

HE KAI TE RONGOĀ, HE RONGOĀ TE KAI:

Report of the evidence presented by Te
Waka Kai Ora to the Waitangi Tribunal's
inquiry into the Wai 262 claim.



Te Waka Kai Ora
October 2022

TE WAKA KAI ORA ACKNOWLEDGE THE
BEAUTIFUL ARTWORK OF THERESA REIHANA
IN COMMUNICATING THE KAUPAPA OF
TE WAKA KAI ORA AND THE HUA PARAKORE.

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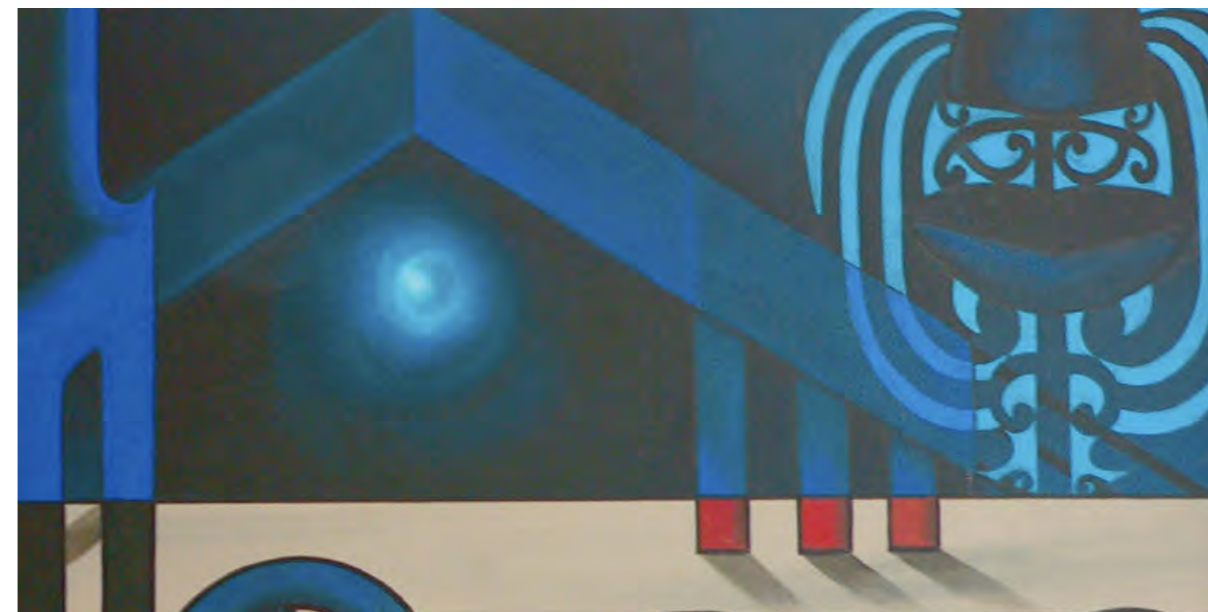
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Mauri ora ki te hā o te ao tūroa

Mauri ora ki te hā o te ao pūtaiao

Manawa ora

Manawa hinengaro

Mana waiora

Mana wairua

Whānau ora

Whānau manaaki

Ko te hau ora

Te hihiri o te hau whāngai tinana

*This karakia that is the opening of our report was inspired by the many kōrero shared
by Percy Tipene*

ACKNOWLEDGEMENTS | NGĀ MIHI

Ka tukuna aku mihi tuatahi i ahau e tuhi ana i tēnei kupu whakataki ki ngā kaikerēme taketake o Wai 262: arā, ki a Del Wihongi, nō Te Rarawa; koutou ko Saana Murray, nō Ngāti Kuri; ko John Hippolite, nō Ngāti Koata; ko Tama Poata, nō Te Whānau-a-Ruataupare me Ngāti Porou; ko Kataraina Rimene, nō Ngāti Kahungunu; ko Witi McMath, nō Ngāti Wai. E 31 ngā tau kua hipa mai i te tukunga o te kerēme Wai 262 ki Te Rōpū Whakamana i te Tiriti o Waitangi i te 9 o Oketopa, i te tau 1991. Ka rua tekau tau, kātahi anō ka whakahoki pūrongo Te Rōpū Whakamana i te Tiriti o Waitangi mō taua kerēme, ā, ka whakaputa rātou i tā rātou pūrongo Ko Aotearoa Tēnei i te tau 2011. Kātahi ka waru tau atu anō ka urupare ai te Karauna. Ahakoa te rere o te wā, ahakoa ngā tini rongonga me ngā pūrongo hoki kua ahu mai i te kerēme, he iti noa te kokenga o te Karauna hei anganui i ngā take i hāpaingia e ngā kaikerēme.

I te tau 2006, i tū Te Waka Kai Ora hei rōpū kerēme ki te kerēme Wai 262, ā, nā rātou te taunakitanga i tuku ki Te Rōpū Whakamana i Te Tiriti o Waitangi. Ko te maha o ēnei kōrero i ahu mai i ngā kaumātua o Te Waka Kai Ora, i ngā kaitautoko o te rangatohe hoki. E tino hira ana ēnei kōrero kaumātua i runga i tā rātou mahi tūāpapa, whai tikanga hoki ki Te Waka Kai Ora, ā, mai i tērā wā tokomaha o rātou kua huri ki tua atu o te ārai. He taonga ā rātou kōrero, ā, he tūrama arataki; ko tēnei pūrongo ko tētahi ara kia whakahui i taua aho ki te wāhi kotahi hei āwhina ki te tūrama i te wā o nāianei i a tātou e whai whakaaro ana ki te hiahia whitawhita kia hanga anō i ngā pūnaha kai Māori, kia whakarauora hoki i te mauri o te taiao.

E mihi ana au ki Te Waka Kai Ora mō rātou i mātua ū ki te kaupapa e pā ana ki te whakamahinga o ngā paturuha me ngā patu otaota organochlorine tāoke, o ngā whakahaumako matū, o ngā rauropi raweke ira hei tiaki i te mauri o tō tātou nei ao mataora. E mihi hoki ana au ki tō Te Waka Kai Ora whakawhanaketanga o te pūnaha whakapūmau, whakatūturu hoki mō te whakatipu Kai Atua parakore, arā ko Hua Parakore. Ko te āheinga o ngāi Māori ki te whakatau i ā tātou ake paerewa pūtaka-kaupapa mō te whakaputanga kai, ā, kia kua tērā e whakatauhia e te Karauna, ko tētahi whakahihikotanga matua kia tūhono atu Te Waka Kai Ora ki te uiui Wai 262.

E āki ana au kia horapa whānui ai tēnei pūrongo; kia whakamahia ai, kia kōrerotia ai hei huinga o te taunakitanga kaupapa Māori mai i Te Waka Kai Ora e hāngai ana ki a Hua Māori, ki a Hua Whenua, ki a Hua Parakore anō hoki. He kaha taku āki atu i te Karauna kia pānu i te pūrongo, kia tūhono atu hoki, ā, kia kakama

te rapu ara hei anganui ki ngā nawe kua whakapuakina e Te Waka Kai Ora, me te whakatinana i ngā marohi kua tukuna.

Ko tētahi kōrero mai i te pūrongo me mātua maumahara ko tēnei, e tukuna ana e te pūnaha Hua Parakore tētahi ara whakawhiti atu ki te momo whakaputa kai he nui ake te toitūtanga, te whakahaumanutanga – ā, ka hangaia i runga i ngā uara o tēnei whenua, ka whakaputaina te kai e kaha ana te mauri o roto, ka whakahaumanutia te kōtuituinga kai o te oneone, ā, e taea ana hei whakakapinga kē i te ahuhwhenua me te whakaputanga kai auraki hei wāhanga tuanui o ō tātou pūnaha kai.

Ka noho tēnei pūrongo ki roto tonu i ngā kōrerorero whānui ake, ā, ka tukuna hoki he whakaaro ki ērā e pā ana ki te wero i te pūnaha ahuhwhenua o nāianei me tana hāngai atu ki ngā tikanga Māori i runga i te whakakino ka takea mai ki ngā tāngata, ki ngā taiao hoki i te whakamahinga o ngā whakaurunga tāoke e hōhonu ana te whakaūnga ki roto i ngā ōhanga angahaorawa. Waihoki, kei te puta mai te pūrongo i te wā e whakahouhōngia ana ngā waeture parakore ki Aotearoa e te Organic Products Bill kei mua i te aroaro o te Pāremata i tēnei wā. He pāhekeheke tō te pūnaha Hua Parakore wāhi ki roto i te ao parakore hou e ahu mai ana. Heoi anō, ahakoa te hua o ngā whakahounga, ahakoa te hononga o te pūnaha Hua Parakore ki roto i te ao hou, kotahi te mea e māramatia ana: e kore rawa te mātauranga Māori, a Hua Parakore hoki e whakariteritea e te Karauna. Ka ū tonu atu te tūnga tino rangatiratanga, motuhake hoki o Te Waka Kai Ora hei whakarato i ngā ara Hua Parakore mō te haumanu i ngā pūnaha kai, i te mauri o te taiao hoki. E tika ana tā Te Puni Kōkiri utu i tēnei pūrongo hei wāhanga o te hōtaka mahi a Te Pae Tawhiti, arā ko te urupare tērā a te kāwanatanga katoa ki te kerēme Wai 262 hei whakaū i te urunga atu o Te Waka Kai Ora ki te uiui Wai 262.

He mihi kau atu ki te Tumu Whakarae o Te Waka Kai Ora i te tautoko kia tū mai tēnei mahi, ā, ki Te Puni Kōkiri nā rātou te pūtea. He mihi maioha ki a Tākuta Helen Potter hoki nāna tēnei pūrongo i tuhi, ā, nāna i āwhina ki te whakaora i te kōrero a Te Waka Kai Ora me Wai 262.



Tākuta Jessica Hutchings

Papawhakaritorito Charitable Trust, he kaiwhakaputa kai kua whakatūturutia e Hua Parakore

My first acknowledgments in writing this foreword are to the original Wai 262 claimants: Del Wihongi, nō Te Rarawa; Saana Murray, nō Ngāti Kuri; John Hippolite, nō Ngāti Koata; Tama Poata, nō Te Whānau-a-Ruataupare me Ngāti Porou; Kataraina Rimene, nō Ngāti Kahungunu; and Witi McMath, nō Ngāti Wai. It has been 31 years since the Wai 262 claim was lodged with the Waitangi Tribunal on the 9th of October, 1991. It took twenty years for the Waitangi Tribunal to report back on the claim, releasing their report *Ko Aotearoa Tēnei* in 2011. It then took another eight years for the Crown to respond. Despite the passage of time and the numerous hearings and reports that have come out of the claim, the Crown has made little progress in addressing the issues raised by the claimants.

In 2006, Te Waka Kai Ora became a claimant group in the Wai 262 claim and presented a body of evidence to the Waitangi Tribunal. Much of the kōrero was from Te Waka Kai Ora kaumātua, as well as supporters of the movement. This kaumātua kōrero is of special importance as these kaumātua played a foundational and pivotal role in Te Waka Kai Ora and many have now passed on. Their kōrero is a taonga and a guiding light; this report is a way of bringing that light together in one place to help illuminate the present as we consider the urgent need to rebuild Māori food systems and restore *te mauri o te taiao*.

I acknowledge Te Waka Kai Ora for holding such a steadfast line on the use of toxic organochlorine pesticides and herbicides, chemical fertilisers and GMOs to protect the mauri of our living world. I acknowledge too Te Waka Kai Ora’s development of the Hua Parakore validation and verification system for producing organic Kai Atua. The ability of Māori to determine our own kaupapa-based standards for food production and not have one imposed by the Crown was a key motivation for Te Waka Kai Ora to join the Wai 262 inquiry.

I encourage the wide dissemination of this report; for it to be used and cited as a body of kaupapa Māori evidence from Te Waka Kai Ora in relation to Hua Māori, Hua Whenua and Hua Parakore. I strongly encourage the Crown to read and engage with the report also, and actively seek out ways to address the grievances that Te Waka Kai Ora has raised and action the recommendations made.

A key take away from the report is that the Hua Parakore system offers a transition pathway to a more sustainable and regenerative form of food production – one which is based on the values of this whenua, produces mauri rich food, restores the soil food web, and which is an accessible alternative to conventional agriculture and food production as a dominant part of our food systems.

This report sits within and contributes to wider discussions questioning the current agricultural system and its congruence with tikanga Māori due to the harm caused to both people and environments by the use of toxic inputs deeply embedded in capitalist economies. Furthermore, the report comes at a time when organic regulations in Aotearoa New Zealand are being reformed by the Organics Products Bill currently before Parliament. The place of the Hua Parakore system within the emerging new organic landscape is uncertain. But whatever the outcome of the reforms and the relationship of the Hua Parakore system within the new landscape, one thing is clear: mātauranga Māori and Hua Parakore will never be regulated by the Crown. The self-determining and independent role of Te Waka Kai Ora to provide Hua Parakore pathways for restoring food systems and te mauri o te taiao will endure. It is tika that this report has been funded by Te Puni Kōkiri as part of the Te Pae Tawhiti work program, the whole-of-government response to the WAI262 claim in recognition of Te Waka Kai Ora joining the WAI 262 enquiry.

Thank you to the current Executive of Te Waka Kai Ora for supporting this work to take place and to Te Puni Kōkiri for the funding. A heartfelt thank you to Dr Helen Potter too for undertaking the writing of this report and helping to bring the story of Te Waka Kai Ora and Wai 262 to life.



Dr Jessica Hutchings

Papawhakaritorito Charitable Trust, Hua Parakore verified food producer



INTRODUCTION
KUPU ARATAKI

INTRODUCTION | KUPU ARATAKI

In 2006, Te Waka Kai Ora was included as a claimant in the Wai 262 claim, raising additional grievances for the Waitangi Tribunal to consider alongside those lodged by the original claimants. These grievances centre on: Crown authorisation of the use of toxic organochlorine pesticides and herbicides and the harms their use has and continues to cause to whenua, waterways, Māori food systems and the health of tangata whenua; and the detrimental impacts that the Crown's proposed Australia-New Zealand Therapeutic Products Authority (ANZTPA) would have on rongoā Māori and rongoā Māori practitioners. While grievances related to genetic modification (GM) and genetically modified organisms (GMOs) and the threats they pose to the mauri of te taiao were already part of the Wai 262 inquiry, this was also raised as a specific and critical issue of concern in the evidence of Te Waka Kai Ora and is therefore included here alongside the other issues raised.

This report brings together the evidence Te Waka Kai Ora presented to the Tribunal in 2006 on these issues into a single document. The purpose for doing so is to provide a user-friendly resource for our members and to help promote and build support for our kaupapa of Hua Parakore food production. Hua Parakore is about the production of kai atua or pure food that is free of chemical pesticides and fertilisers and GMOs, where it is produced in ways that accord with Māori values, to support healthy food secure futures for whānau.¹ Reflecting this kaupapa, the whakataukī which we hold to as our grounding pou, has been used to name this report: 'He kai te rongoā, he rongoā te kai' (let food be thy medicine and medicine be thy food).

The evidence informing the report includes written briefs by members of Te Waka Kai Ora, as well as hoa mahi who also contributed their expertise to the claim. Those who lodged briefs of evidence are listed below in the order they were named in the opening submission to the Waitangi Tribunal,² along with their roles and/or fields of expertise relevant to the claim:

- **Iwi Puihi (Percy) Tipene** – chairperson of Te Waka Kai Ora and Ngāpuhi Nui Tonu advisor for rongoā;
- **Cletus Maanu Paul** – spokesperson for Te Waka Kai Ora and negotiator for SWAP (Employees of Sawmills Protesting Against Poisons) for their Waitangi Tribunal claim;
- **Hohepa Joseph Kereopa and Taurioterangi Pouwhare** (joint brief of evidence) – members of Te Waka Kai Ora and esteemed Ngāi Tūhoe kaumātua and holders of mātauranga Māori o te taiao;
- **Kaa Kathleen Williams** – esteemed Ngāi Tūhoe kaumātua, lecturer in te reo Māori and member of the Māori Advisory Group for Genetic Engineering and Modification;
- **Angeline Ngahina Greensill** – member of Te Waka Kai Ora, member of Ngā Wāhine Tiaki o te Ao and lecturer in Māori geography, land, resource management and environmental planning;
- **Joseph Harawira** – Co-ordinator for SWAP and former sawmill worker whose health and wellbeing has been significantly compromised by exposure to organochlorine pesticides;

¹ Te Waka Kai Ora website, www.tewakakaiora.co.nz.

