

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Proposed Natural Resources Plan of the Greater
Wellington Regional Council

**JOINT HEARING OF SUBMISSIONS BY COMMISSIONERS OF THE
GREATER WELLINGTON REGIONAL COUNCIL**

**EVIDENCE OF DONALD NORDENG
ON BEHALF OF
GE FREE NEW ZEALAND**

DATED: 2 May 2017

SUMMARY OF EVIDENCE

1. GMO crops pose a unique environmental threat to conventional crops due to the risk that pollen will cross pollenate with non-GMO crops, thereby negating years of investments with a single contamination. Further, if non-GMO seed becomes contaminated with GMO seed through accident, the property would also lose its organic status.
2. Non-GMO crops carry a specific market based premium that GMO crops do not command. The loss of this premium leads to a 30% (fruit) to 150% (dairy) loss in premium.¹

QUALIFICATIONS AND EXPERIENCE

3. My name is Donald Nordeng and I hold the position of CEO, BioGro New Zealand.
4. My qualifications are:
 - (a) Anaheim University, MBA, Sustainable Management 2009 to 2010; and
 - (b) University of Wisconsin-Stevens Point, Bachelor of Science, Communication, Writing 1983 – 1987.
5. I have nineteen years of experience in senior management of organic certification, audition and certification work. I have extensive knowledge of international organic regulations and certification systems, including six years of organic trade experience in Asia.
6. I set out a timeline for my managerial experience in the organic sector below:
 - (a) Taneyama ga Hara Co., Ltd. – Import manager – 1992-1996. Direct import and distribution of certified organic chilled beef, ice cream, frozen vegetables and grocery items.
 - (b) Quality Assurance International (QAI) Japan office General Manager: 1996 to 2000.

¹ Maximising Export Returns (MER): Communicating New Zealand's Credence Attributes to International Consumers, Nic Lees Caroline Saunders, Research Report No. 334 January 2015.

- (c) QAI Japan Ltd. – Managing Director 2000-2002. First foreign owned organic certifier in Asia.
 - (d) Ecocert-QAI Japan Ltd. – Managing Director, Shareholder, 2002-2012. First joint venture organic certifier worldwide. Managed JAS organic certification in 23 countries with 145 auditors.
 - (e) Daabon Japan Co., Ltd. – CEO 2012-2014. Direct import of certified organic palm oil, certified organic fair trade fresh bananas, and certified organic coffee beans and freeze dried coffee from the largest fair trade and organic banana and palm farms worldwide.
 - (f) BioGro New Zealand Ltd. – CEO 2015- present.
7. I consider that I am an expert in the area of organic certification.

CODE OF CONDUCT

- 8. I have read the Environment Court Code of Conduct for expert witnesses and agree to comply with it.
- 9. I confirm that the topics and opinions addressed in this statement are within my area of expertise except where I state that I have relied on the evidence of other persons. I have not omitted to consider materials or facts known to me that might alter or detract from the opinions I have expressed.

THE VALUE OF NON-GMO CERTIFICATION

- 10. BioGro will soon be introducing a further form of organic certification for natural producers – i.e. non-GMO certification. We are now working with customers who export product using a non-GMO label for China. The program is in an internal testing phase.
- 11. The incentive for non-GMO certification has been created by a US\$550 billion market for non-GMO products.² There is presently no domestic certification scheme in New Zealand for non-GMO products.
- 12. The New Zealand primary industries are looking for ways to export value added products as they move away from commodity based trading. The collapse of the

² <http://www.prnewswire.com/news-releases/packaged-facts-global-non-gmo-food--beverage-market-reaches-550-billion-us-sales-at-200-billion-300127127.html>

dairy industry in 2015 and the rise of tourism as the largest contributor to New Zealand's GDP indicate an over-reliance on a narrow range of commodities. Federated Farmers sponsored a number of speakers, during their national conference on 1-3 July 2015 in Wellington, who shared the view that value added agriculture is important to the resilience of the industry. Organic and sustainable agriculture is the highest value added agricultural market with over US\$80 billion worldwide sold as organic in 2014³

13. Of New Zealand's five key trading partners, three have non-GMO labelling regulations.⁴ New Zealand has a market with these countries due to the perception and the fact that no GMO seeds are currently being cultivated in New Zealand. China is the largest trading partner with dairy being the largest single export. In 2014 NZ\$5.3 billion of dairy products were exported to China.⁵ Allowing cultivation of GMO plants poses a significant risk to non-organic and organic agriculture in New Zealand.
14. I will outline below the requirements for organic certification and non-GMO certification and why these should be taken into account when deciding whether to take a precautionary approach to regulation of GMOs under the Far North and Whangarei District Plans.

REQUIREMENTS FOR ORGANIC CERTIFICATION

15. Organic property certification must be managed under a specific set of practices that precludes prohibited materials for three years.
16. At the end of that three year period, only allowed practices and materials can be used. Use of non-approved or non-allowed materials, or contamination by the same, can result in part or all of the property losing organic certification for up to three years.
17. All agricultural and farming materials/inputs need to be assessed prior to use to establish they are (amongst other things) GMO free. All inputs must meet the relevant organic standard prior to use. Failure to notify BioGro prior to the use of any input is a non-compliance for that can lead to loss of certification of the land for up to three years.

