Wednesday 9<sup>th</sup> June 1999

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To Whom It May Concern,

Irrespective of my own personnel leaning on this issue, I believe the tenet of the freedom of choice is only possible through the freedom of information. As a conscientious consumer I not only demand the right to properly labelled GE foods, but I also demand transparency in the GE industry, ie

- which GE companies are involved in Australia, where and what are they doing;
- what are their track records on human and environmental rights;
- who are the board of directors and their major share holders?

Without freedom of information and transparency how am I able to make an informed choice?

As for your terms of reference, the main problem I have with the scope of this inquiry is that it is fundamentally biased in favour of those who have the most to gain from the GE industry. Therefore I wish to only concentrate on your first term of reference.

• the future value and importance of genetically modified varieties;

Common sense dictates that when supply outstrips demand then price inevitably falls. As illustrated by the current dioxin scare, the further demise of food security can only add to a windfall for our cleaner counterparts. Any halfwit can see the vital economic importance of tunning into sustainable niche markets ie the growth of the Australian organic fruit and vegetable industries have grown exponentially in contrast to their traditional competition as awareness has increased among consumers.

If however, we allow the American model of GE food legislation to dominate our industry, ie, the ban on labelling of food that is organic, then the backlash amongst consumers will be immense. As the BSE and the current dioxin scare in Europe have illustrated, when the health of consumers is perceived to be at risk then reputations

will be hard to dispel amongst food industries. And as has happened in the past, health authorities have been proven to act too slowly in order to protect the public good. In essence, the demise of food security will bring terrible health, financial and social consequences on generations to come.

By its' very nature GE 'science' (through a lack of transparency, science without evidence is hard to prove or disprove) and its' vested interests that are trying to sell it, are unable to guarantee food security. This will undermine the future value and importance of genetically modified varieties.

Firstly the 'science' itself is at fault for it ignores two basic underlying principles.

1. Over thousands of years we humans have evolved naturally with our food, which in many cases were tampered by us to produce superior species, ie wheat derives from three undistinguished weedy grasses. Through this evolvement we have built up natural resistances to many forms of diseases and/or viruses found common in our food chain.

GE food undoes all this through the patenting of genes and the use of rDNA, recombinant DNA. Patents on genes can cost around the \$100 000 US each. The technical terms for these new patents are what are known as 'bio-engines'. Once a company has patented a number of genes, then the company has the right to combine them (rDNA) in any fashion to invent new 'bio-engines'. Any gene of any living entity can be patented. The whole of evolution of nature is up for sale. Humans, plants and animals.

A recombinant DNA is the combining of two unrelated DNA to form a new DNA. Eg, human DNA combined with animal, plant + animal, plant + human or unrelated plant + unrelated plant etc. The dangers here are that diseases and/or viruses, which would never have evolved in such a way, may combine with other unrelated diseases and/or viruses, of which we have no immunity towards; let alone the means to detect, quantify and develop strategies to deal with.

What are the health consequences of this? Not only to us, but also to our livestock (BSE), fisheries, flora and fauna?

Given the demise of our health and environment due an unforseen bio-contagion, what would the long term effects be on our other industries ie, Health, Tourism, Arts, Culture, Export driven industries, Education, Transport, R & D etc, etc?

No one knows the short or long term effects of contaminating our food chain or diluting the natural gene pool. The risk is immense given that billions of dollars are at stake. It's far too early to jump to any conclusions.

2. This 'science' is not science at all but basically theft. This 'science' is plundering R & D from third world communities, which has accumulated over thousands of years. By taking out patents on foreign seeds, that are intrinsically woven into social fabrics of farming communities, ie the Basmati rice of India, or the Kava plant of Melanesia, these bio-tech companies consent in the wonton destruction of the very same communities they have fed upon. There is a term coined for this, **Bio-Piracy**.

Dr Gregory Scrinis, author of *Colonising the seed: Genetic Engineering and Techno-Industrial Agriculture* describes how the GE industry undermines third world communities in his article 'Sowing the demon seed' (Opinion section pg. 13 'the Age', Monday 7 June 1999).

Small-scale farmers and rural communities 'rely on the saving and replanting of seeds that have evolved and continue to adapt to changing local ecological conditions. These seeds are also suited to labor-intensive, low-input and organic or mostly organic farming practises. Labor-intensive farms are in turn an important source of work and income for landless and near-landless laborers, who increasingly make up the world's poor and hungry.

Genetically modified seeds, on the other hand, are primarily designed to fit into and enable the expansion and intensification of chemical-industrial forms of agriculture. This means expanding the range of crops and geographical regions farmed in this manner. They also enable the more direct linking of seeds to chemical inputs, and the designing of crops for long distance transportation of the food processing industry.

Genetically modified seeds are all patented and command high royalties for seed companies. Farmers are prevented from freely saving and replanting their seed. These seeds will largely be dependent on the use of costly pesticides, fertilisers and irrigation systems. For these reasons they are likely to be out of reach or ill suited to the needs of small-scale producers.

Many poor farmers who have taken out loans to purchase earlier versions of these industrial seeds and their accompanying chemical inputs have been unable to service their debts and have lost their land as a result. But the new seeds also pose a direct threat to the livelihoods of the small-scale farmers who do not take them up.'

One of the most cynical exercises in duplicity between governments and biocompanies is the strategy they've adopted to try and sell this new technology. They've come out with the catch cry that GE technology can stave of massive hunger, famine and starvation. If this were truly the case then they'd discontinue their practises. Logic dictates that if they could stave of massive hunger then who would pay for the food? Obviously not the starving poor!