² Sykes A. & Pou, J. (2006). Submissions Te Waka Kai Ora, 8 September 2006 (Wai 262 #2.359).

- **Colleen Arihana Skerrett-White** – claimant/lead claimant in a number of Waitangi Tribunal claims against the Crown for permitting the pollution of waterways in her iwi rohe by the timber industry;
- **Mere Takoko** – member of Te Waka Kai Ora, author of the report 'People Poisoned Daily' and former toxics campaigner for Greenpeace Aotearoa;
- **Gary Raumati Hook** – biochemist, researcher and educator specialising in toxicology;
- **Gwenda Paul** – social scientist, researcher and author of a report commissioned by SWAP on a health and wellbeing survey of former sawmill workers and their families;
- **Carl Te Hira Mika** – lawyer, lecturer on Indigenous legal issues and author of publications on the marginalisation of tikanga and mātauranga Māori;
- **Jessica Violet Hutchings** – member of Te Waka Kai Ora, lecturer in environmental studies and author of numerous publications that discuss Māori opposition to GM;
- **Jane Kelsey** – professor of law whose research, publications and teaching specialise in the areas of law and colonisation, law and policy and Te Tiriti o Waitangi;
- **Ian Brighthope** – professor of medicine, president of the Australasian College of Nutritional and Environmental Medicine and head of an Australian natural health products company; and
- **Michael Cushman** – pharmacist and executive director of a natural dietary supplements company based in Auckland.

Alongside these, the evidence includes additional material referred to in the briefs of evidence, such as research reports, journal articles, book chapters, academic theses and industry reports, as well as documents prepared for the Waitangi Tribunal by Te Waka Kai Ora's legal counsel in the Tribunal's proceedings, Annette Sykes and Jason Pou. This report has been funded by Te Puni Kōkiri as part of the Te Pae Tawhiti work program, the whole-of-government response to the Wai 262 claim.

The report is presented in three parts:

- Part one provides background information and begins with a summary of the Wai 262 claim. It then outlines how Te Waka Kai Ora came to be included as a claimant, and provides details of our claim and the remedies sought;
- Part two focuses in on the evidence, starting with the kaupapa of Te Waka Kai Ora. This is followed by a discussion of the interconnected system of whakapapa relationships within which mātauranga and tikanga related to food production has developed. The next section details Crown failures and their impacts on te taiao, Māori food systems and on whānau, hapū and iwi. The next three sections also focus on Crown failures and their impacts, covering the specific grievances raised by Te Waka Kai Ora, namely, the use of organochlorine pesticides and herbicides, the use of GM and GMOs and the Crown's proposed ANZTPA and international agreements more generally; and
- Part three includes a set of recommendations for Crown action to address these failures and deliver on the remedies contained in our claim.

EXECUTIVE SUMMARY | WHAKARĀPOPOTO MATUA

This report is summarised by bringing the claim Te Waka Kai Ora lodged with the Waitangi Tribunal in 2006 to the foreground, along with the remedies we sought to address our grievances.

The claim | Te kerēme:

- That the Crown has failed to actively protect Māori lands, waterways, flora and fauna in their Hua Māori, Hua Parakore and Hua Whenua organic sustainable state;
- That the Crown has failed to protect Hua Māori, Hua Parakore and Hua Whenua flora and fauna as Māori sources of kai, beverages and medicines;
- That the Crown failed to actively protect the Māori economy that was based on a Hua Māori, Hua Parakore and Hua Whenua organic sustainable production system;
- That the Crown failed to protect the transmission of mātauranga Māori associated with Hua Māori, Hua Parakore and Hua Whenua;
- That the Crown failed to ban organochlorines;
- That the Crown failed to protect the health of Māori by failing to protect Māori lands, waterways, flora and fauna in their Hua Māori, Hua Parakore and Hua Whenua organic sustainable state;
- That the Crown has failed to support the development of infrastructure to support Hua Māori, Hua Parakore and Hua Whenua as it has done for other sectors; and
- That the Crown is failing to provide active protection for Te Waka Kai Ora growers and producers to exercise their right to development.

The remedies sought | Ngā rongoā e tonoa ana:

- That the Crown establish a task force of Wai 262 claimants to review Crown practices, policies, Acts and regulations which adversely impact on Indigenous flora and fauna sources of kai, beverages and medicine, and make changes that provide for their protection;
- That the Crown provide infrastructure support for Te Waka Kai Ora to promote the research, education, training, marketing (locally, nationally, internationally) and development of Hua Māori, Hua Parakore and Hua Whenua;
- That the Crown fund a health project founded on Hua Māori, Hua Parakore and Hua Whenua;
- That the Crown engage Te Waka Kai Ora to provide the curricula and pedagogy for the introduction of Hua Māori, Hua Parakore, Hua Whenua in kōhanga reo, kura kaupapa Māori, wharekura, whare wānanga and other education providers;
- That the Crown ban the use of all hazardous products that pollute Māori lands and waterways; and
- That the Crown affirms the tino rangatiratanga of Te Waka Kai Ora as the certifier/verifier of standards of therapeutic products sourced from Indigenous flora and fauna.


In the sixteen years since lodging our claim, however, the Crown has failed to take any meaningful steps in actioning these remedies to protect Māori food systems and support the kaupapa of Hua Māori, Hua Parakore and Hua Whenua food production. Thus the report also includes a set of recommendations for Crown action. These recommendations too are foregrounded in this summary.



Recommendations | Ngā tūtohunga:

- That the Crown allocates baseline funding to Te Waka Kai Ora to ensure our kaupapa of Hua Māori, Hua Whenua and Hua Parakore for a pollutant-free taiao is protected and sustainable into the future;
- That the Crown supports the development of a programme to promote and elevate the Hua Parakore validation and verification system for kai production, as a pathway to transition Māori growers and producers into organic regenerative agriculture;
- That a further allocation is made from the Crown to resource Te Waka Kai Ora to implement and promote the Hua Parakore system with Māori growers and producers, including funding for on-farm Hua Parakore extension officers to support Māori growers and producers to transition to Hua Parakore;
- That the Crown works to introduce legislative and regulatory changes to stop the sale and use of organochlorines and other hazardous substances in agriculture and food production and on te ao tūroa;
- That the Crown works to introduce legislative and regulatory changes to prevent any further research into the use of GM and GMOs in New Zealand given its incongruence with tikanga Māori; and
- That the Crown funds a Hua Māori, Hua Whenua and Hua Parakore programme of research, including research into:
 - the health and wellbeing benefits of Hua Māori, Hua Whenua and Hua Parakore; and
 - the development of Hua Māori, Hua Whenua and Hua Parakore educational resources for use in kōhanga reo, kura kaupapa Māori, wharekura, whare wānanga and other education providers.





**PART ONE:
CONTEXTUAL
BACKGROUND
WĀHANGA TUATAHI:
TE WHAKAMĀRAMA
Ā-HOROPAKI**



Artist credit: Theresa Reihana

PART ONE: CONTEXTUAL BACKGROUND | WĀHANGA TUATAHI: TE WHAKAMĀRAMA Ā-HOROPAKI

The Wai 262 claim | Te kerēme Wai 262

The Wai 262 claim was first lodged with the Waitangi Tribunal in 1991 by six claimants from six different iwi: Del Wihongi (Te Rarawa); Saana Murray (Ngāti Kuri); John Hippolite (Ngāti Koata); Tama Poata (Te Whānau-a-Ruataupare, Ngāti Porou); Kataraina Rimene (Ngāti Kahungunu); and Witi McMath (Ngāti Wai), with the assistance of lawyer Moana Jackson (Ngāti Kahungunu, Ngāti Porou).³

Development of the claim | Te whakawhanaketanga o te kerēme

The catalyst which brought all the claimants together was the Plant Varieties Act 1987. It enabled commercial plant breeders to gain proprietary or

ownership rights to new varieties of plant species. The problem with this was that most plant species targeted for research and commercialisation were Indigenous plants, but there was no requirement to first enter into discussions with or gain consent from Māori. As a consequence, the passing of the Act raised significant concerns about the ongoing ability of hapū and iwi to exercise tino rangatiratanga in relation to Indigenous flora and their mātauranga, including in the preparation of rongoā.⁴ The following year, at a 1988 ethnobotany conference in Christchurch, Māori attendees learned the Crown had given the seeds of different varieties of ancient kūmara species brought by Māori from Hawaiki to a research institute in Japan.⁵ This raised further concerns about the conservation of Indigenous plants, the protection of mātauranga related to

3 Wai 262 claim, cover page.
 4 Sutherland, O., Parsons, M., Jackson, M., and whānau of claimants (2011). The background to Wai 262, https://weebly.com/uploads/7/4/6/3/7463762/the_background_to_wai_262.pdf; Jackson, M. (2021). Kōrero at the Wai 262 Kia Whakapūmau Online Symposium, 19 July 2021.
 5 Poata, T. (2012). Poata: seeing beyond the horizon. Wellington: Steele Roberts, pp.233-234.

their use, the exclusion of Māori from the research process and from the benefits of commercialisation, and the failure to consult with Māori about any of it.⁶

In March 1989, John Hippolite and scientists Oliver Sutherland and Murray Parsons (Ngāti Kahungunu) met with Moana Jackson to discuss how Indigenous flora, their genetic material and the traditional knowledge associated with them might be protected. The discussion led to the idea of lodging a claim with the Waitangi Tribunal, and a group of six claimants comprised of friends and fellow activists who shared these concerns was formed. Further discussions to develop the claim were informed by the particular concerns and decades-long work of the six claimants, which included campaigns to protect kaitiaki relationships and rights in relation to the pūpū harakeke (flax snail) and tuatara, and to reassert tino rangatiratanga. This meant that the drafting of the claim broadened to include Indigenous fauna as well as flora, and an explicit focus on constitutional issues.⁷

The drafting of the claim was also informed by the discussions Indigenous Peoples were having as part of the drafting of the United Nations Declaration on the Rights of Indigenous Peoples, which began in 1985. As outlined by Moana Jackson, who was a member of the Working Group on Indigenous Peoples tasked with developing the Declaration, and Chair of its Indigenous Caucus, many of the discussions were about intellectual property rights and the right to protect Indigenous species from exploration, privatisation and exploitation by scientific and commercial interests. These discussions between Indigenous Peoples often centred around the notion of sovereignty: that the right to protect and care for Indigenous species is part of holding and exercising sovereignty.⁸ Reflecting this, the Articles in the finalised text

of the Declaration which deal with the rights of Indigenous Peoples to their lands, waterways and flora and fauna, all relate to the UNDRIP's core Article on the right of Indigenous Peoples to self-determination.⁹ As the Wai 262 claim was drafted, it too framed the issues it raised within a broader constitutional context, where recognition of the tino rangatiratanga of iwi in relation to taonga is part of recognising the tino rangatiratanga of iwi as a constitutional sphere of authority.¹⁰

The original claim | Te kerēme pūtake

After a two-and-a-half-year process of developing the original claim, it was lodged with the Waitangi Tribunal on 9 October 1991. In its opening pages, the claimants assert that consistent with the tino rangatiratanga recognised in Article 2 of Te Tiriti o Waitangi 1840:

“Iwi hold all rights relating to the protection, control, conservation, management, treatment, propagation, sale, dispersal, utilisation and restrictions on the use of Indigenous flora and fauna and the genetic resources contained therein.”¹¹

Because of the absolute nature of those rights, they state that all past and present Crown actions or omissions, or actions or omissions on behalf of the Crown, to develop policies and practices and enact laws in relation to Indigenous flora and fauna, are a denial of the tino rangatiratanga of iwi and are in breach of Te Tiriti o Waitangi.¹² The claimants further state that such actions and omissions have not just been a denial of tino rangatiratanga, but have also divested iwi of their rangatiratanga and deprived them of their rights to exercise it in relation to the Indigenous flora and fauna within and upon their whenua and kāinga.¹³

6 Sutherland et al, 2011.
 7 Sutherland et al, 2011.
 8 Jackson, M. (2021). Kōrero at the Wai 262 Kia Whakapūmau Online Symposium, 19 July 2021
 9 See for example, Articles 25, 26, 27, 29, and Article 3 respectively, United Nations Declaration on the Rights of Indigenous Peoples, 2007.
 10 Jackson, 2021.
 11 Wai 262 claim, p 2.
 12 Wai 262 claim, pp 2-3.
 13 Wai 262 claim, p 5.

The claimants map out how the denial and deprivation of tino rangatiratanga has led to four broad areas of breaches of Te Tiriti, namely, the right to development, the right to preserve and protect species, the right to the use and dispersal of species and the right to cultural and spiritual concepts associated with them.¹⁴ They state that the effect for Māori of these breaches has been the dispossession of major spiritual, cultural, scientific and economic resources.¹⁵ They then illustrate the ways in which this dispossession occurs by making detailed claims in regards to four species of flora (Kūmara, Pōhutukawa, Koromiko and Puawānanga), species of forest timbers and other Indigenous flora, and three species of fauna (Pūpū Harakeke, Tuatara and Kererū).¹⁶



To ensure the survival of a Māori way of life for future generations, the remedy sought by the claimants is Crown acknowledgement and recognition of the tino rangatiratanga of iwi as defined by tūpuna, as represented in tikanga, as reaffirmed in He Whakaputanga and as recognised in Te Tiriti o Waitangi – and as part of that recognition, for control of Indigenous flora and fauna to be returned to iwi.¹⁷ Simply put, the claim calls for ‘Māori control of Māori things’, and this became its catch-cry.¹⁸

The amended claim | Te kerēme kua whakahoungia

By the mid-1990s, further Crown breaches of Te Tiriti in relation to Indigenous flora and fauna were taking place. These breaches included the Crown’s support of the updated General Agreement on Tariff and Trade (GATT 1994), the Agreement on Trade-Related Aspects of International Property Rights (TRIPS), the establishment of the World Trade Organisation (WTO), and the subsequent proposed legislative changes to give them effect. Not only were these international agreements signed without prior discussion with and consent from Māori, the legislative changes required to give them effect would further impact on the ability of Māori to exercise rangatiratanga and kaitiakitanga in relation to Indigenous flora and fauna – and indeed any taonga.¹⁹

Because of the comprehensiveness of what these international agreements covered, the Wai 262 claim was amended to become as equally comprehensive. This amended statement of claim was filed with the Waitangi Tribunal on 10 September 1997, ahead of the first round of hearings in 1998.²⁰

As a result, the claim now encompasses all taonga, where ‘taonga’ is defined as all the elements of an iwi estate – material and non-material, tangible and intangible. Alongside Indigenous flora and fauna, this includes but is not limited to: mātauranga; whakairo; wāhi tapu; biodiversity; genetics; Māori symbols and designs and their use and development; and associated Indigenous, cultural and customary heritage rights in relation to such taonga.²¹

14 Wai 262 claim, pp 6-7.
 15 Wai 262 claim, p 5.
 16 Wai 262 claim, pp 9-28.
 17 Wai 262 claim, p 28.
 18 Solomon. M. (2018). Keynote presentation at Ngā Taonga Tuku Iho conference, 17 September 2018.
 19 Waitangi Tribunal. (2011). Ko Aotearoa Tēnei: A report into claims concerning New Zealand law and policy affecting Māori culture and identity. Wellington: Waitangi Tribunal, pp 27-32.
 20 Wai 262 claim, amended statement of claim, 10 September 1997, pp 1-2.
 21 Wai 262 claim, amended statement of claim, 10 September 1997, p 1.

