



AGRICULTURE RESEARCH GROUP ON SUSTAINABILITY

Māori Organic Rīwai Potatoes, Putahi Farm and the Ngāi Tahu Mahinga Kai Brand



**By
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The information in this report is accurate to the best of the knowledge and belief of the author(s) acting on behalf of the ARGOS Team. The author(s) have exercised all reasonable skill and care in the preparation of information in this report.

¹ <http://www.ngaitahu.iwi.nz>

² <http://www.argos.org.nz>

³ <http://www.frst.govt.nz>

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Cover Photo: Rīwai growing trial at Putahi farm summer 2009-2010.

Executive Summary

The current market price of \$5.99 per kilogram for Māori organic rīwai (potatoes) is the highest price available for any particular type of potato variety and provides a large incentive to investigate expanding the growing area of rīwai on Putahi farm from its small trial area at present into a bigger research area of several acres. The expanded production of rīwai on Putahi farm could be sold under the Ngāi Tahu mahinga kai brand which could be expected to help generate maximum prices for the rīwai around the current retail price of \$5.99 per kilogram. The new Ngāi Tahu mahinga kai brand system through establishing the provenance and indigenous authenticity of the product and by helping supply the rīwai direct to consumers can be expected to help maximise the returns to the producers of the rīwai to help with the sustainable development of Putahi farm.

1. Introduction

This brief report highlights the potential premium market opportunity for the growing and selling of traditional Māori varieties of potatoes (rīwai) on the Wairewa Rūnanga Putahi Farm using the Ngāi Tahu Mahinga kai brand. This research is based on price comparisons observed in Christchurch between the 16th and 18th of June 2010. The research information gathered for this report was from New World in St. Martins, Countdown in Ferrymead and a certified organic retail shop called Liberty Market in central Christchurch.

2. New World St. Martins

The researcher just happened to be visiting the New World supermarket in St. Martins when it was noticed that there were some Māori potatoes being advertised at the rather extravagant price of \$5.99 per kilogram (see photos 1-3). This price is significantly above the \$3.99 per 1.5 kilogram bags for ordinary varieties of certified organic potatoes in the same section of the supermarket (photo 4).



1. New World Māori Potatoes \$5.99 per kilogram

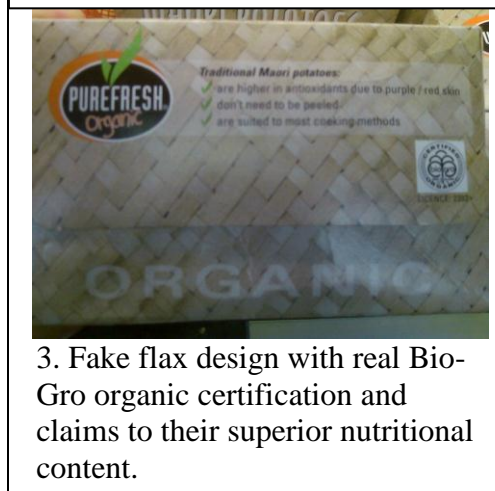
Whereas, the conventionally grown varieties of potatoes here were being sold at:

- \$4.69 per 4 kg (Red & White varieties)
- \$9.99 per 10 kg (Golden)

This makes them roughly \$1 per kilogram. From this analysis it could be seen that there was an extra premium of \$4.99 per kilogram for the organic Māori potatoes compared to the ordinary conventional varieties and an extra \$3.33 per kilogram compared to modern organic varieties (photo 4).



2. Māori fern logo in fake paua



3. Fake flax design with real Bio-Gro organic certification and claims to their superior nutritional content.



4. Ordinary organic potatoes for \$3.99 per 1.5 kg.

3. Countdown Ferrymead

In order to get a better appreciation of the price of potatoes elsewhere the researcher also visited another major supermarket that is targeted more at the budget end of the market. Countdown in Ferrymead has recently been re-branded away from Woolworths.

They also had organic potatoes and conventional varieties, but there were no Māori potatoes on display. The organic potatoes of different varieties were being sold for \$6.58 in 2.5kg bags (photo 5). However, the researcher has seen the Māori variety of organic potatoes sold there before in previous years and the organic variety shown in photo 5 is from Pure Fresh the same company that supplied the organic Māori potatoes to New World (see photo 3) .



5. Ilam Hardy organic potato variety for \$6.58 for 2.5 kg.

The conventional varieties of potatoes that they stocked were well labeled with a wide variety of types and prices:

- Roasting, boiling & mashing potatoes \$5.48 for 2.5 kg.
- Gourmet \$3.98 for 1.5 kg.
- Brushed potatoes \$10.98 for 10kg.
- Petite \$3.98 for 700 grams.
- All-purpose washed \$1.88 per 1 kg.

The conventional Petite potatoes seemed to be marketed on their small size coupled with fancy packaging and branding (photo 6). There was no immediate identification of the variety of potatoes that they come from, nutritional difference or cultivation methods.