³ <https://shop.fibl.org/fileadmin/documents/shop/1698-organic-world-2016.pdf>

⁴ http://www.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-in-profile-2015/trading-partners.aspx

⁵ http://www.stats.govt.nz/browse_for_stats/industry_sectors/imports_and_exports/global-nz-jun-14/key-points.asp

18. Contamination from outside the farm is obviously not an input over which a farmer has any direct control. It is very difficult to prevent potential spread of agricultural contaminants. Where contamination of an organic farm occurs from outside sources the land is subject to the same loss of certification as might otherwise occur if the contamination was introduced by the farmer themselves. This means that either part or the entire farm can lose organic certification for up to 3 years.
19. A well known example of an organic farmer losing certification due to GMO contamination is the Australian case of *Marsh v Baxter*.⁶ Marsh grew organic canola and Baxter grew GMO canola. Baxter cut his canola and left it to dry in his fields. Pollen from the GMO crop drifted onto Marsh's land during the drying process and contaminated his organic canola crop. As a result, Marsh lost his organic accreditation for three years.
20. I make no comment of the legal aspects of this case. Instead, I simply wish to point out that I consider the facts of this case illustrate why it is so important to take a precautionary approach to GMOs when planning for how they might be used in the agricultural sector insofar as it shows GMO farming can have serious impacts on organic farming certification, which is invariably accompanied by financial loss.

THE PROPOSED NATURAL PRODUCERS CERTIFICATION

21. Only the GMO status of seeds and inputs would be evaluated. Accordingly, any material input can be used provided it is not a GMO or derived from GMO materials.
22. Genetically engineered and or cloned animals are prohibited.
23. Current New Zealand dairy practices would fall into this category if they didn't feed cows GMO corn or soy derived feed. Generally a cow's feed is 85% pasture and 15% feed, which is imported from off the farm. The price premium for a non-GMO product is between 5% and 15%. This is referred to as the clean label market.⁷

⁶ *Marsh v Baxter* [2014] WASC 187

⁷ <http://www.wsj.com/articles/fields-of-gold-gmo-free-crops-prove-lucrative-for-farmers-1422909700>

24. Following Fonterra's recent announcement that it plans to introduce a market-linked organic milk price for its organic milk farmers, the Co-operative forecast a market-linked organic milk price of \$9.20 per kg milk solids for the 2016/17 season.⁸
25. Paul Grave, Head of Co-operative Affairs, Waikato, said while the opening forecast organic milk price is a big step up from the \$5.65 per kgMS payment organic farmers currently receive (the organic fixed premium on top of the Farmgate Milk Price), it reflects consistently high prices for organic milk products in its global markets.
26. The international retail price of organic milk powder is \$14,600 per tonne compared to about \$2800 for non-organic. Skim organic powder fetches \$12,500.⁹
27. New Zealand beef producers gain a grass fed premium for beef exported to the US. This premium would also be at risk if GMO grasses were developed in New Zealand, as the grass fed standard is a natural standard and public perception may be damaged if it was discovered that the pasture was derived from GMO seed. BioGro's naturally produced standard could apply to these producers provided the pasture is not GMO.

GMO CONTAMINATION IMPACTS ON BOTH FORMS OF CERTIFICATION

28. If a farmer or grower uses a non-approved input that is not compliant to the organic standard in question because it contains GMOs, either all or part of their property would need to be de-certified and taken out of organic production for up to three years. For example, if a farmer or grower knowingly uses GMO seed their property would need to be de-certified and taken out of organic production.
29. If a farmer or grower knows his property is at risk from GMO contamination from his neighbour, it is his responsibility to set up buffer zones, and inform the neighbour that his farm is organic and offer to cooperate in eliminating risk of contamination.

⁸https://www.fonterra.com/content/dam/fonterra-public-website/pdf/public-notice-dir/2017/2017_Public_Notice_DIRA_May_2017_forecast.pdf

⁹ <http://www.stuff.co.nz/business/farming/dairy/71254726/fonterra-desperate-for-high-value-organic-milk>

30. If a farmer or grower has had a contamination incident, the land may need to have the organic certification removed. It would depend on the level of contamination identified, and the certification standard used to make a determination.

CONCLUSION

31. GMO crops pose a significant threat to the investment organic farmers and growers have made in their businesses. In addition secondary industries have large investments and their requirements that could be significantly impacted or lost entirely if supply is curtailed through GMO contamination.
32. Organic and natural dairy is at significant risk of contamination from GMO corn and soy being fed to dairy cows and beef cattle and the use of GMO seed to grow pasture.
33. China, Korea, Japan, and the European Union require agricultural imports to be non-GMO. These markets have regulated the labelling of GMO crops and products. Contamination of traditional and organic agriculture in New Zealand would require those products to be identified as containing GMOs in these markets.

Dated: 2 May 2017

Donald Nordeng