Aroha Mead has developed a useful summary of the claim, highlighting the key points of concern raised by the claimants:²²

- That the Crown has failed to actively protect the ability of Māori to exercise tino rangatiratanga and kaitiakitanga in relation to Indigenous flora and fauna, mātauranga Māori and other taonga;
- That the Crown has failed to protect taonga;
- That the Crown has usurped the tino rangatiratanga and kaitiakitanga of Māori in relation to taonga through the development of policy and the enactment of laws; and
- That the Crown has entered into international trade agreements and obligations which further impact on taonga.

Inclusion of Te Waka Kai Ora in the claim | Te whai wāhitanga o Te Waka Kai Ora ki te kerēme

In 2006, during the second round of hearings, the Waitangi Tribunal sought to admit new claimants, with additional grievances, into the inquiry to enable them to gain the fullest picture possible of those affected by the Crown’s policies and legislation at issue in the claim.²³ Our application for claimant status was lodged by spokesperson, Maanu Paul, on 20 July, 2006.²⁴

The spur that led Te Waka Kai Ora to apply was the Crown’s Australia-New Zealand Therapeutic Products Authority (ANZTPA) agreement. This agreement sought to establish a joint body for the regulation of therapeutic products, including commercially sold traditional medicines, for the purpose of harmonising the efficacy and safety standards of therapeutic products, and minimising the trade barriers between the two countries. Of concern to Te Waka Kai Ora was the impact the ANZTPA would have on rongoā Māori and rongoā Māori producers and practitioners, and particularly their ability to develop commercial rongoā products. Alongside this was the concern that the proposed ANZTPA had been developed without any engagement with Māori – including Ngā Ringa Whakahaere o te Iwi Māori Inc, the national body of traditional Māori healers. Our claim also widened to include Crown failures relating to the protection of Māori organic food production or ‘Hua Whenua, Hua Māori, Hua Parakore’, and particularly that the Crown authorised the use of harmful organochlorine pesticides and herbicides such as DDT, PCP and other dioxin-based substances.

In making their decisions, the Tribunal sought to assess the distinctiveness of the applications they received and determine whether the new claims were so central to the underlying issues at hand that they should be heard as part of the inquiry into the Wai 262 claim or be deferred to later district-based or general inquiries. Following such deliberations, it admitted two new claimants into the inquiry. One was the Wairoa-Waikaremoana Māori Trust Board, which also lodged concerns about the harms caused by the use of organochlorines.²⁵ The second applicant granted claimant status was us, and this was granted on 21 July 2006.²⁶

Following this, our memorandum applying for claimant status was developed into a particularised statement of claim.

22 Mead, A. (2021). Panel presentation, webinar on the history and impacts of Wai 262, 21 July 2021.
 23 Waitangi Tribunal. (2011). Ko Aotearoa Tēnei: A report into claims concerning New Zealand law and policy affecting Māori culture and identity. Wellington: Waitangi Tribunal, p 8.
 24 Te Waka Kai Ora. (2006a). Memorandum to the Waitangi Tribunal, 20 July 2006.
 25 Waitangi Tribunal, 2011, p 8.
 26 Te Waka Kai Ora. (2006b). Particularised statement of claim for Te Waka Kai Ora, 26 July 2006, p 1.

Te Waka Kai Ora claim | Tā Te Waka Kai Ora kerēme



Te Waka Kai Ora's statement of claim in the Wai 262 inquiry was lodged by Maanu Paul on 26 July 2006.²⁷

Regarding Māori organic food production and the use of organochlorines, the claim states:

- **That the Crown has failed to actively protect Māori lands, waterways, flora and fauna in their Hua Māori, Hua Parakore and Hua Whenua organic sustainable state:** where the Crown's clearance policies and practices to create pasture land for grazing and to aid settlement destroyed habitats of Indigenous flora and fauna, including traditional and ancient seed stocks, which also decimated the traditional practice-based knowledge associated with it; and where the Crown's land development policies were privileged over Hua Māori, Hua Parakore and Hua Whenua land utilisation regimes, which included the subsidised use of organochlorine dioxin-based hazardous substances that have poisoned Māori lands, waterways, flora and fauna;
- **That the Crown failed to protect Hua Māori, Hua Parakore and Hua Whenua flora and fauna as Māori sources of kai, beverages and medicines:** where the Crown instead privileged the growing and production of non-organic products;
- **That the Crown failed to actively protect the Māori economy that was based on a Hua Māori, Hua Parakore and Hua Whenua organic sustainable production system:** where the Crown's non-organic, profit-based economy has destroyed the organic, communally-based Māori food economy;
- **That the Crown failed to protect the transmission of mātauranga Māori associated with Hua Māori, Hua Parakore and Hua Whenua:** where the Crown has excluded Māori science, technology and pedagogies from the education system, including knowledge and use of the maramataka;
- **That the Crown failed to ban organochlorines:** where the Crown failed to ban organochlorine-based products as soon as they were known to be harmful;
- **That the Crown failed to protect the health of Māori by failing to protect Māori lands, waterways, flora and fauna in their Hua Māori, Hua Parakore and Hua Whenua organic sustainable state:** where this failure has destroyed the traditional Māori diet that is high in antioxidants, contributing to high levels of ill-health from diseases such as diabetes, obesity, heart disease and cancer; and

- **That the Crown has failed to support the development of infrastructure to support Hua Māori, Hua Parakore and Hua Whenua as it has done for other sectors:** where this failure has prejudicially affected the flourishing of a key aspect of the Māori economy and the livelihoods of Te Waka Kai Ora growers and producers in particular.

Regarding the ANZTPA, the claim states:

- **That the Crown is failing to provide active protection for Te Waka Kai Ora growers and producers to exercise their right to development:** where we are required to conform to international conventional standards regarding the certification and verification of therapeutic products, instead of being able to develop our own standards for products sourced from Indigenous flora and fauna.


The remedies sought by Te Waka Kai Ora are:²⁸

- That the Crown establish a task force of Wai 262 claimants to review Crown practices, policies, Acts and regulations which adversely impact on Indigenous flora and fauna sources of kai, beverages and medicine, and make changes that provide for their protection;
- That the Crown provide infrastructure support for Te Waka Kai Ora to promote the research, education, training, marketing (locally, nationally, internationally) and development of Hua Māori, Hua Parakore and Hua Whenua;
- That the Crown fund a health project founded on Hua Māori, Hua Parakore and Hua Whenua;
- That the Crown engage Te Waka Kai Ora to provide the curricula and pedagogy for the introduction of Hua Māori, Hua Parakore, Hua Whenua in kōhanga reo, kura kaupapa Māori, wharekura, whare wānanga and other education providers;
- That the Crown ban the use of all hazardous products that pollute Māori lands and waterways; and
- That the Crown affirms the tino rangatiratanga of Te Waka Kai Ora as the certifier/verifier of standards of therapeutic products sourced from Indigenous flora and fauna.

To date, the Crown has not responded in any meaningful way to these remedies, except to fund the production of this report. This is an ongoing issue of concern for Te Waka Kai Ora and the protection of Hua Māori, Hua Parakore and Hua Whenua food production.

²⁷ Te Waka Kai Ora. (2006b). Particularised statement of claim for Te Waka Kai Ora, 26 July 2006, p 1.

²⁸ Te Waka Kai Ora. (2006b). Particularised statement of claim for Te Waka Kai Ora, 26 July 2006, p 2.



**PART TWO:
THE EVIDENCE
WĀHANGA TUARUA:
TE TAUNAKITANGA**



PART TWO: THE EVIDENCE | WĀHANGA TUARUA: TE TAUNAKITANGA

The interconnected whakapapa system of te ao Māori | Te pūnaha whakapapa kōtuitui o te ao Māori

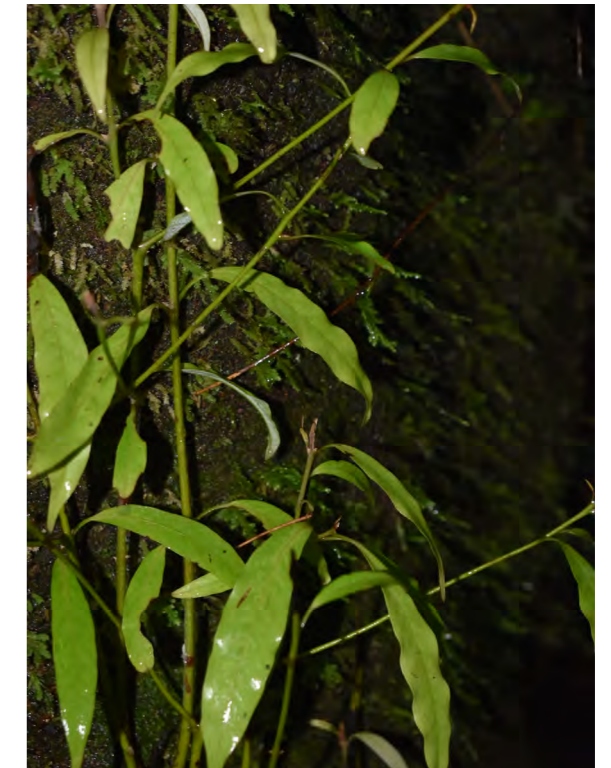
The joint brief of evidence of esteemed Ngāi Tūhoe kaumātua and holders of mātauranga Māori o te taiao, Hohepa Kereopa and Taurioterangi Pouwhare, describes the progressive creation of te ao Māori. Over eons of time, through the stages of te kore, and then through the stages of te pō, the celestial parents Ranginui and Papatūānuku conceived and bore children in the darkness until they were separated by Tāne. In the space and light of te ao mārama, and over countless generations, their children produced the world in which we live, with Tāne producing flora and fauna:

“He whakamārama paku mō ēnei kupu iti. Mai i a Rangī rāua ko Papa, ka wehea e Tāne, ka heke ko te iho o Rangī, ka ai i a Papatūānuku. Ka puta a Tāne mai taua iho anō, mai te iho o Rangī ki te whenua o Papatūānuku otirā ki te tara o Papatūānuku. I roto i te whakapakanga, ka puta a Tāne mā te minenga o Papatūānuku ka wehea amātua. Waihoki anō, koirā anō te putanga o ana tuākana a Tāwhiri-mātea, a Tangaroa, a Ruamano, a wai ake, a wai ake, a wai ake.

Ka hanga a Tāne te nao , rākau, ngāngara, manu, kararehe, aha ake, aha ake, aha ake.”

From the farthest realms of the domain of Ranginui, Tāne obtained the knowledge to produce human life, and together with the assistance of Papatūānuku, he was able to do so:

“Ko te Toi-ariki, ko Toi-urutapu, ko te Toi-ururangi, me Toi-ururoa ngā mana nui i ahu mai i te mātāpuna o te atua nui i a Io-matua-te-kore. Ko te waitohi te kawa i taea ai e Tāne te eke atu ki Tikitiki-o-rangi, me te whakahoki mai i aua mana ki te Ao Tūroa. Ko tētahi tino taonga i whakahokia mai anō e ia hai whakatō ki roto i te uwaha ko te wharetangata. Ka kimi ia i te wāhi tika hai whakauru atu i tēnei taonga.... I hangaia, ko tana whaea tonu ko Papatūānuku.”



This understanding that all life comes from a common point of origin means that all life is necessarily interconnected; that all living things are part of a complex but singular system of whakapapa relationships where we are literally kin to each other, and where our wellbeing as humans is inextricably tied to the wellbeing of the system as a whole. As explained by Hohepa and Taurioterangi below, maintaining the female essence or natural fertility of Papatūānuku is vital to our wellbeing and indeed to our very survival. It is the centre of that system, binding all living things together:

“I whanaunga mātau ki a Papatūānuku me ōna kaupapa katoa tae noa ki ngā kaupapa i puta i te minenga o Papatūānuku. Arā, ki a Tangaroa, ki a Ruamano, ki a Rehua, ki a Tāwhirimātea, ki a wai ake, ki a wai ake, ki a wai ake. He aha ai? Koirā taku tipuna e kōrero nei au. Nā rātau hoki, ko ahau....

Ko te whenua e noho ake i roto i te wahine. Ko tana mahi hai awahi i ngā whakaaratanga i whakanōhia ai i te ure ki roto i te kōpū o te whaea, ka tipu ake he tangata. Nā te ngaro o tērā whenua, ā, me pēhea hoki e puta ai i tērā tangata? I te ngaro hoki o tērā whenua, ā, me pēhea te ora ai o te tangata? Waihoki mō te whenua a Papatūānuku. Te whenua o Papatūānuku e puta ai ngā rangatira o te Ao. Ko Tangaroa tērā, ko Tāne tērā, ko Ruamano, ko wai ake, ko wai ake, ko wai ake. Ko ngā rangatira i whakanōhia ai hai mana, hai mauri, hai manaaki, hai karapotī i ngā kaupapa katoa i roto i ngā aitanga a Tāne i kōrero ai.

Nō reira, koirā te āhuetanga o te whenua ki a mātau. Ko te whenua te pātaka e ora ai te tangata. Ko taua pātaka hai pupuri i ngā piakaka wairua e ora ai te tangata, he rua wai. Ko te oneone te whakatinanatanga, te kaituitui i ngā tamariki a Tāne.

Ko te whenua āhuru te kaitui i te kākahu o Papatūānuku. Koirā kē te whenua ki a mātau. Ko te whenua ki a mātau; ko te mana o te tinana. Ko te mana tērā o te tinana o te tangata. Ko te kaiwhatu, kaihonohono i ngā tamariki a Tāne, ko te kaiwhāngai i ngā māhuri o te whenua.”

To illustrate this, they quote the well-known saying of Tūhoe prophet, Rua Kenana:

“Ka ngaro te wahine, ka ngaro te tangata; ka ngaro te whenua, ka ngaro te tangata.”

In her brief of evidence, esteemed kaumātua, Kaa Williams, also of Ngāi Tūhoe, describes the concept of mauri – the ‘breath of life’ or life force derived from atua that binds the physical and the spiritual together, and which all aspects and species of the Māori world possess. When this vital essence of the land, sea, waterways, flora, fauna or people is compromised, such as by paru or when tampered with by scientists modifying genetic codes, the physical and spiritual bond is unwound, affecting its vitality:

“I te orokohanga mai o te tangata, he tinana tōna, he wairua tōna. I te ao Māori, he wairua tō ngā mea katoa, tō te whenua, tō te moana, tō ngā

tipu, tō ngā kararehe, tō ngā manu me ngā momo āhuetanga katoa o te ao. Kei ia taonga tōna ake mauri, tōna ake tapu, me tōna ake āhua. I heke mai ēnei āhua i ngā Atua.

Ka whāwhāhia ēnei e ngā kaimahi pūtaiao, i runga i ā rātau mahi nanakia, ka wetewetekina tētahi o ngā miro, o te werewere tākai i te wairua me te tinana ka puare te tukutuku. Kāore e roa, ka papahoro te whare. Ka patua ko te tinana, ka patua anō ko te wairua. Ko ēnei taonga me ōrite tonu te noho tahi i ngā wā katoa.

Ko te mauri te ngao.... I heke mai anō tēnei āhua i a lo-matua-kore. Koinei te hā-ora, o ngā mea katoa. Ko te mauri te kaiwhakapūmau, te kaihere, te kaihonohono i te wairua me te tinana.... Ka pā he raru ki te tinana, ka pā anō te raru ki te wairua. Ko te katoa o te tinana ka raru.”

And because of the interconnectedness of all things, where the mauri of one part of the system is compromised, this, in turn, affects and diminishes the mauri of the rest of the system.

Knowledge of the world as an interconnected system led to the development of tikanga to ensure we continue to acknowledge and reinforce our relationships with te taiao, and act appropriately to maintain the balance and mauri of the system so that our mauri can be similarly maintained. One example, given by Matua Percy above, is the use of karakia to uphold these connections and obligations. He also talked of the tikanga of disposing of human waste (untreated or treated) away from food production areas, including waterways, to ensure their mauri is not compromised.