Dr Gregory Scrinis describes further how the demise of food security in especially developing countries would further diminish sustainable farming and therefore increase the likelihood of mass famine.

'If genetically modified crops allow large-scale, monocultural, capital-intensive farms to increase production levels or improve their profit margins – even if only in the short term – then this competitive advantage will continue the process of lowering commodity process and thereby squeezing out small-scale farmers, leading to a further concentration of land ownership.

This dynamic is at work in highly industrialised countries such as Australia but is especially devastating in Third World communities where there are few other employment opportunities for those who lose their land and livelihood.

Genetically modified crops are also likely to accelerate the erosion of farm laboring work by enabling the further introduction of labor replacing technologies.

For example, the ability to engineer crops to tolerate broad-spectrum herbicides — which kill all plants other then the selected crop — will allow a wider variety of crops to be sprayed in a wider variety of situations, thereby reducing the need for manual weeding.

Seed-chemical corporations such as Monsanto are going to great lengths to prevent farmers from engaging in the age-old practise of saving, replanting and thereby improving their seeds. In addition to new patenting regulations and binding contractual arrangements that farmers may be obliged to sign, their latest strategy is to use "terminator technology", which enables any seeds to be engineered to be biologically sterile, thus ensuring that farmers repurchase their seeds to be engineered every year. The availability of non-patented and non-sterile seeds will also diminish as the large seed companies continue to buy out smaller companies and seed banks.

The techno-colonisation and commodification of the seed is enabling transnational corporations to further extend their ownership and control of the entire industrial food chain. For these corporations, it is not so much a case of feeding the world as of feeding on the world.'

## What about Australia?

It is this very concentration of power that is one of my main concerns. In the spirit of competition where is the logic in the ideology that private monopolies are for the public good? In Australia for instance large transnational agri-chemical companies are withholding free access to agricultural GE from Australian researchers and farmers. They have monopoly ownership and control and want to use that power to maximise their profits. As seed and other companies are bought up by the major companies, monopoly control of our food supply is intensifying. Again it is this lack of transparency and freedom of knowledge.

This concentration of power goes further. Monsanto for instance charges a big royalty on its Bt cottonseed (the first GE crop in Oz, around double the US license fee) so that farmers who grow it here are losing money. They save a bit on chemicals, marketed by the same companies, but production is down too. The farmers may not save seed for replanting next year.

## What about Australasia?

What sort of message will we be sending not only to our own indigenous people but to our neighbours if we give the thumbs up to the GE industry? The other issue that greatly concerns me are the unforeseen outcomes from bio-research and their inevitable consequences to our neighbours.

Take for instance Aroha Te Pareake Mead's article 'Resisting the gene raiders', published in the New Internationalist August 1997. In this article Aroha states that a 'Scottish-based PPL Therapeutics is conducting research into Maori and Aboriginal peoples, in some cases to ascertain genetic pre-dispositions to what are essentially socio-economic conditions – alcoholism, lung cancer and domestic violence.'

In the interests of race relations at least, what government would condone such a fascist use of 'science'? Unfortunately however this is alive and well and it too has a

term coined for it, **Bioprospecting**. Not only is it occurring both here in Australia and New Zealand but also in Western Samoa, New Caledonia, Vanuatu and Fiji.

Take what happened to the Hagahai people who first came in contact with the 'outside' world in 1984. Due to this first contact many of them died from external diseases and viruses. At risk of extinction they made contact with a foreign researcher who provided inoculations which saved their lives. Unbeknown to them, he also took samples of their DNA, which was sent back to the US. The Hagahai seemed to be immune to leukemia and degenerative neurological diseases, which persuaded the US researchers to take out a patent on the genetic qualities of a Hagahai individual.

'There was a massive global outcry at the US patent,' says Aroha 'led by the Canadian-based Rural Advancement International Foundation (RAFI) but also advanced at a Pacific regional level, which ultimately resulted in a US decision to abandon the patent.'

<u>Conclusion</u> the future value and importance of genetically modified varieties for Australia is minimal. We do not have the means to compete with the US bio-tech industry. Rather than being swamped by these companies there is a viable financial alternative. Due to the demise of food security around the world we could well be faced with the largest boon ever to fall into our hands. Therefore, this is where we can lead the world. Only with organic and biodynamic food, plus the proper labelling of foodstuffs can we guarantee viable competition for the already growing export market of consumers around the world concerned about their health and environment.

With any industry, human error is incalculable. When dealing with products that have yet to be proven safe not only for our health, but our environment, we must not throw caution to the wind. Until such time when the GE industry can prove itself to be safe and sustainable, not only in its' end product but through its' whole production process, then a moratorium must be placed on any future development of this industry.

Lastly we must heed the words of Aroha Te Pareake Mead's August 1997 New Internationalist article 'Resisting the gene raiders'.

'There are two legal instruments which have been developed in the Pacific region over the past five years which 'express the dismay and anger (of indigenous peoples) regarding biological and human genetic research' [Pacific Treaty]: The 1993 Mataatua Declaration on the Cultural and Intellectual Rights of Indigenous Peoples, and the 1995 Treaty for a Lifeforms Patent-Free Pacific and Related Protocols.

That the South Pacific would also develop a Life Forms Patent-Free Treaty is not surprising given the economic realities of Pacific islands...The Treaty reaffirms a belief in the sanctity of all life and states that it is affronted by the use of intellectual property rights systems and Western science and technology to control and exploit the lands, territories, resources and integrity of indigenous peoples. It expresses concern that the heritage of future descendants will be diminished through the commercialization of the biological resources of the Pacific and presses for 'immediate and united action'.'