6. Specialty Petite potatoes for \$3.98 for 700 grams.

4. Liberty Market

[Liberty Market](#) is a large organic supermarket in central Christchurch that has had its organic operations certified by AsureQuality. On the day that they were visited they had these varieties of potatoes for sale:

- Rua 10kg for \$13.99
- Agria two 5kg bags for \$15 or \$7.99 for one 5kg bag.
- Loose potatoes \$1.79 per kg

The average price for the organic potatoes at Liberty Market was between \$1.40 to \$1.79 per kilogram.



7. Certified organic Agria potatoes

5. Premium Market Opportunity with Ngāi Tahu Brand Rīwai

In summary the following table below shows that the greatest return for potatoes comes from two specialist varieties, firstly, the certified organic Māori potato and then the branded conventional Petite potatoes. However, this does require the caution that the producer of the Māori potatoes may not necessarily be the one that is receiving all the extra profit as firstly the distribution company Pure Fresh has gone to great lengths with the branding and packaging for these and New World will obviously take a large chunk of the final price. There is also no indication on the packaging that the actual growers of the Māori rīwai are indeed of Māori descent themselves.

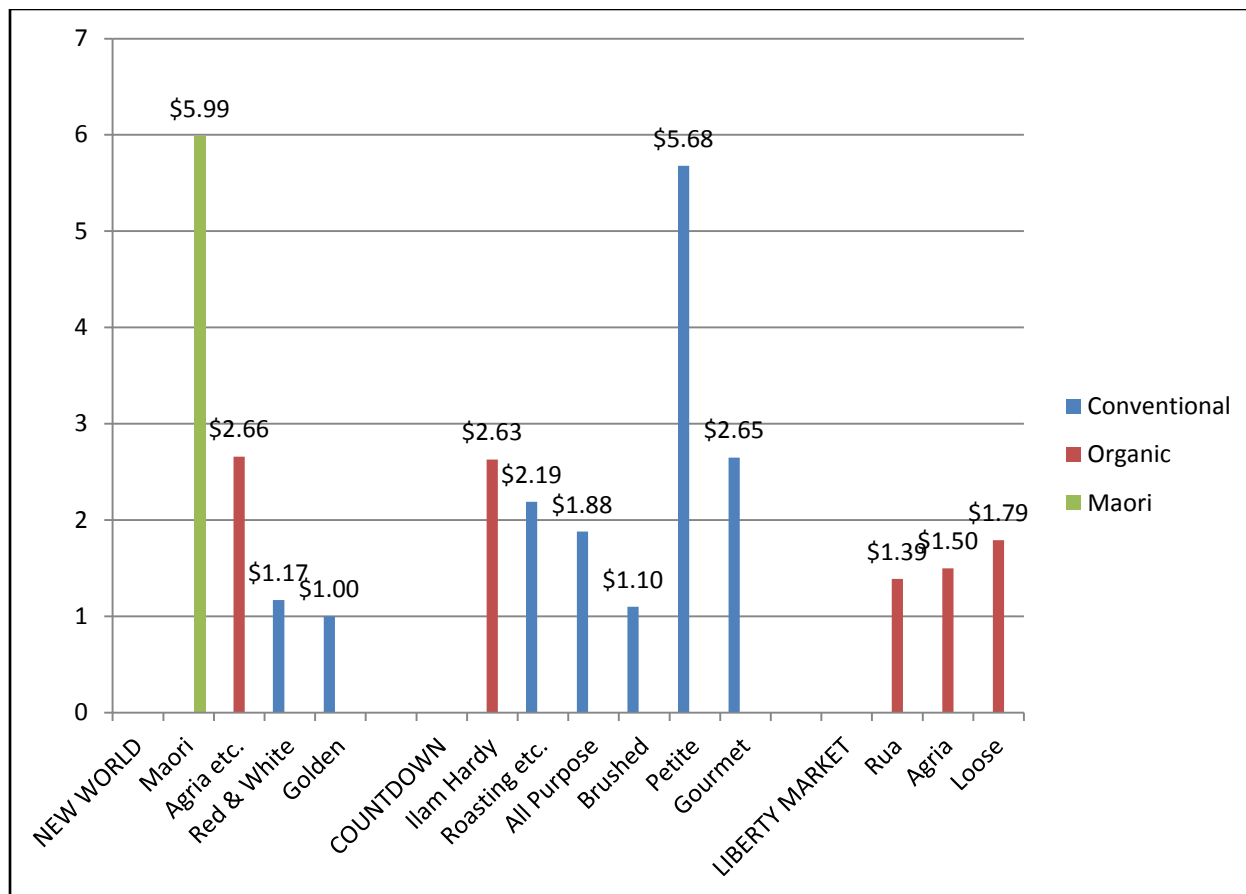


Table 1 – Price Comparison between Māori, Organic & Conventional Potatoes

The He Whenua Whakatipu project and the Wairewa Rūnanga Te Putahi farm grew a range of 4 Māori potatoes in the last summer season of 2009-2010, but not the purple variety shown in photos 1-3. Production was very successful in terms of both the quality and quantity of potatoes produced on Putahi farm. However, this particular summer was probably the most ideal climatic conditions for potatoes in Canterbury as it was cool with an above average rainfall until late summer when it became drier and warmer. Normally Canterbury has warm and dry summers with a tendency towards drought from mid-summer and if these conditions prevailed next year or tended to even more drought conditions then this would affect the health and yield of rīwai particularly if irrigation with water was not readily available.

