

Parallel Session 29: Is there a real social participation in GMO discussion?

INCOMMENSURATE RISKS: DEBATES CONCERNING GENETIC MODIFICATION AND CULTURAL TRANSGRESSION AMONG NEW ZEALAND MAORI

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Abstract

Growing public anxiety about the development of genetically modified organisms (GMOs), prompted the New Zealand Government's year 2000 Royal Commission enquiry into Genetic Modification. The Commission noted overwhelming public rejection of GM, including multiple concerns specific to Māori. Maori concerns carry legislative weight because several Acts of Parliament, including that which governs GMOs, require that the views of Maori be considered. This paper draws on primary and secondary sources to identify key values perceived by Maori as important in assessing the effects of GMO's on their culture and traditions, and focuses on the concept of *mauri* (life force or essence).

Key words: mauri, risk, culture

Text

Context

In 2000, the NZ Government ordered a Royal Commission of enquiry into GM, in response to growing public anxiety about research intended to lead to the development of genetically modified organisms (GMOs), and especially the production and release of GM food crops into a currently GMO-free environment. The Commission found that the public in general, including New Zealand's indigenous (Maori) people, overwhelmingly rejected this form of biotechnology. Maori concerns carry legislative weight because several Acts of Parliament, including the Hazardous Substances and New Organisms Act 1996 (HSNO), which governs all GMO activities in New Zealand, require that the views of Maori to be taken into consideration.

Objectives

This paper identifies key values perceived by Maori as important in any consideration of the potential effects of GMO's on their culture and traditions.

Methods

Individual and focus group interviews with Maori were conducted in 2001-2. Transcripts were analysed, then subjected to further discussion by a team of experts. All Māori submissions to the Royal Commission were also examined, along with Māori submissions to the Environmental Risk Management Authority (ERMA) and other contemporary and archival material pertaining to Māori values.

Results

Three concepts were particularly prominent across the various sets of submissions and discussions: *mauri* (life force or essence), *kaitiakitanga* (guardianship) and *whakapapa* (inherited genealogy). Underpinning these was the view that genetic modification was a process demanding the exercise of great caution. Many Maori voiced concerns about the potential for GMOs to impact adversely on the *mauri* and *whakapapa* of the organisms involved, including humans who might eat products with GM components. This paper will focus on the concept of *mauri* in relation to genetic modification.

Mauri is a central notion in Māori philosophy, derived from the Proto-Austronesian term *hudip “to live”, and acquiring in Māori the sense of “the essence which gives a thing its specific natural character” (Metge 1976:57). The word refers both to the life principle or essential quality of a being or entity, and a physical object in which this essence has been located. In this context “being” and “entity” comprise all observable phenomena: individual beings, objects and events (including, for example, a speaker, their speech, and the platform they are standing on) have a *mauri*, and, importantly, ecosystems and social groupings. In classical Māori thought, the *mauri* was linked to the vitality, or *hau*, of a being, bound closely and inseparably to individual human beings, but having a collective significance paralleling *mauri* in relation to the forest and other phenomena (cf. Gathercole 1978, Best 1978).

While references to *hau* were comparatively sparse, the notion of *mauri* was frequently raised across all fora, and also in submissions by Māori to the Environmental Risk Management Authority. Many felt strongly that the transfer of genetic material between organisms, especially the mixture of human and animal genetic material, would have adverse consequences, disrupting the natural order of things, and affecting negatively the *mauri* of ecosystems, the animal world, and humanity. For example, the Ngati Wairere tribe, who objected to an application to insert a human gene into a cow, asserted that this affront to the *mauri* of both donor and recipient organisms would result in physical and psychological ill health for all concerned including Ngati Wairere on whose land the research took place.

Even cultural experts who held that addition or removal of genes did not affect the *mauri* of a particular organism had very strong concern for maintaining the integrity of the natural world, and a parallel certainty that serious disruption to this would affect people as well as things and places.

Conclusions

Communication of these values and their meaning between Māori and scientists responsible for regulatory decisions has been fraught with difficulty. This is in part because: (a) risk management legislation is effects based and hence concern about *mauri* must be matched by forensic proof of adverse consequences; (b) the current decision-making framework cannot weigh cultural transgressions and intangible expressions of risk alongside physical ones; and (c) there is a general lack of knowledge among regulators and lawmakers in an increasingly secular society of Māori spiritual beliefs. Thus despite attempts by the Courts to acknowledge Māori spiritual values, it is the scientific information which dominates the ERMA's risk assessment process. No application has yet been declined for cultural reasons. Thus in the case involving Ngati Wairere, the Authority concluded that "taking into account the need to provide active protection for Māori spiritual beliefs does not extend to accepting those beliefs as the determinant of whether the research ... should be approved". Efforts by Māori to promote a broader decision-making approach to solve this impasse include the development of values-based risk assessment frameworks (e.g. Durie 2003).

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