Turning back to the evidence of Hohepa Kereopa and Taurioterangi Pouwhare, they explain how the interconnected whakapapa system of te ao Māori led to mātauranga about how to read the signals in one part of the system to know what that means in other parts of the system. For example, they outline how reading the signs of Papatūānuku enable the year to be mapped into seasons, with each season having a particular kaupapa – such as for Spring and for Autumn, as outlined below:

“Kai reira te tohu mai mō ngā kaupapa kia eke ake te wā mō tēnā kaupapa, mō tēnā kaupapa e hangaia ai kai te whenua hai tauira ake pea: mehemea he tuna te kai i ahu mai i te whenua, i te mīna o Papatūānuku, nā, koinei te wā mō te tuna, ko tēnei marama i a tātau nei. Koinei hoki te marama e heke ai te matamoe ki te whakatūtaki ki a Tangaroa....

Ko te Kōanga tērā. He aha tōna kaupapa? He whiri haere i ngā kaupapa o te whenua me ōna wairua katoa o te wai kia whakatō, kia whakamātauhia, kia whakatōhia i tōna wairua e puta ai he hua e kite taua, ki ngā huawhenua katoa. Tae noa ki te kūmara....

Ka heke atu ki raro ki Poutū-te-rangi, ki a Paengawhāwhā, ki a Haratua. Ko Mahuru tērā. Koirā te huruhanga o te hau. Nā hara katoa ina kai mai i te Kōanga tae ki te Mahuru kua hauhake tērā. Kua waiho ērā hai purapura, hai māhuri mō te tau haramai.”

Their brief also includes kōrero about the mātauranga of the maramataka, listing the names of the thirty phases of the monthly cycle of moon, where each phase has a specific kaupapa related to planting and fishing. For example, Rākaunui, when the moon is full, is an optimal time for planting because the earth is bathed in the life-giving light of the moon.

Beginning with the new moon that signals the start of the cycle, the names of the phases are:

1) Whiro; 2) Tirea; 3) Ohoata; 4) Ō-Uenuku; 5) Okoro; 6) Tamatea; 7) Tamatea-ā-ngana; 8) Tamatea-āio; 9) Tamatea-kai-ariki; 10) Huru; 11) Ari; 12) Maure; 13); Māwharu; 14) Ōhua; 15) Atua-mate-ohutu; 16) Ōturu; 17) Rākaunui; 18) Rākaumatohi; 19) Takirau; 20) Oike; 21) Korekore-hahani; 22) Korekore-whakatehe; 23) Korekore-piri-ki-Tangaroa; 24) Tangaroa-ā-roto; 25) Tangaroa-kiokio; 26) Tangaroa-whakapau; 27) Ōtāne; 28) Ōrongonui; 29) Mauri; and 30) the last day of the moon cycle, Mutuwahenua.

Next they turn to the daily cycle of day and night, outlining how understanding the relationship between sunlight and the energy cycles of the

earth generated mātauranga about morning as the optimal time for planting and harvesting, including harvesting plants for rongoā. This is because the earth, and therefore all living things, are in their most vibrant state in the morning light. Thus, planting at this time aids growth, and harvesting yields kai and rongoā in a similarly vibrant and optimally nutritious state. After the peak of the sun is passed, the energy of the earth starts to wind down and rest:

“Mehemea he whakatipu kai, ko te ata te wā pai mō te whakatō kai. He aha ai? E ora ana katoa e te whenua i te haukū, i te tōmai-rangi, i te mahana i ērā kaupapa katoa, ka tere tipu te kai....

Kua rere te ora mai a Tamanui-te-rā, kua eke ko te ātārangi. Kua tirohia i ngā pou, e tohu ana i te ata ki runga o te whenua, nau mai tērā pou ki tērā pou, koirā te wā mō te whakanukunuku i ōna kaupapa katoa i mua i te ekehanga o te awatea. Ko te awatea koirā te wā e whakatae te whakatinanatanga ki te kapo tana hauora, ka pau te tangata ngā rākau katoa, ngā ngārara katoa, he aha ai e mōhio ai? He pērā anō te rākau. Inā haere koe ki te whawhati rau rākau, ki te tapahi kiri rākau rānei hai rongo, ko te wā pai hai haere, ko te atatū rāua ko ātārangi. Ka tae koe ki te awatea kua moe ana te rākau. Hai te moe tonu a te rākau kua kore he kai. Kua kore he whāngai. Nō reira kua kore he rongoā, kua tae te Poutū-te-rā, kua huri a Rūaumoko, kua whakatā.”

And similarly, they talk of the importance of planting kai to face east and taking the leaves or bark from the eastern side of the plant, as the life-force and wellbeing of plants is enhanced from the east as the sun rises:

“Ka tapa koe, ka whawhati koe i ōu rau, i ōu kiri mai i te rāwhiti. Tātemea ko te ora mō te rākau i ahu mai i te rāwhiti. Tahuri atu koe ki tōna tuarā, kai te ahiahi tonu. Kai te pōuri tonu. Kai te kī katoa i te wai ko tēnei taha kua pakari. Waihoki mō te whakatipu kai, whakatipu katoahia ōu kai, e ana atu rā i te rāwhiti. Ka huri ai koe ōu kai, e ai āhua ana ki te rā tō, ā, tō tonu atu ōu kai.”

As outlined in their evidence, and as gestured to in the excerpts included in this section, te ao Māori is filled with mātauranga; treasured, ancient

knowledge sourced from the farthest reaches of the universe and from the depths of the land:

“Ko te mātauranga Māori, ko te nui o ngā mātauranga o tōku ao, ko te mātauranga Māori, ko te roa o ngā roa, ko te mātauranga Māori i puta ai a Ranginui, a Rangiroa, ko te kura matuatanga mai o ngā kura māhora o ngā hiranga o te rangi, ngā hōhono o nuku, taketakenga mai o te urutapunga o te kōrero e puta ai ōna whiwhia ōna rawea mai i ngā mātangaroa, mairenuī o ngā pū wānanga e matāho ai, mai i a taua hua e puta ai te kī he kupu te kupu, he kōrero te kōrero, he karakia te karakia, he tapu.”

Angeline Greensill’s brief of evidence too speaks of the wealth of mātauranga in te ao Māori, which has been developed and refined over generations through a deep understanding that “our universe is intricately related”. Significantly, her evidence demonstrates the quality and efficacy of this knowledge:

“I was fortunate to be born into the Kereopa-Rickard whānau, one who valued and lived respectfully with the environment. My grandmother, Riria Rapana Kawharu Kereopa, was a healer, or more accurately a pharmacist of rongoā Māori. She would send young people like Hana Horomona and others to fetch rau from Karioi when she needed to prepare rongoā. If they came back with the wrong rau, they would be sent back until they returned with what was requested. Naturally they hated having to trek to the maunga and back two or three times a day, so they committed the paths to memory and became the repositories of knowledge about where particular trees for particular medicines were. It was also important that the barks, leaves, roots and berries were gathered on the right side of the tree, and at the right times, to work effectively.

When my Auntie Rahunga was born, she contracted smallpox. My grandmother was told she would die, but by using her own knowledge of medicine and the body, she managed to save her, much to the amazement of the medical profession at Waikato Hospital at the time. As a child I would put my fingers in indentations on her

shoulders which looked like miniature craters on the moon. It wasn’t until later that I understood how miraculous it was that my aunt had survived an illness that has killed thousands.

My dad, James Rickard, grew up at Rangitukia opposite a kuia called ‘old Jane’. Jane is still talked about today whenever there are whānau gatherings of those who were healed by her. My Uncle Minty’s calf muscles were ripped out, but Jane grabbed a plant, heated it, slapped it on the wound and covered it. Today there is minimal evidence of scarring, a testimony to the knowledge and skill of this old kuia.

My dad, who is now 82, has used the same plants to treat chainsaw accidents and other deep wounds. His poultices have managed to draw out wood and other objects that have pierced the skin, when doctors have given up and suggested perhaps an operation is needed. Through his efforts our tribe now has a rongoā bush within walking distance of our whānau home, so there is now no need to take the long trek up to Karioi....

My father, like his mother and previous generations, has developed and refined horticultural and pharmaceutical practices which continue to amaze those who are more affluent or focused on Western science methodologies.... Under his guidance, we also adhere to planting and harvesting by the maramataka or lunar planting which takes into account the relationship of the moon with the tides and seasons. Years of experience and observation assist us to plant in the right places and at the right time to get bountiful harvests. When the earth begins to warm up, we plant. Preparing the rua for storage has ensured that inherited seeds are available and have been for generations to provide harvests for our current generations.”

In his brief of evidence, Maanu Paul talks of how his kuia also taught him how to grow Hua Parakore kai and of the mātauranga and tikanga involved, where it is “not just growing food” but being part of and in accord with the interconnected whakapapa system of te ao Māori :

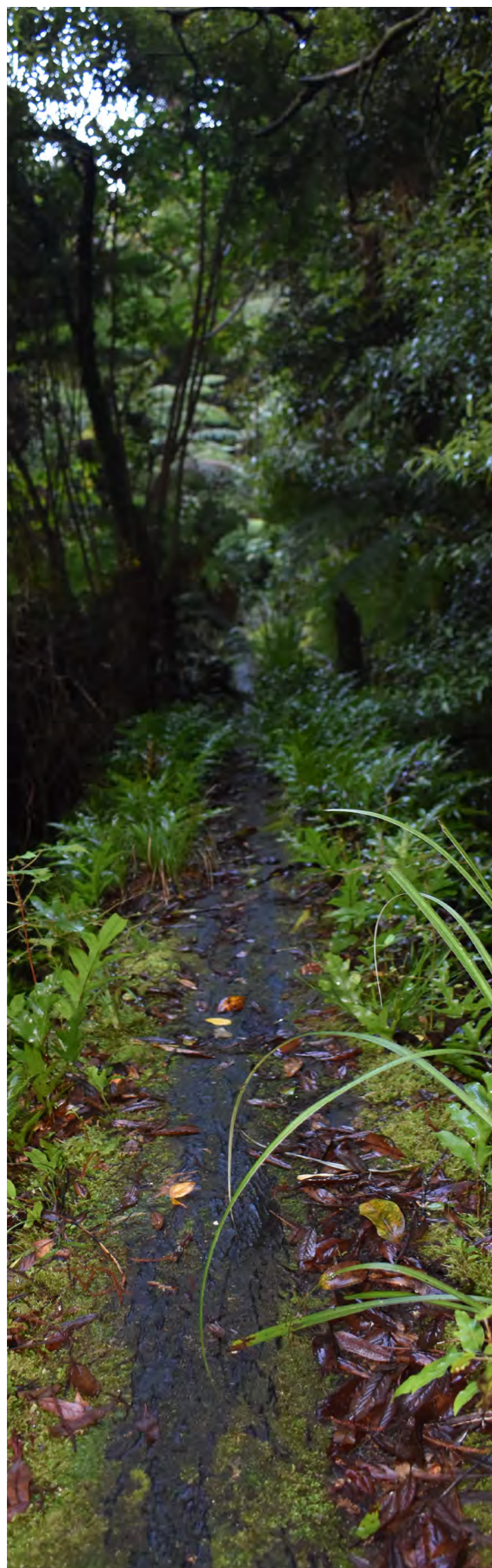


“Ehara ko te whakatipu noa iho tēnei mahi. Ko ngā karakia mō Papatūānuku me te kāhui o ngā atua, ko ngā kōrero i ahu mai i Rangiatea, ko ngā tikanga, ko ngā whakapapa mai i te Kauae Runga me te Kauae Raro, ko te maramataka, ko te mōhio ki te takoto o te whenua, ko te pūtaiao mo ēnei Hua Māori, ko te mātauranga o te taiao.”

Coming back to the framing embrace of Ranginui and Papatūānuku, the following excerpt from the brief of evidence of Colleen Skerrett-White aptly summarises this section:

“Our tūpuna understood and recognised that we live in a ‘closed system’ in terms of our existence being a moment in time in a never-ending constant cycle or re-cycling of all life forms (ngā tamariki a Papa rāua ko Rangi, me ngā taonga

katoa), within the realms of Papatūānuku and Ranginui. Tangata (people) share whakapapa with all these life forms as part of this process. Our tikanga are the guidelines that ensure we protect and nurture the very delicate balance required to ensure the survival of the whole system. These tikanga include the protection of the integrity of the wairua (spirituality) and mauri (life-force), all the intangible energies of the taonga.”



To illustrate the relationship between people and the environment, and the resources with it, she includes the following waiata composed by Morehu Tuhua and Kimoro Taiapa, which tells of the whakapapa of the harakeke:

I waenganui pū harakeke ahau
 Whakarongorongo ana ki ngā hau
 Oho ana tōku wairua, oho ana tōku wairua
 Ki ngā takawirihanga o te poi
 E mīreirei ana ka toko
 Te whakairo i ahu ko koe i hea, te whakairo i ahu koe
 i hea

Nā Io-matua-kore
 Ka moe i a Whaea Rikoriko
 Ka puta ko ngā ao
 Ka puta ko ngā pō
 Ka puta ko Ranginui e tū iho nei
 Ko Papatūānuku e takoto nei
 Piri ana rāua ka puta ko Tāne-mahuta, ko Tāne-
 mahuta

Nā Tāne-mahuta ka moe i a Pakoki
 Ka puta ko Harakeke, ka puta ko Harakeke
 Nā Tāne-mahuta ka moe i a Repo
 Ka puta ko Raupō
 I a rāua tahi ka puta ko Muka
 Ko Taura, ko Here, ko Awe
 Ka tae mai ki a koe e poi

Ehara tōu mana i te mana i takea nō nanahi
 Engari tōu mana nō tuawhakarere, nō tuawhakarere
 Ehara tōu mana i te mana i takea nō nanahi
 Engari tōu mana nō tuawhakarere, nō tuawhakarere
 Ake tonu atu.

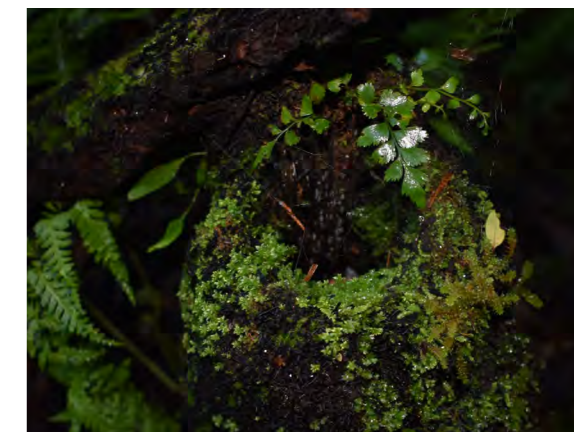
Crown failures and the impacts | Ngā mūhore a te Karauna me ngā pānga

This section turns to focus on the Crown’s failure to honour Te Tiriti o Waitangi and the impacts of this on te taiao, Māori food systems and on whānau, hapū and iwi. Drawing from across the briefs of evidence, Crown failures to protect te taiao and to recognise the tino rangatiratanga of hapū and iwi and our principles of kaitiakitanga used to maintain its mauri, have had devastating impacts.

These Crown failures have meant the taking, destruction, degradation and pollution of both lands and waterways, which has destroyed much of the māra and mahinga kai and food economy that hapū and iwi once relied upon for sustenance. In his brief of evidence, Maanu Paul elaborates on this, lamenting how the taking of land has not only meant the destruction of māra kai, but the burning of storehouses, despoiling of kūmara pits and the loss of Indigenous species of kai such as taro and varieties of yam. Significantly, this taking and destruction has deprived whānau and hapū of using and further developing their mātauranga related to growing food, so that it too has depleted:

“E pōuri ana, e tangi ana mō ngā kai, ngā Hua Māori tūturu o ō mātou tīpuna. Nō te mea i murua ērā e te Karauna i ana mahi raupatu – i murua katoatia ō mātou mahinga kai, ō mātou māra kai me te nuinga o ō mātou ngahere, awa, roto, repo, puna wai, whenua hoki.

