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GENETIC ENGINEERING AND ORGANIC AGRICULTURE: PERCEPTIONS OF ORGANIC EXPORTERS, PRODUCERS, AND CONSUMERS

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A thesis presented in partial fulfillment of the requirements for the degree of Master of Applied Science in Natural Resource Management

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ACKNOWLEDGEMENTS

I would like to thank the following wonderful people who have helped me directly or indirectly throughout this thesis:

John Holland, my supervisor. John has been a continual source of motivation, support and friendship throughout my studies. His supervisory role extended right across the world, and he is always available with inspiration and enthusiasm.

Terry Kelly, also my supervisor. Terry has provided invaluable advice and guidance for my research, and has worked with John to provide me with an excellent supervisory team.

Uwe Lohman of Wye College, who agreed to supervise me in the United Kingdom. Although I have since changed topics, Uwe was most helpful and obliging in the beginnings of my research.

My parents who have provided me with encouragement, opportunities and experiences throughout my life.

My friends throughout the world, without whose humour and friendship, studying would never have been the wonderful experience it has been, thanks especially to my fellow NRM student Callum Eastwood.

And finally, Tarewa Williams, who has always stood by me with love and understanding.

ABSTRACT

Genetic engineering technology is becoming increasingly widespread throughout the world. Since the late 1990s there has been intense controversy regarding its use in food production. Organic agriculture could lose or gain significantly from consumer uncertainty and apprehension regarding the genetic engineering of food products. Concerns about genetic engineering spread across the world, and organic agriculture is in a strong position to exploit consumer concerns about genetically engineered food. However, organic farming is also at risk from the cross-contamination of engineered crops, pest-resistance exacerbated by the technology, and the corruption of organic seedlines. In addition, there has been debate as to whether organic standards should be altered to permit the use of genetically engineered crops.

This study attempts to gauge the attitudes of three key sectors of the organic industry in New Zealand towards genetic engineering, namely producers, exporters and consumers of organic food in New Zealand. Producers of organic food in New Zealand were questioned regarding their views on genetic engineering, and whether they would consider incorporating genetically engineered crops in their food production. Exporters of New Zealand organic produce were questioned on the international organic markets and the exporters own opinions of consumer concerns towards genetically engineered food. Consumers of organic food were surveyed on their attitudes and beliefs about genetic engineering, and the possibility of genetically engineered organic food. Results for each survey sample were analysed using the statistical package SPSS.

The results show conclusively that organic exporters, producers and consumers do not want to eat or grow genetically engineered organic food. This appears to be based on intrinsic and ethical concerns as much as environmental and health concerns. Even if reassured about the safety of genetically engineered food to the environment and to human health, most organic consumers claim they would not eat it.

It is concluded that there is no future for genetic engineering in the organic industry. The industry would be wise to take advantage of the general consumer unease towards genetic engineering. Research into alternative methods of pest control would also be advised.

Keywords: Organic agriculture, Genetic engineering, Genetically modified organism, Consumer perception

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