Maori rīwai also have a reputation for being hardier compared to conventional varieties, but do take a longer time to mature unlike the modern varieties which have been bred for speed and size at a cost to nutritional content as identified in various studies.⁴

Market research carried out by the Putahi farmers providing samples of the rīwai potatoes at various hui with a variety of participants found that the rīwai were very well received for both their deliciously varied taste and their multitude of colours which were aesthetically pleasing.

6. Rīwai Conclusion

While the survey of prices in shops for the potatoes was not comprehensive it provides a sufficient snap shot of prices to indicate that there is a significant market niche available for the specialty production of organic varieties of Māori rīwai that would generate the maximum of premium prices compared to any other currently available potato varieties whether organic or conventional. This price return can be maximised by removing the middlemen and going direct to consumers as much as possible from the farm, for example, high quality restaurants could be targeted and/or through advertising on the mahinga kai website for direct sale. Therefore, it is recommended that He Whenua Whakatipu and Toi Tu Te Kainga help facilitate the creation of a Ngāi Tahu brand of rīwai from Putahi farm:

- Assisting in the expansion of rīwai production on the farm next summer to several acres e.g. fencing, planting, irrigating, weeding & harvesting;
- Enough rīwai was grown on Putahi farm in the 2009-2010 season to plant out one acre. Another source of virus free rīwai seed has been identified and is available to plant this spring;
- Maintain scientific records on the performance of the different varieties of rīwai for future developments;
- Establish scientific claims to the nutritional status of the rīwai for marketing purposes;
- Developing the marketing, design and brand profile for the Putahi varieties of rīwai e.g. organic status, Ngai Tahu mahinga kai website and packaging;
- Develop a system for the storage and distribution of rīwai post-harvest linked to mahinga kai website e.g. restaurants, Rūnanga, TRONT Hui a Tau etc.

There are six main potential problems with the concept of expanding the growing of rīwai on Putahi farm:

- i. It does not have certified organic status, but this could be mitigated by growing the rīwai to the NZS8410 organic standard so that they can be legally identified as being organic for brand purposes.
- ii. Labour to plant, maintain and harvest rīwai as the HWW field worker only has one day of paid labour available for the farm and has other priorities as well, but maybe a land lease and/or profit share deal could be arranged with Putahi to provide the economic incentive to carry out the extra work.

⁴ http://www.biotechlearn.org.nz/focus_stories/taewa_Māori_potatoes/the_benefits_of_taewa
<http://riddet.massey.ac.nz/Riddet%20e-Newsletter.pdf>

- iii. The [potato psyllid virus](#) is continuing to spread throughout NZ and this might impact on both the quantity and quality of the rīwai yield. However, the rīwai varieties appear to be less susceptible to the virus, but it is a production risk factor that could impact on profitability.
- iv. The lack of irrigation capacity and water quantity could pose a problem if there is not regular rainfall and/or drought conditions set in particularly in the early stages. This would limit the area that could be guaranteed to be successful for rīwai production and may require some investment. A resource consent would eventually be necessary for any water extracted from a stream on the property.
- v. A new and larger area of land would have to be cultivated and fenced if the trial was to have a large enough area to provide the commercial incentive to make it worthwhile to invest labour and new capital into the establishment and maintenance of it. It has been recommended that the old alfalfa paddock in Magnet Bay be the location for this enterprise:



- vi. Expanding the supply of a limited product, organic rīwai, could potentially reduce the available price under general market conditions. However, with the right branding and marketing a couple of extra acres of rīwai should not detrimentally affect the available price for rīwai in the short term. Indeed, a novel new idea like combining different

varieties of rīwai for a multi-coloured meal of organic rīwai grown by indigenous Ngāi Tahu could set new price heights over the \$5.99 currently being charged at New World.

In conclusion, organic varieties of rīwai grown by Putahi farm and sold under the Ngāi Tahu mahinga kai brand could expect to generate maximum prices for potatoes around the current \$6 per kilogram retail threshold. The new Ngāi Tahu mahinga kai brand system through establishing the provenance and indigenous authenticity of the product and by helping supply the rīwai direct to consumers via its website can be expected to help maximise the return of the majority of this profit to the producer. If extra capital and skills are needed to expand the production of rīwai then Putahi could look at establishing a partnership with other investors to help with this development.