Nā tēnā mahi o te muru whenua – i tāhuna katoatia ngā māra kai e tipu ana i te whenua, i turakinatia ngā pātaka, ā, i ukuukutia ngā rua kūmara – i ngaro ai te mātauranga, te pūtaiao, te mōhio ki te whakatipu kai. Inā hoki i ngaro anō ngā purapura me ngā tipu o ngā kai o te ao tawhito. Nā, kua kore e kitea ana i ngā momo uhi, arā te mea nui me te uhi whero he paku tēnā. Anō kua kore e kitea i ngā momo taro – nuku atu i te rua tekau o te whānau taro.”
 - Maanu Paul



The erosion of māra kai and mātauranga began to ramp up following the Crown’s establishment of the Native Land Court in 1865. This wasn’t just because it was the vehicle by which vast tracts of Māori land was acquired, but because, as Maanu notes, court sessions were often lengthy and held out of the district – and were invariably held when it was time for planting:

“Ko ngā mahi o te Kooti Whenua Māori anō te take kāore e kite ana ngā hua tawhito i tēnei wā. Ko te mea hoki ko te tino roa ki te whakawātanga i ngā tonu mo ngā whenua, me te mate i whakatūhia ēnā Kooti i te wā e tika ana ki te whakatō kai – anō i whakatūhia ki waho o te rohe o ngā kaitono. Nā, ka ngaro atu rātou i te whenua, ā, ngaro tonu atu ngā kai o te Hua Māori.”

In their brief of evidence, Hohepa Kereopa and Taurioterangi Pouwhare talk of the roles both Christianity and the Crown have played in diminishing te taiao and the mātauranga and tikanga associated with it. Beginning with Christianity and its belief in one god, church leaders instructed against the worship of the trees and the birds though the incantation of karakia, which has meant that some Māori no longer subscribe to this view or are unaware it even exists. In terms of the Crown, its actions and failures have degraded the health of waterways in their rohe, impacting on and depleting the stocks of traditional kai like tuna. For other sources of kai, the Crown has set down laws which limit or deny access to them, such as for kererū. Not only does it mean they’re unable to gather these traditional kai for their own use, they’re also unable

to manaaki their visitors as they once did – serving them foods like ham and sausages instead of the renowned delicacies of their rohe:

“I raruraru tātau i te rā nei. I māharahara tātau ki ērā kōrero. He aha te raruraru?”

Kua taemai a Karaitiana. ... Ka haramai ngā hāhi, ka haramai ngā karaitiana hou, ka kī mai ki a tātau, ka kī mai ki a mātau, kāti te whakapono ki ngā rākau, ki ngā manu. Kāti te karakia. Hauware ake anō ki ērā kaupapa.

I roto i te mahara o ngā mātua, ka noho ngā mātua ka whiriwhiri, ‘Ānei mātau kia kōrero ki a mātau anō, he atua i roto i ngā hangahanga a Tāne’, kua haramai koe, kua kī mai koe, ‘Ānei kē, kia mutu te hari mai he atua whakawai’.

I te whakawai i te iwi, i ngā tangata, kua riro te mahara he whenua kē. Me te aha, ka wareware i ēnei whakatipuranga te nuinga o ngā whakapirihanga o ērā kaupapa katoa. ...

Hai ako ake nei tae rawa ake tātau ki Maungapōhatu kua heke te ora o te tuna, kua kore te tuna e patua. Hai te taenga ki Maungapōhatu i te marama o Hune, ka ora mai te kererū.

Mehemea te Karauna e whakaae ana ki aku kaupapa, kai reira koe hai whāngai i te kererū. Tāmatea, kua oti katoa a koe ko te Kooti Whenua Māori, te herehere aku kai katoa tae noa ki te tuna, koirā koe kāre e whāngaihia e Waiohau ki te tuna. Koinei te kāinga mō te tuna. I te wā o mātau koroua e haramai ana ki Waiohau, mōhio tonu rātau, he tuna te kai. Taemai ki Waiohau, auē, he ‘ham’ kē te kai. He aha ai? Nā ōu ture. Ka hereherehia aku kai. Nā, kua kore ai e tae ki te mahi i aku kai hai whāngai i a koe. Ā kōneke, tae rawa atu ki Maungapōhatu, he tōtiti tō kai. Kua kore koe e whāngaihia ki aku kai rangatira.

Ko aku kai rangatira katoa, kāre e mahi ana hai kai māku engari e mahi ana hai kai mā te manuhiri. Nō reira, kia ora tātau mō tērā wāhanga. Ngā wawāhanga o te tau.”

They too lament these losses and wish for their restoration:

“Ko te moemoeā me te tūmanako kia whakahokia mai tō mātou Ao Māori kia ora ai ngā whakanekeke o te waonui a Tāne me te waipāpata o Tangaraoa kia tika ai a mua, kia tika ai a muri, kia tika ai a runga, kia tika ai hoki a raro.”

In her brief, Colleen Skerrett-White gives an overview of Crown failures in relation to the Tasman Pulp and Paper Mill, a Crown-owned company established outside of Kawerau in the 1950s. The Crown permitted the mill to discharge huge volumes of untreated industrial waste into the Tarawera River, which also polluted its tributaries and other waterways, devastating their collective fisheries and the traditional mahinga kai of Ngāi Tamarangi. Adjacent lands were similarly polluted, destroying māra kai and the ngāwhā scattered around the south-eastern shore of Lake Rotoitipaku, which were used for the nurturing of kūmara plants that provided the staple crops for all of the pā in their rohe. Colleen explains that, despite the devastation and years of endlessly protesting the desecration of their taonga, the Crown had other priorities:

“Tasman was a large company with over 2,000 employees, the largest industrial site in New Zealand and the biggest exporter during the 1970s and 80s. Fletchers and the Crown were the major shareholders in the company. Within this financial and political environment, the Crown and its agents – the Māori Land Court, New Zealand Forest Service, Regional and District Councils, Pollution Advisory Board, New Zealand Insurance Company (Guardian Trust), acted with a complete and absolute disregard for the history and cultural norms of Ngāi Tamarangi me Ngāi Tuwharetoa whānui in the pursuit of their vision for the forestry industry.”

These Crown actions and failures have:

“... resulted in the loss of our traditional māra kai and ngāwhā, a loss of connection to our whenua as there was no longer any access to that land for owners, and ... a loss of the practice of the karakia and tikanga that helped imbue our taonga with healing qualities. ... The wairuatanga and mauritanga of these taonga has been compromised. ... affecting huge negative

psychological, physical and emotional impacts on our whānau, hapū and iwi.”

In other cases, access to lands and waterways and species of kai and rongoā has remained intact – but the areas in which they live or grow have also been polluted so they’re not always able to be found or are not safe for eating or use. Angeline Greensill elaborates on this in her brief of evidence in relation to the Crown’s ongoing use of 1080 poison:

“The Department of Conservation has dumped tonnes of 1080 on our maunga and other native forested areas within the Tainui waka area as part of its policy under the Resource Management Act and Conservation Act to get rid of pests such as possums. It doesn’t seem to matter that other forest floor dwellers, including the chemicals within the trees, will be affected.

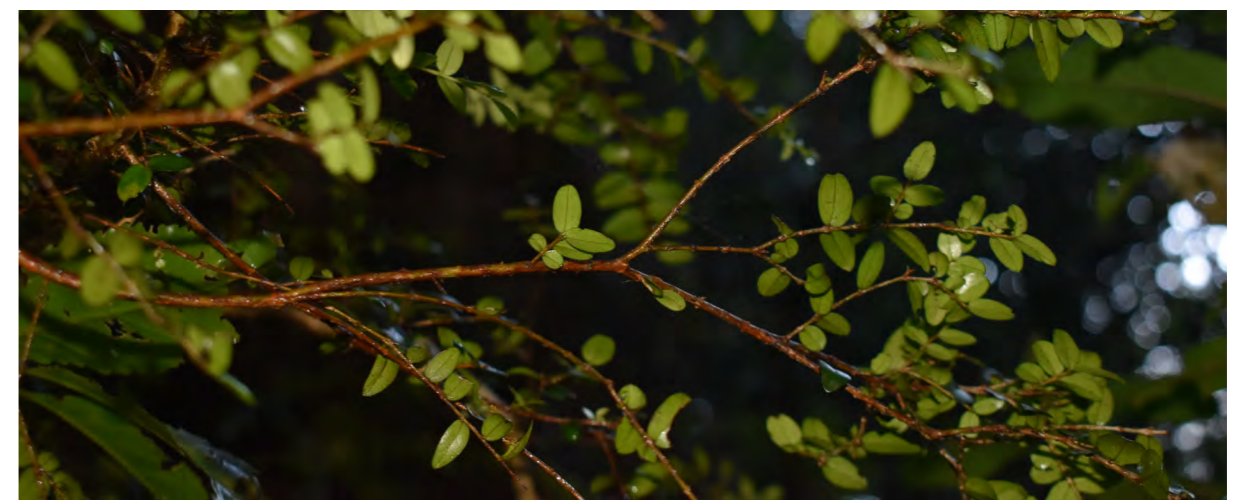
The ideology that drives this behaviour is entrenched within the Crown’s political and economic system, which is totally at odds with our system of kaitiakitanga which focuses on whānau and hapū ensuring that the mauri of all things within our respective rohe, beneficial to human existence, is maintained. Protecting the integrity of the environment therefore is a given if current and future generations are to survive.

Unfortunately the long-term impact of 1080 and other chemicals on rongoā and on the wider environment has yet to be ascertained as we no longer gather rau from the maunga. In fact we rarely venture into the ngahere at all....

We rely on isolated pockets that we have cultivated in safer environments under our own control. We have had to construct forests which contain our medicine chests instead of relying on what was handed down to us naturally by Tāne.”

Instead of valuing te taiao and Indigenous flora and fauna sources of food and medicine as taonga to be treated with the utmost care and respect, the Crown subscribes to a very different view. In this view, environmental management is about breaking the environment into discrete parts and not seeing it as an interconnected system. It means that the actual costs involved in purportedly ‘cost-efficient’ activities like discharging waste to rivers and dropping large volumes of 1080 on Indigenous forests don’t get counted – and certainly not the cost that whānau, hapū and iwi have and continue to pay, as outlined above. As noted by Angeline, the Crown’s persistent failure to recognise the tino rangatiratanga of hapū and iwi in relation to te taiao, where our interests are minimised as merely cultural interests, and our values as merely a cultural perspective, means that:

“... no one is listening to our experts versed in mātauranga Māori. Crown decision-makers are focussed too narrowly on the myths of Western science as truth, for example, the diffusion theory is constantly used to justify pollution of waterways. When we start tasting acid rain as toxins from tūtae raining down on us and polluting our land and crops, maybe then Western science will catch up and realise that our universe is intricately related.”



Take tuatahi – organochlorines

This section addresses the Crown’s failure to protect te taiao, Māori food systems and the health of tangata whenua from the devastation caused by the use of organochlorine pesticides and herbicides such as DDT, PCP and other dioxin-based hazardous substances. The key grievances raised in the evidence presented by Te Waka Kai Ora are:

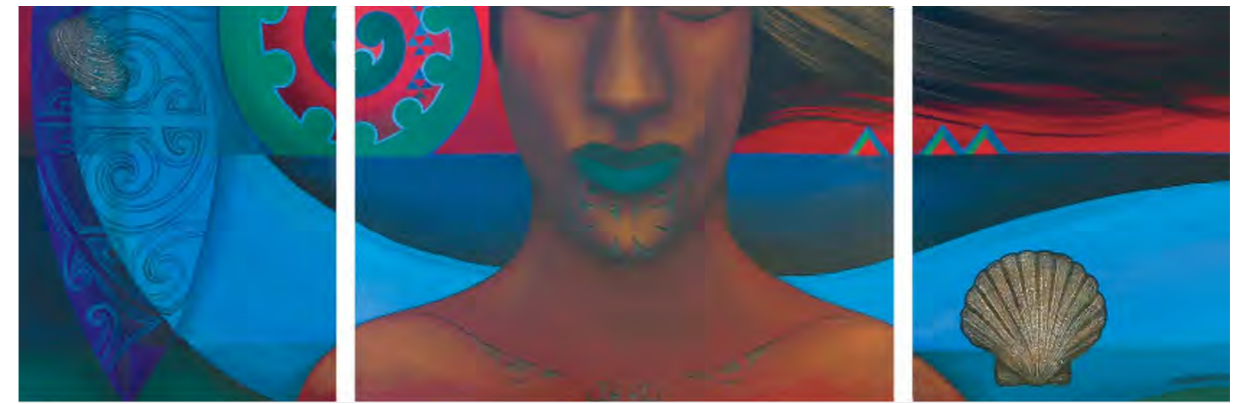
- The Crown’s failure to ban the use of organochlorines when the harms they cause became known;
- The Crown’s ongoing failure to ban the use of all organochlorines;
- The Crown’s ongoing failure to properly investigate the extent of dioxin residues persisting in te taiao, Māori food systems and in our bodies, and to take appropriate action in terms of research, support, services, education and redress to hapū and iwi; and
- The Crown’s ongoing failure to acknowledge the harms caused to workers exposed to dioxin, and support their health and wellbeing needs.

Use of organochlorines in New Zealand | Te whakamahinga o ngā organochlorines ki Aotearoa

As outlined in the brief of evidence from biochemist, Gary Hook, organochlorines are a class of man-made chemical compounds that are highly toxic to all living things. They began to be used worldwide soon after the end of World War II as insecticides, fungicides, herbicides, antimicrobials, miticides, molluscicides and nematicides in the agricultural, horticultural, forestry and timber industries. They were embraced by governments around the world, including in New Zealand, because they are highly effective at killing, and cheap to use.

Gary’s brief of evidence, and those of researchers Mere Takoko and Gwenda Paul, map out the use of these chemicals in New Zealand. The first organochlorine compound released into the environment was DDT, which began to be used in New Zealand in 1945. In 1946, a further organochlorine compound called 2,4-D became available, and this was followed by 2,4,5-T in 1948. From 1954, yet more organochlorine compounds were developed and made available, including Lindane (HCH), Aldrin, Dieldrin, Chlordane, PCP and HCB. All were considerably more toxic than DDT. They were used extensively across New Zealand’s primary industries and were also used by councils, including in waterways to control weeds, and in and around domestic homes. In more detail:

- DDT was used on farms to control grass grubs, in market gardens to control porina caterpillars, by councils in public parks and on domestic lawns;
- 2,4,5-T and 2,4-D were used to control weeds on farms and in forestry, and to keep railway tracks clear;
- Lindane was used to control lice on cattle, ectoparasites in sheep, grass grubs in pasture, and insects in orchards and market gardens. Domestically it was incorporated into fly sprays and used for the control of fleas and carpet moths;
- Aldrin and Dieldrin were used as stock remedies in sheep sprays for controlling ectoparasites, and to control horticultural pests. Dieldrin was also used to preserve timber and to mothproof carpets;
- Chlordane was used as a broad-spectrum insecticide in the agricultural sector, and in the timber industry as a treatment against termites and wood borer;
- PCP was used in the timber industry to beat Sapstain, a fungal infection that affects soft timbers such as pine; and
- HCB was used experimentally between 1970 and 1972 as a seed-dressing fungicide for cereal grain.



Artist credit: Theresa Reihana

Referring to the report *People Poisoned Daily* that Mere wrote for Greenpeace on the impacts of exposure to 2,4,5-T and 2,4-D,²⁹ her brief of evidence highlights the Crown’s efforts to support the productivity and profitability of the agricultural and forestry sectors by sponsoring a number of schemes to subsidise the use of these chemicals. One such scheme in the early 1970s involved subsidising the use of 116 products containing various mixes of 2,4,5-T and 2,4-D which cost an estimated \$4,022,000. Production and use of the chemicals boomed under this scheme.

