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a flowering plant to bacteria, but that no link has been demonstrated.

- Dr Pusztai's experiment on the effects of GM potatoes on rats has been one of the best-known cases in the GM literature, because of his highly unorthodox method of seeking to publicize the results. The experiments, however, did not follow standard practice, because they required the rats to eat raw potatoes, a diet that the rats rejected to the point that they began to starve to death. Nobody in the scientific community has replicated the results; and the consensus, shared by the Royal Commission, is that no link has been demonstrated.

Many opponents of GM food argue in favour of the 'precautionary principle'. Although precaution is intuitively reasonable, the principle (and Dr Julian Morris has counted no fewer than 19 different specific definitions) amounts to not allowing something to proceed unless it is proven safe.

Such a standard is scientifically impossible, and no food that we present-

ly consume could ever pass it. Yet, the rules of liability law and the strict standards of the many regulatory authorities have given us levels of food safety unparalleled in human history. Indeed, the sort of 'natural' food of yesteryear resulted in considerable harm, because of spoilage and the presence of poisons.

AFTERMATH

Will fanatics agree to the decision of an umpire who did not, as it transpired, support their position? Anyone thinking so has not been following activist politics. Certainly, as the outcome of the Royal Commission has demonstrated, rational arguments will convince a properly constituted review panel. But the process demonstrates yet again that sober evidence will not dislodge strongly held irrational beliefs.

And many of the GM opponents are not simply concerned about the marginal efficiency issues that were at the heart of the Royal Commission's recommendations. They seek to prevent it on far higher grounds—grounds that call into question the entire basis of modern society. Ten thousand chanting militants took to the streets to coerce a shaky, left-wing government to reject the Royal Commission's findings and impose a further moratorium.

Francis Wevers of the NZ Life-science Network describes his confrontation with one anti-GM demonstrator in Auckland. The demonstrator claimed that he would reject GMOs even if the outcome were to be mass world starvation. 'Stunned, I looked him in the eye and asked, "would you personally kill 120 million innocent children a year?" "Yes I would," he shouted back. "To stop GMOs, I would kill them all"! And there you have it.'

Yet New Zealand, like Australia, cannot afford to give in to these Luddites. The stakes are too high for the vast majority of human beings, who just want to get on with their own lives and who aspire to a better standard of living.

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