Secondary poisoning, product bans and ongoing harms | Te whakapaihanatanga tuarua, ngā whakakatinga hua, ngā whakakino e haere tonu ana

Drawing again on the briefs of Gary, Mere and Gwenda, they explain the chemistry of organochlorines and how they work. When they are manufactured, dioxin and dioxin-like by-products form which contaminate them. The problem is that dioxins are also toxic, some extremely so, and they’re exceptionally stable so they don’t breakdown and disappear. Instead, they can persist in soil and organic matter for years, and also in the fatty tissues of animals. Because dioxins persist, they can be passed along the food chain, from prey to predator, causing harm as they become concentrated in meat-eating and fish-eating species like birds at high enough levels to kill them. They are also insoluble in water, which means water systems can transport dioxins beyond the places the pesticide is used, causing harm to other ecosystems. This is known as secondary poisoning.

Gary’s brief of evidence shows that concerns about secondary poisoning by organochlorine pesticides were first raised in 1958.³⁰ In that study, DDT had been used to kill a disease-carrying pest affecting elm trees.

As he explains:

“The pesticide was then ingested by earthworms from leaves, soil and groundwater. The earthworms contaminated with DDT were then eaten by American Robins with lethal consequences. The dead birds were found to contain lethal doses of DDT in their brains.”

Following that, a major study reporting the negative consequences of organochlorine use was published in 1962.³¹ His evidence also refers to research published in 1966 which showed how organochlorine pesticides can be carried by wind, water and inadvertent hosts to regions never intended to receive the chemicals.³² In that study, DDT residues were found in Antarctic species such as penguins and other birds. Further studies

29 Takoko, M. (1994). *Matitapu o te hakino: people poisoned daily: how Ivan Watkin Dow contaminated Aotearoa*. Wellington: Greenpeace.

30 Barker, R. J. (1958). Notes on some ecological effects of DDT sprayed on elms. *Journal of Wildlife Management*, 22: 269-274.

31 Carson, R. (1962). *Silent spring*. London: Houghton Mifflin.

32 George, J. I. & Frear, D. E. H. (1966). Pesticides in the Antarctic. *Journal of Applied Ecology*, 3 (Suppl): 155-167.

focused on the harms caused to people who'd eaten contaminated foods such as fish, or who'd been directly exposed through their jobs or through living near farms or forestry blocks.

He goes on to show that, as these harms became known and better understood, many governments began to ban the use of organochlorines from the 1970s and into the 1980s. For example, use of DDT was banned in the US in 1972. Use of Aldrin and Dieldrin was also banned in the US in 1974, except for use in termite control which was banned in 1987. The New Zealand Crown, however, did not follow suit and only moved to ban DDT in December 1989. In terms of the other compounds, the last remaining Aldrin product was withdrawn in 1985, Chlordane was banned in 1989 and Lindane in 1990. The timber treatment industry voluntarily ceased the use of PCP in 1988, and in 1991 the last remaining PCP product was deregistered by the Pesticides Board.

Referring specifically to DDT, Gary said that:

“It is clear that insofar as the introduction and use of chlorinated pesticides ... are concerned, New Zealand acted no differently from other nations around the world. The exception comes when one looks at the time taken to ban the use of DDT following the accumulation of knowledge concerning its toxicity.

DDT was by far the most used of the organochlorine pesticides and the banning of DDT did not occur until 17 years after it happened in the USA.

... Surely, in the face of scientific knowledge and argument, the continued use of DDT by the Crown was an irresponsible act and an abrogation of its Treaty-based obligation to protect the flora and fauna of this country.”

With regards to 2,4,5-T and 2,4-D, and drawing on Mere's evidence, the New Plymouth factory of Ivan Watkin Dow (now Dow Agrosciences), who'd manufactured 2,4,5-T since 1969, was forced to

stop production after intense campaigning by local residents. Over the decades of the plant's operation, locals had begun to experience higher than usual levels of cancers and illnesses, and their children were being born with congenital deformities, all which they believed were linked to toxic releases from the plant. Conversely, 2,4-D continues to be used in New Zealand despite international moves to ban it – including the UN's Stockholm Convention to protect human health and the environment from persistent organic pollutants, which was adopted in 2004, and which the New Zealand government is a signatory to. In her brief, Mere reiterates the call for the government to ban 2,4-D in line with its obligations under the Stockholm Convention and Te Tiriti o Waitangi.

Regarding the term 'persistent organic pollutants' or POPs, Gwenda Paul explains in her brief of evidence that all organochlorine pesticides and herbicides are now classed as POPs because the toxic dioxin and dioxin-like compounds in them persist and take years, even decades, to break down. It means that even though almost all organochlorine pesticides and herbicides are no longer used, dioxins and dioxin-like compounds continue to be present in the soil, in flora and fauna and in human bodies, and they continue to cause harm.

Harms to te taiao and sources of kai | Ngā whakakino ki te taiao, ki ngā puna kai

In terms of the persistence of dioxins in soil, Gary's brief of evidence refers to a Ministry for the Environment study published in 1998 which confirmed their presence, but mainly at lower levels than lands overseas.³³ However, he points out that the study failed to focus its investigation on agricultural and forestry lands where organochlorines were spread in vast quantities from 1945 to the early 1990s. It means there is no valid data about the extent of ongoing soil contamination in these areas. Nor is there data on the dispersal of dioxins to other lands which might be considered to be free from contamination, but which may not have stayed that way.

33 Ministry for the Environment. (1998). Organochlorines in New Zealand: ambient concentrations of selected organochlorines in soils. Wellington: Ministry for the Environment.



Building on this, Mere's brief of evidence highlights dioxin contamination of te taiao and sources of Indigenous kai, and the issues it raises for whānau, hapū and iwi, including in the context of Treaty settlements and the return of lands. Like Gary, she too points to the failures of the Crown to undertake comprehensive research on dioxin contamination in soil and in the wider food chain:

“Many Indigenous species, particularly aquatic and forest-dwelling species, have been grossly affected by dioxin contamination and residues that remain in their ecosystems. This presents an enormous problem for Māori. The Crown has yet to emphasise dioxin contamination to hapū and iwi who are seeking the return of ... dioxin contaminated lands and aquatic bodies. Environmental research is urgently needed to assess the long-term effects of dioxin exposure in the food chain in order that communities are aware of the significant measures that will need to be taken for their territories to be cleaned up before they can be used once again as kāpata kai.”

34 Baker, V., Fowles, J., Phillips, D., & Garret, N. (2004). A study of 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) exposures in Paritutu, NZ - Phase II: Serum Study.

Gwenda also comments on this, saying that:

“In all the years organochlorines have been used, almost no thought has been given to Māori sources of kai, such as pikopiko in the pine forests and watercress in drains and streams ... where spraying has regularly taken place. ... Even after the toxic nature of organochlorines was well known, the protection of Māori food sources has very rarely been considered by Crown authorities or local bodies.”

Harms to tangata whenua | Ngā whakakino ki ngā tangata whenua

In terms of the persistence of dioxins in our bodies, Gwenda and Mere's briefs of evidence show that dioxins continue to reside in adipose (fatty) tissue and in the liver for most of a person's life, and continue to affect the body. For example, a government-funded blood serum study published in 2004 showed that levels of dioxin residues in residents around the Dow plant in New Plymouth

were up to eleven times higher than the national average.³⁴ Fatty tissue includes breast milk, so dioxin can also be passed from mother to child. A World Health Organisation study conducted in 2000 showed that dioxin levels in breast-fed babies may be ten to a hundred times greater than their mothers.³⁵ Dioxins can also be passed from mother to foetus via the placenta.

In their briefs of evidence, Gwenda and Gary outline what dioxins do to our bodies:

- *Dioxins are endocrine disruptors:* The endocrine system is made up of glands, which produce and secrete hormones. Those hormones regulate numerous important bodily processes, such as the maintenance of homeostasis, metabolism of food, reproduction, growth and development, mood and cognitive functioning. Dioxins interfere with the synthesis, secretion, transport, binding, action or elimination of hormones, affecting these processes. While most people can tolerate a limited level of endocrine disruption without any effects, higher persistent levels of disruption can cause long term or even permanent adverse effects;
- *Dioxins are neurotoxins which affect the nervous system:* Neurotoxicity is characterised by motor, sensory, cognitive or autonomic nervous system dysfunction. For example, one study published in 1998, showed the effects of dioxin exposure from nearby farms on pre-school children where they demonstrated decreases in stamina, gross and fine eye-hand coordination, memory tests and the ability to draw.³⁶
- *Dioxins are carcinogens and cause cancers:* Studies in the 1990s began to show that

exposure to dioxins could cause a range of cancers including non-Hodgkin's lymphoma, multiple myeloma and kidney cancer;³⁷ and

- *Dioxins cause genetic damage:* Geneticists have shown that exposure to dioxins can cause genetic damage, meaning that the harms sufferers experience can be passed on to their biological children.³⁸

Significantly, Mere's brief of evidence points out that a disproportionate number of Māori suffer the effects of dioxin poisoning due to higher levels of exposure through being employed in the agriculture and forestry industries in higher numbers. Similarly, Māori communities living adjacent to farmlands and forestry blocks were exposed to dioxins and have also suffered the effects. Drawing from her 1994 report, already high levels of exposure were exacerbated by the fact that, up until the 1970s, the level of dioxin in chemical sprays was high. In some extreme cases, it has been estimated that the dioxin level was equivalent to that in the chemical warfare product known as Agent Orange (made up of equal parts of 2,4,5-T and 2,4-D) which was used by the US military to clear forest cover and destroy local crops in the Vietnam War.³⁹

As with environmental research, Mere's brief of evidence also points out that the Crown has been similarly remiss in ensuring comprehensive epidemiological research is undertaken into the long-term effects of dioxin exposure on whānau and Māori communities. For example, a recommendation from the 1986 Ministerial Commission of Inquiry into dioxin exposure to undertake a nation-wide study of Māori women's breast milk was never actioned.⁴⁰ Such failures have enabled the Crown to continue to minimise the issue of dioxin poisoning and the seriousness of the

harms it causes, and therefore to ignore the need to provide appropriate supports and health services to affected communities, whānau and families – and to educate the public and health professionals who often have little experience in this area.

Case study: impacts of PCP use in sawmills | He rangahau whakapūaho: ngā pānga o te whakamahinga PCP ki ngā mira kani rākau

This subsection includes evidence from members of the group Sawmill Workers Against Poison, namely Joseph Harawira (project coordinator), Maanu Paul (negotiator) and Gwenda Paul (researcher).

In her brief of evidence, Gwenda Paul gives an overview of the ways in which sawmill workers and their families were exposed to PCP:

“PCP enters the body through the skin, through inhalation and through ingestion. In the sawmill, powdered PCP was mixed by hand with water daily. Timber was soaked in the solution and then sent to the green-chain heavy with the solution. Here it was sorted by hand. The men usually used gloves but by the end of the day their gloves and clothing would be soaked in the stuff. It was hot work so in summer the men often wore shorts and singlets. There was no real effort to ensure that the men were protected from the solution. The wet timber was then stacked and while it stood in stacks it was sometimes sprayed again with PCP. Workers were exposed through the handling of the wet timber, mixing the solution, cleaning the tanks, sitting on the timber and in many other ways.

The exposure was then taken home to the family. Wives and mothers washed the clothing heavy with PCP solution. During the winter, one of the perks of the job was to take home timber off-cuts for the open fire. The burning of the wood released the dioxins to be inhaled by family members. Used solution was often taken home to use as weed killer around lawn edgings and on gardens, thus releasing dioxins into the home garden. In these ways, exposure included the whole whānau.”

In 2002, she undertook a survey of nearly 100 members of SWAP, all of whom were former sawmill workers exposed to PCP, and of their families to determine their health and wellbeing status.⁴¹ Most of the members were Māori. The following is a summary of the findings:

- Immediate effects had included a range of acute symptoms ranging from itchy eyes to severe chloracne (an acne-like eruption of blackheads, cysts and pustules);
- Many experienced night-sweats, sweating yellow sweat which smells like PCP. For some, this had persisted as a long-term problem;
- Long-term effects included cancers, heart disease, diabetes, depression, impotence and skin disorders. Often they hadn't appeared until years after their first exposure, and because dioxins affect the endocrine and neurological systems, different people's bodies react to those changes in different ways;
- Not only did SWAP members not have good health, they had a more negative view of their health compared with a similar-aged group of kuia and koroua tested in 1997 who hadn't been exposed to PCP in their workplaces;
- The impacts of ill health and a depressed attitude on whānau life had been considerable, to the detriment of whānau relationships;
- Some of the health effects such as chloracne, severe smelly night sweats, impotence, mood swings, depression and chronic pain had sorely tested relationships with spouses and partners; and
- Because the health effects were so many and so varied, it had been hard for any of the former workers to convince any authority that their ill health is as a result of their work.

“When it comes to the exposure of Māori to the many forms of organochlorines, they have been at the forefront as forestry workers, farm workers, railway workers and other industries that have used these products. ... They've had the best of their lives stripped away from

35 World Health Organization. (2000). Levels of PCBs, PCDDs and PCDFs in human milk: protocol for third round of exposure studies. Bilthoven, The Netherlands: WHO European Centre for Environment and Health.

36 Guilette, E. A., Meza, M. M., Aquilar, M. G., Soto, A. D. & Enequina, I. (1998). An anthropological approach to the evaluation of pre-school children exposed to pesticides in Mexico. *Environmental Health Perspectives*, 106: 347-353.

37 See for example, Hertzman, C., Teschke, K., Ostry, A., Hershler, R., Dimich-Ward, H., Kelly, S., Spinelli, J. J., Gallager, R. P., McBride, M. & Marion, S. A. (1997). Mortality and cancer incidence among sawmill workers exposed to chlorophenolate wood preservatives. *American Journal of Public Health*, 87(1): 71-79.

38 Edwards, L. A. (2006). Genetic damage in New Zealand Vietnam war veterans. Master of Science in Genetics thesis, Massey University, Palmerston North; and subsequently, Rowland, R. E., Edwards, L. A. & Podd, J. V. (2007). Elevated sister chromatid exchange frequencies in New Zealand Vietnam War Veterans. *Cytogenic and Genome Research*, 116: 248-251.

39 Takoko, M. (1994). *Matitapu o te hakino: people poisoned daily: how Ivan Watkin Dow contaminated Aotearoa*. Wellington: Greenpeace.

40 Brinkman, G. L., Matthews, R. E. F. & Earl, W. B. (1986). Possible health effects of manufacture of 2,4,5-T in New Plymouth: report of Ministerial Committee of Inquiry to the Minister of Health. Wellington: Ministry of Health.

41 Paul, G. M. (2002). *He rangahau o ngā kaimahi mira kani rākau*. Research report prepared for Sawmill Workers Against Poisons.

them and no-one will take responsibility. As one eminent academic said at a SWAP meeting, ‘These men contracted to give their time and labour for money. They did not contract to give their lives’.

The following brief of evidence from former sawmill worker, Joseph Harawira, gives a deeply personal insight into the physical, mental, emotional and spiritual torture that is dioxin poisoning:

“I worked in the sawmilling industry for 29 years. I took advantage of early redundancy in 1992 because of the poor state of my health. I was unemployed and on a sickness benefit from 1992 till 2000. Then for three years I was unemployed with no income and dependant on my wife, until I was made officially responsible for the SWAP project in 2003. During this period, I made an application for ACC support but was sadly declined.

From the 1980s I began to feel sick, but I didn’t know what the sickness was. I sought treatment from my GP. I was diagnosed as suffering hip problems although I believed that there were other issues responsible for my poor health. I suffered extraordinary, severe pain throughout my whole body. I became totally immobilized in 1993 through to 1994 when both hips were replaced. The sickness made me nauseous, caused periodic sweats, periodic headaches, constant depression, stress related agony, bouts of severe frustration, unable to take solids or drink the local tap water, incessant dehydration and made me totally reliant on watermelon. ALL the above suffering was as a result of the severe pain that wracked my body.

The high use medical care I received was, I believe, inadequate. The medical practitioners refused to take into account that I was being poisoned by carcinogenic hazardous substances (dioxins) while I worked in the sawmill timber industry.

The sickness reduced me to infant status. I required 24-hour care by registered nurses who bathed me, toileted me, fed me, turned me regularly, usually on an hourly basis and they responded to the only functioning capacity I had – which was my mental ability. I didn’t lose this but I did lose my voice.

To this day my left arm is 90 per cent disabled. I suffer from diabetes, gout, odd nights of sleeplessness and exhibit kidney problems. The legacy of this sickness is that my children are born suffering from asthma, eczema, whilst my mokopuna also from the same symptoms. My wife suffered three unexplained miscarriages, has had a thyroid operation, suffers from asthma, constant inhalation, respiratory difficulties, fatigue, headaches, high blood pressure and is now totally reliant on medication.

Over the last ten years I have suffered bouts of recurrent pain of up to three weeks duration on three occasions. I’ve felt completely useless, so much, I resigned myself to the fact that I wouldn’t make it.

I believe I was destined to survive to be able to tell my story of my suffering which was the same for all my workmates who worked with these dioxin related substances.

I tell my story to the Tribunal because I and my workmates and everyone else who worked in similar conditions with similar substances believe that we as people, ‘he tangata’, are part of the environment which has been affected so injuriously by these toxic substances, and which have also injured the flora and fauna of our taiao.

- Joseph Harawira

In allowing our whenua to be poisoned, the Crown has poisoned our tangata. When they poisoned me, they poisoned my wife, they poisoned my children, they poisoned my mokopuna. They poisoned any legacy that I may leave behind in this physical world. When they did that, they also poisoned my spirit. In telling my story I fervently hope that the errors of the Crown which were visited upon us do not happen to anyone else.”

The PCP solutions used in sawmills were not necessarily disposed of safely, where there was seepage into lands and waterways and the dumping of waste. For example, Gwenda’s brief of evidence tells of how SWAP members believed there had been seepage from the old Whakatāne sawmill site into the Kōpeopeo canal which runs past it. They requested that Environment Bay of Plenty carry out tests on eels in the canal, and it was found that:

“There was unacceptable levels of dioxin in the eels in this area. They were so polluted they were inedible. This from a mill that closed almost twenty years ago! Signs have been put up to discourage people from taking eels in this area. In some areas in the Whakatane area where sawmill waste has been dumped, animals are no longer allowed to graze.”



In his brief of evidence, Maanu Paul tells of the impacts of dioxin contamination from the Whakatāne sawmill on the lands, waterways and sources of kai around his marae, Te Hokowhitu a Tū ki te Rāhui, which is near the mill. Instead of the abundance after which the marae is named, there is no kai; no crops are grown, no fish are seen in the waterways and what remains is poisoned and unsafe to eat:

“E tū tata ana te mira kani rākau o Whakatane ki tō mātou marae a Te Hokowhitu a Tū ki te Rāhui. Ko te wāhi o te marae i tapainatia ki ‘te Rāhui’ e ngā tīpuna nō te mea he wāhi kiki katoa i te kai o te whenua me te kai o ngā awa me ngā awaiti. Tērā ka hiahia ētahi atu hapū ki te tāhae aua kai mō rātou ake. Ka whakaaro ngā tīpuna me rāhuitia taua wāhi kia kore e riro i te kaitāhae.

Ināianeī, kua kore he kai ki te whenua o taua wāhi nā te mea i ukuukuitia e ngā paihana o te mira kani rākau. Ko aua paihana e mōhio nei he mawaiwaro. Kua kore mātou e rongō i te reo o te poraka, e kite i te morihana, te kanae, te kaimoana a ngā uri a Tangaroa. Anō kāore e kite i te kumara, i te rīwai e tipu ana i taua wāhi o te Rāhui.

E kore e mutu te kaha pā mai o te mawaiwaro ina hoki kua kore ki a mātou ā mātou puna wai, kua paihanatia. Ko ēnei o ngā momo tipu me ngā momo kararehe o Aotearoa kua ngaro nā te mahi paihana a te mawaiwaro.”

The kaupapa of Te Waka Kai Ora | Te kaupapa a Te Waka Kai Ora

Te Waka Kai Ora was established at a national Māori organics hui held at Rātana Pā in Whanganui in 2001. The hui brought together around 150 food producers and growers from throughout the motu who collectively gave their support for the development of a national Māori organics organisation to represent Māori interests in the organic sector, and to be a Tiriti o Waitangi partnership organisation to Organics Aotearoa New Zealand. The name chosen for the organisation was 'Te Waka Kai Ora', and a working group was set up and mandated to develop our kaupapa.⁴²

That kaupapa is detailed in the brief of evidence lodged by Percy Tipene, who was the inaugural chairperson of Te Waka Kai Ora until he passed away in 2017. The following passage is taken from his kupu whakamihi:

“Ngā kōrero he awahi i te kaupapa Hua Whenua, Hua Māori, Hua Parakore. Ko tēnei whakapapa, e hoki muri ana, i te wā e kaha ana te haere o ngā tohunga, o rātou tohu, e mahi katoa ana ēnei tohu, i ngā wā katoa.

- Kanohi, kia kite rānō te kanohi o Tāmatī, ka whakapono;
- Ngā taringa, whakarongo ki te tangi a te huia, hui, hui, huia, tā te tūi tūi tūi tūi;
- Te ihu, te honotanga, te whakanoatanga o ngā āhuetanga, me hongī ka tūtuki;
- Te māngai, te kaitiaki te tinana, mā te Māori anake ka mōhio, kua rerī te kānga piro ki te kai.

I heke mai ngā Hua Whenua, Hua Māori, Hua Parakore i a Papatūānuku rāua ko Ranginui me te whānau o ngā atua katoa.

He taonga tuku iho.

I tukuna mai ngā hua kai e te ira atua, ki te ira tangata, ki ō tātou tūpuna, tae rā anō ki a tātou i tēnei rā. Ka puāwai mai i a hei kaupapa mō ngā tikanga mō tātou ki te mahi i ngā Hua Whenua, Hua Māori, Hua Parakore.

Ko ngā kai Hua Whenua, Hua Māori, Hua Parakore, hei oranga mō ō tātou tinana, tātou wairua, tātou hinengaro, tīmata mai i ngā mahinga kai, māra kai, ngā kararehe, ngā uri kai o Tangaroa, kaimoana katoa, ngā manu me ngā uri o Tāne-mahuta.

Ko te maramataka Māori te tohu, hei kaiārahi mō ngā Hua Whenua, Hua Māori, Hua Parakore kai katoa.

Mā te maramataka, ka tutuki a Tāwhiri-mātea, a Tangaroa, me Tāne-mahuta, ki te marama kia puta ki waho te Hua Whenua, Hua Māori, Hua Parakore kai, hau ora, ka whakahono ki te tuituia i a rātou katoa, kia mau ai te mauri o ngā atua, e whakapiri ana, kia puta ai te Hua Whenua, Hua Māori, Hua Parakore.

Ko te tiaki, manaaki, atawhai, whakapono, me te poipoi i a Papatūānuku rāua ko Rangī te tino mahi mā tātou: kia ora ia ngā toke, me ōna whanaunga e hora i tonu nei e ngā paru kikino, kia puta ai ngā Hua Whenua, Hua Māori, Hua Parakore pai.

He wairua tā te Hua Whenua, Hua Māori, Hua Parakore, e ārahi nei i te taha tinana, me te taha hinengaro, i roto i te ao tūroa e whakaruruhau nei i ngā Hua Whenua, Hua Māori, Hua Parakore.

Mā te rongoā, ngā mate o ngā Hua Whenua, Hua Māori, Hua Parakore, e whakaora, ngā mate katoa. Ngā tohu whakamātau mō ngā āhuetanga, o te ao Māori, me ngā Hua Whenua, Hua Māori, Hua Parakore, ko ngā tikanga, ngā kanohi, ngā taringa, tō ihu, tō māngai.

Te kaupapa whakapūmau, whakaaroa mō ngā Hua Whenua, Hua Māori, Hua Parakore arā organic production mō Aotearoa whānui.”

As outlined in these kupu and his brief, the kaupapa of Te Waka Kai Ora is centred on supporting and promoting Hua Parakore or Māori organic food production, where food is grown or produced in its natural, pure state free from the use of chemical pesticides and fertilisers and other harmful substances and in ways that accord with Māori beliefs, values, mātauranga and tikanga. Producing food naturally maintains its mauri, ensuring it is both food and medicine for our bodies, minds and spirits, keeping whānau healthy and well.

Taonga tuku iho

The kaupapa of Hua Parakore is necessarily multi-layered, encompassing multiple taonga tuku iho – taonga which have been created by atua, passed on by tūpuna, and which are to be cared for and passed to future generations. These taonga include Indigenous species of kai, and all of the other species that are critical to their wellbeing and fertility, as well the lands, waterways, coastal areas, oceans and seas, forests and skies in which these species are nurtured.

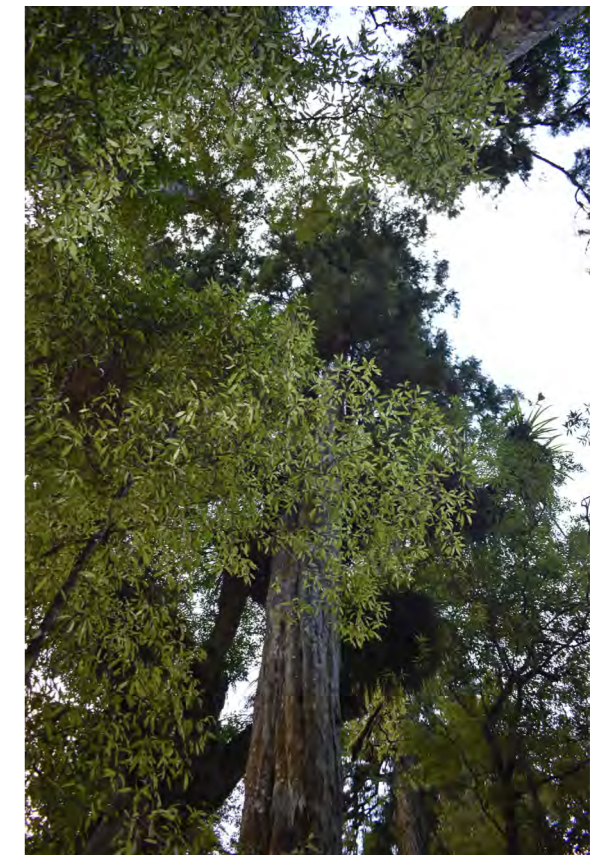
Wairuatanga, tikanga and Māori science | Te wairuatanga, ngā tikanga me te pūtaiao Māori

These taonga tuku iho also include the tikanga and mātauranga involved in organic food production. Matua Percy outlines the importance of wairuatanga and maintaining a clear relationship between the celestial world of the atua (kauae runga) and the terrestrial world of people (kauae raro). This is because the wellbeing of people is intrinsically tied to atua, and maintaining “their essence should be the guiding light by which decisions are made”. The purpose of tikanga is to uphold this traditional standard of excellence. Failing to do things right, in accordance with tikanga, leads to failed outcomes, as is evident in the tauparapara he quotes:

Rata ware, Rata ware

I tuatua noatia e koe

Te wao tapu nui a Tāne



Te maramara i rere noa ki tawhiti

Awhitia mai kia piri, kia tata

Uenuku tū! Uenuku ara, poutū mai

Kiri ora, kiri tū, kiri maranga

Ki te whai ao ki te ao mārama

Tihei mauri ora!

His brief also notes the importance of karakia, as reminders of the obligations we have to protect and nurture those who protect and nurture us in our daily lives.

In terms of mātauranga, Matua Percy describes how this has been developed and passed on by tūpuna, including the maramataka (Māori lunar calendar), and that a key role of Te Waka Kai Ora is to keep the integrity of this knowledge intact and to the fore:

“Centuries of practice, where finely honed practices have been empirically tested and refined to ensure sustainability and continuity of consciousness, have culminated in the Indigenous science of Māori.

42 Sykes A. & Pou, J. (2007). Closing submissions, Te Waka Kai Ora, 20 April 2007, p 3.

The Māori system of planting is but one example of this Indigenous knowledge system, based on relationships with the moon, tides, winds and the seasons...

The methodology employed by Te Waka Kai Ora is to ensure that the Māori form and vision is not swamped and suffocated by the imposition of the Western body of knowledge.”

This taonga is to be cared for too and expanded upon as appropriate, to be passed on as part of a Māori cultural storehouse of knowledge for the health and wellbeing of future generations.

The brief of evidence lodged by Hohepa Kereopa and Tauirioterangi Pouwhare also highlights the role of Te Waka Kai Ora in caring for and maintaining the mātauranga of kai Māori, to ensure this treasure can be passed on to coming generations and is not taken away by others, tampered with or degraded as other taonga have been. They explain that this role to protect mātauranga is of critical importance, as mātauranga is the vehicle which informs tikanga, and a waka huia which protects and regulates the identity and existence of Māori, and our right to independence and self-determination:

“Ko te kaupapa tohenga e mōhiotia nei e tātau o Te Waka Kai Ora, kai te kōkiri he kaupapa mō ngā āhuatanga katoa o te mātauranga Māori, he taonga hai tiaki, he taonga tuku iho kātahi ka whakaara ake kia whakangungua ki ngā whakatipuranga e ōpiti mai ana.

Kai te mārama mātau ki tēnei kawenga me ōna tino taumata nā te mea e whai wāhi ana mātau ki ngā hapū kua roa e pupuri ana i te mātauranga Māori, koia nei he kuru pounamu.

He rōpū whakatipu kai, he rōpū whakarite ture, he rōpū whakatipu tikanga ki te hoko i ā rātau kai a Te Waka Kai Ora i whakatōpū mai i a rātau i roto i ngā tau tata kua pahure ki muri otirā ki te titiro kia angitu te kaupapa i whakatauhia, i whakawhanaketia hoki e tēnā hapū, e tēnā

hapū kia kore e tangohia, e whakanaohia, e whakahekehia, e takahuritia hoki hai whai ora mō te hunga kāre i te Māori ōrite ki te whenua, ki te takutai moana, me te wao-nui-a-Tāne me ēra atu taonga i raupatuhia i ngā tau kua pahure ki muri. Hai whakamutunga, mā mātau e whakaatu ake ko te mātauranga Māori e tuitui nei i a mātau huri noa ana ko te ariā i tikina atu ngā āhuatanga hai whakarite i ngā tikanga, ko te waka huia kaitiaki, kai whakahaere i tō mātau mana motuhake me tō mātau tino rangatiratanga.”

[Rangatiratanga, kaitiakitanga and managing the risks of te ao hou | Te rangatiratanga, te kaitiakitanga me te whakahaere i ngā tūraru o te ao hou](#)

Matua Percy’s brief highlights that a further key role of Te Waka Kai Ora is to, “support tangata whenua hopes, aspirations and expectations” pertaining to the taonga of organic food production. Critical to this is tino rangatiratanga so that tangata whenua hold authority as decision-makers and can determine strategies to enable kaitiakitanga of “the fruits that flow from our whenua”. This role includes:

“Identifying risks and developing strategies to manage these risks from a tangata whenua perspective, in accordance with tangata whenua values, beliefs, customs, ethics and religions [so that] traditional practices can thrive”.

These risks don’t just include the introduction of chemical fertilisers and pesticides, herbicides and fungicides. They also include the impacts of Western systems of capitalism and individualism which have marginalised the organic Māori food economy where kai is produced and shared by whānau and communities to ensure the health and wellbeing of all.

A further, more recent risk to maintaining the ‘essence of atua’ included in his brief is the advent of new sciences such as GM.



[The future | Te wā e heke mai ana](#)

Matua Percy’s brief concludes with the following statements:

- That the future of Te Waka Kai Ora is dependent on the ability to respond to and manage risks while maintaining the integrity of Māori values and tikanga;
- That the future of Te Waka Kai Ora is dependent on the Crown “not destroying that which we hold dear, our taonga”; and
- That change and adaptation should be at the discretion of tangata whenua, and not imposed.

“It is on these terms that we desire to protect the integrity, the ira, the ihi, the wehi, the wana, the mana and the mauri of those things that are Hua Māori, Hua Whenua, Hua Parakore.”

Since the lodging of its claim in the Wai 262 inquiry, Te Waka Kai Ora has responded to the aspirations of tangata whenua for tino rangatiratanga and kaitiakitanga in relation to organic food production by developing the Hua Parakore verification and validation system for Māori organic food growers and producers. Developed through a three-year kaupapa Māori research project with Māori organic growers, farmers, whānau, hapū and rongoā practitioners, the Hua Parakore verification system consists of a framework of six interconnected kaupapa drawn from mātauranga Māori – namely whakapapa, wairua, mana, māramatanga, te ao tūroa and mauri. These kaupapa act as pou to guide food growing and production practices. As a food sovereignty approach, Hua Parakore puts control of the values and ways in which food is grown and produced back into the hands of Māori organic food growers and producers ourselves. This enables us to continue practicing and developing the rich tradition of mātauranga tuku iho which has informed Hua Parakore, and to pass this taonga on to future generations.⁴³

As a result of this development, Te Waka Kai Ora is now made up of Hua Parakore verified producers alongside Māori growers, producers, cooks, bakers, fermenters and farmers.⁴⁴

⁴³ Hutchings, J. (2015). Te mahi māra Hua Parakore: a Māori food sovereignty handbook. Ōtaki: Te Wānanga o Raukawa, and Hutchings, J. & Smith, J. (2020). Te mahi oneone Hua Parakore: a Māori soil sovereignty and wellbeing handbook. Christchurch: Freerange Press.

⁴⁴ Te Waka Kai Ora website, www.tewakakaiaora.co.nz.



Artist credit: Theresa Reihana

Take tuarua – GM and GMOs | Te raweke ira me ngā rauropi raweke ira

This section turns to focus on Māori opposition to genetic modification (GM) and genetically modified organisms (GMOs), outlining the threats they pose to Indigenous flora and fauna and thus to Māori food systems, te taiao, tikanga Māori and ourselves more broadly. The key grievance raised in the evidence presented by Te Waka Kai Ora is the ongoing failure of the Crown to ban GM and the use of GMOs in New Zealand, which, in turn, is a failure of their obligation to protect the tino rangatiratanga of hapū and iwi in relation to Indigenous flora and fauna and the genes contained within them.

Simply put, GM is when the genetic material of an organism, such as a plant or animal, is altered through the use of recombinant DNA technology (genetic engineering) to produce a GMO. GM processes involve deleting, changing or moving genes within a living organism, and it also includes processes that transfer the genes from one organism to another or to another species (transgenic organisms).⁴⁵ The movement of

genes within an organism and across species impacts on the mauri, wairua and whakapapa of that organism, and its wider surroundings, and is a violation of tapu.

Māori opposition to GM and the production of GMOs | Te ātete a ngāi Māori ki te raweke ira me te whakaputanga o ngā rauropi raweke ira

As outlined earlier, the brief of evidence presented by Kaa Williams discusses the concept of mauri: the essential life force derived from atua which all living things possess, binding their physical and spiritual elements together enabling them to exist with vitality and wellbeing. To maintain the vitality and wellness of Indigenous flora and fauna, and indeed of all living things in the interconnected whakapapa system of te ao Māori, she stresses the importance of maintaining and not compromising their mauri through activities like modifying their genetic codes.

Further to this, Whaea Kaa's brief of evidence also

⁴⁵ Waitangi Tribunal. (2011). Ko Aotearoa Tēnei: A report into claims concerning New Zealand law and policy affecting Māori culture and identity. Wellington: Waitangi Tribunal, p 158.

explains that all living things are tapu and under the protection of the gods who created them. This protection puts them beyond interference by people. Thus, GM is not just an assault on the mauri of Indigenous flora and fauna, it is also a violation of tapu:

“Ko te tapu nā te tangata ake i whakatau, ā, māna anō e whakamahi. Ka tukuna e ia tētahi āhua ki raro i te maru o ngā Atua, kia kore ai e taea e te tangata te takakino. Ka hoatu he mana ki runga i taua āhua.

Ehara te tapu i te āhua kitea e te tangata, engari kei ngā wāhi katoa, tae noa mai ki tēnei rā. He āhua hei manaaki, hei whakatūpato, hei atawhai, hei tiaki i ngā taonga me kī o te taiao, o te ao tūroa, o te pūtaiao. He maru mō te tangata i roto i ēnei ao. Koinei te tikanga kei te tukitukihia mai e ngā kaimahi pūtaiao. Kāore rātau i te mārāma ki tēnei tūāhua o te whakataputapu i te taiao.”

The brief of evidence of Hohepa Kereopa and Taurioterangi Pouwhare also talks of the intrinsic tapu of all living things:

“Mō ia kaupapa e hangaia e Tāne, ka whakanōhia e Tāne, he mana, he mauri, he tapu. Kia noho rātau he atua anō ki a rātau anō. Ka noho a Tāne hai matua ora mō ngā mano atua.”

The brief of evidence from author, Jessica Hutchings, refers to a number of publications she's written on Māori objections to GM, drawn from both her own research with whānau and Māori communities and that of other kaupapa Māori researchers.⁴⁶ These publications include additional points of opposition which have been raised by Māori against GM. For example, some Māori have framed their opposition to GM as an attack on the network of interconnected whakapapa relationships

that make up the Māori world, where GM would disrupt these relationships, reorder the cosmos and create irreversible damage:⁴⁷

“The people, the fish, the plants and the forests, the birds and the land animals, the seas and waterways all have a common and eponymous tupuna, rārangi whakapapa, to Papatūānuku and Ranginui. By disrupting that rārangi, that network, that individual lineage, the spirituality and wellbeing of the ... iwi would be affected.”

“Genetic engineering fundamentally messes with the whakapapa of all species and intends on taking bits and pieces of different species' genes, including humans, and creating a whole new cosmological order where Biotech corporations become the new Atua.”

“Whakapapa is the foundation stone of Māori society... when you tamper with a whole society, you cannot start again – it has been forever damaged.”

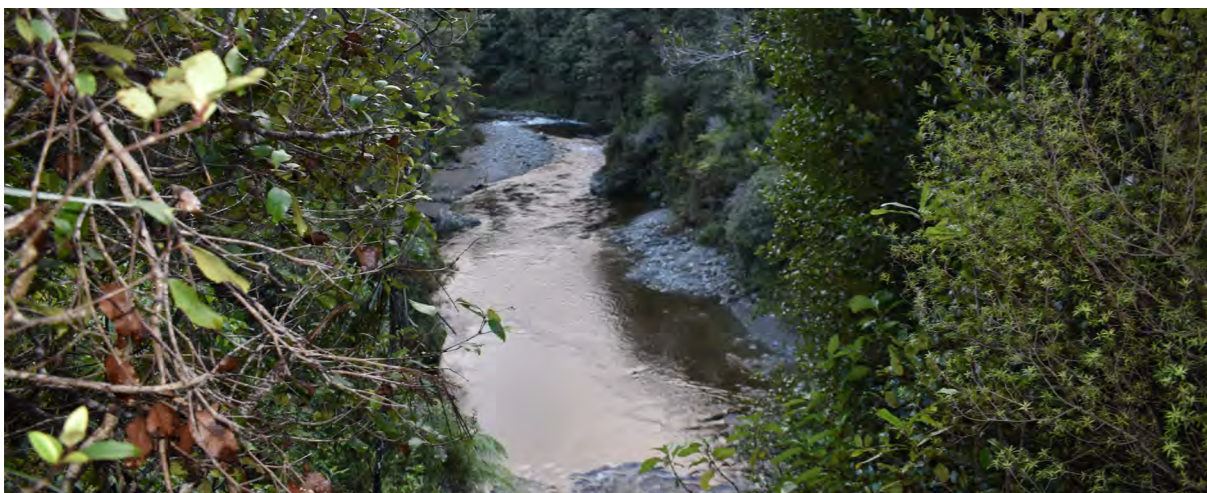
Some also framed their concerns about whakapapa in kaitiakitanga terms, where the role of kaitiaki is to protect and maintain the mauri of our flora and fauna whanaunga for future generations, including at the molecular level:⁴⁸

“For us, all life is sacred and consequently whakapapa is sacred. ... One of the loudest arguments against genetics and biotechnology is coming from our own kaumātua, who are saying very clearly that no one should interfere with whakapapa. The sanctity and respect for whakapapa is to be maintained. Both the mauri and wairua of living things are sacred. The responsibility falls on us to protect the legacy of our future generations and this includes the guardianship of whakapapa.”

⁴⁶ Hutchings, J. (2005). Mana wahine me te raweke ira: Māori feminist thought and genetic Modification. In Women's Studies Journal, 19(1): 47-66; Hutchings, J. (2004a). Tradition and test tubes: Māori and Science. In R. Hindmarsh and G. Lawrence (Eds.), Recoding nature: critical perspectives on genetic engineering. Sydney: University of New South Wales Press, pp 179-191; Hutchings, J. (2004b). Claiming ethical space: a mana wahine framework for discussing genetic modification. In He Pūkenga Kōrero, 8(1): 17-26; Hutchings, J. (2002). Te whakaruruhau, te ūkaipō: mana wahine and genetic modification. Unpublished PhD thesis in Environmental Studies, Victoria University of Wellington, Wellington; Hutchings, J. (2001a). Mana wahine and GM: a debate in poverty. In Pacific World, 60 (June): 57-59; Hutchings, J. (2001b). Molecular kaitiakitanga: guarding our sacred molecules. In Organic NZ, July/August 2001; and Hutchings, J. (2001c). Molecular kaitiakitanga. In Splice, 7(4), May/June 2001.

⁴⁷ Views of Ngai Tahu iwi, Reverend Maurice Gray and Angelina Greensill respectively, cited in Hutchings, 2004a, p 186.

⁴⁸ Linda Tuhiwai Smith, cited in Hutchings, 2004a, p 186.



Jessica herself states that:⁴⁹

“Aotearoa-New Zealand is Māori land, and anything therefore grown on our land we have a kaitiaki responsibility for. It is customarily sinful to allow biotechnology to degrade the state of the natural world. Not to object would be against the nature of our kaitiaki role. It would be a betrayal of past and future generations, and an insult to the authority and integrity of the kaitiaki. It is on this basis that as Māori, we must strongly and clearly state that GM crops must not be allowed on our land.”

In addition to this, Jessica’s work outlines how Māori women have collectivised to make their voices of opposition to GM heard, reflecting the particular kaitiaki role Māori women hold regarding those realms that come under the mantle of atua wāhine.⁵⁰ This includes trees, birds, fish, aquatic species, waterways and the fertility of land.⁵¹ One such group has been Ngā Wāhine Tiaki o te Ao, which was formed in 2000 to protect the kaitiaki role of Māori women in regard to GM. Its membership is comprised of mothers, artists, filmmakers, doctors, academics, activists, scientists and environmentalists.⁵² As part of a campaign to have GM/GE banned in New Zealand, they developed GE Free Marae Kits and sent them to every marae in the country to raise the issue of GE amongst our people, and to encourage marae, hapū and iwi to declare their lands GE free.⁵³ Ngā Wāhine Tiaki o te Ao also gained Interested Persons Status to participate in the Royal Commission on Genetic Modification process in 2000, and sought to speak back to Western science and Pākehā scientists who dismissed Māori concerns as cultural objections with no firm basis in science.⁵⁴ The summary of their submission stated that:⁵⁵

“This submission positions genetic modification as antithetical to tikanga Māori. ... All genetic modification must be stopped. Within tikanga Māori, Māori women hold key roles in the protection of whakapapa, mauri, ira, tapu and as kaitiaki. ... Past, current and future generations have the right to tino rangatiratanga and the tampering with genetic material is in direct conflict with that right.”

49 Hutchings, 2001c, p 11.

50 Hutchings, 2005, pp 55-57.

51 See Potter, H., Spinks, A., Joy, M., Baker, M., & Poutama, M. (2017). Porirua ki Manawatū inland waterways historical report. Wellington: Crown Forestry Rental Trust.

52 Hutchings, 2004b, p 18.

53 Hutchings, 2004a, p 179.

54 Hutchings, 2005, p 57-59.

55 Ngā Wāhine Tiaki o te Ao. (2000). Submission to the Royal Commission on Genetic Modification, June 2001, cited in Hutchings, 2001a, p 58.

Risky science to benefit global corporate interests | He pūtaiao mōrearea kia whai hua ai ngā pānga kaporeihana ā-ao

As the evidence presented by Te Waka Kai Ora shows, from the perspective of Māori science, GM threatens the vitality of all living things and thus our very survival – not just as Māori, but as humans.

Opposing this view are the proponents of GM, who focus on the benefits they see from GM rather than the risks. Regarding food production, for instance, they claim that GM will revolutionise agriculture and horticulture, such as by producing GMOs that are resistant to diseases and pests, enabling more food to be produced more quickly and more cheaply – ensuring there is sufficient, affordable food to feed the world’s growing population and support human health and wellbeing.⁵⁶

What has been shown, however, is that GM is also risky from the perspective of Western science. As stated in the Waitangi Tribunal’s report on the Wai 262 claim, *Ko Aotearoa Tēnei*:⁵⁷

“GM technology has great potential benefits as well as equally significant risks to the well-being of the environment and the health and safety of people. The state of scientific knowledge is such that some of these risks are uncertain and unpredictable.”

What Jessica’s work has also sought to map out and expose, is the global corporate interests that sit behind and drive GM and development and use of GMOs:⁵⁸

“The driving motive of corporate biotechnology, however, is neither to attain food security nor to improve health, but it is to use GM to dominate and monopolise the global market for seeds, foods, fibre, and medical products in an overall strategy to control agri-food and biomedical markets. Corporate biotechnology is part of the new global order where global, according to Indian biophysicist and activist, Vandana Shiva, means ‘simply the global domination of local and particular interests, by means of subsuming the multiple diversities of economies, culture and of nature under the control of a few multinational corporations’.”

The call is to join the dots together:⁵⁹

“The debate regarding GM raises not only the issues of protecting mauri ... but also the issues of globalisation, free trade, intellectual property rights and the plundering of global resources for profit. If we as Māori are to reject GM then we must also make the connection and strongly reject globalisation and free trade on our land: biotechnology is the new global wave of colonisation.”

Take tuatoru - ANZTPA

This final section focuses on the Crown’s proposed Australia New Zealand Therapeutic Products Authority (ANZTPA). The key grievances raised in the evidence by Te Waka Kai Ora regarding the proposed ANZTPA are:

- That the Crown failed to consult with or seek input from hapū, iwi and relevant rōpū about its development, including Ngā Ringa Whakahaere o te Iwi Māori Inc, the national body of traditional Māori healers;

56 Hutchings, 2004a, p 180.

57 Waitangi Tribunal. (2011). *Ko Aotearoa Tēnei: A report into claims concerning New Zealand law and policy affecting Māori culture and identity*. Wellington: Waitangi Tribunal, pp 158-159.

58 Hutchings, 2004a, p 180.

59 Hutchings, 2001c, p 11.

- That by sharing decision making with Australia, the Crown placed a new obstacle between the discharge of its obligations to hapū and iwi under Te Tiriti o Waitangi;
- That the Crown failed to protect the tino rangatiratanga of hapū and iwi in relation to the use and development of rongoā, including its commercial development; and
- That the Crown created new opportunities for the exploitation and commercialisation of Indigenous flora and fauna and mātauranga Māori by non-Māori.

The purpose of the ANZTPA and its development | Te take o te ANZTPS me tōna whanaketanga

In 2002, an agreement was entered into by the Australian and New Zealand governments to establish the Australia New Zealand Therapeutic Products Authority (ANZTPA) which would act as a joint regulatory regime in respect of therapeutic products. The purpose of the ANZTPA was two-fold:

- To harmonise Australian and New Zealand laws in the regulation of therapeutic products to minimise trade barriers and avoid the costs of duplicated regimes; and
- To introduce stricter safety guidelines for products capable of being used as medicines.

While the ANZTPA would regulate commercially available traditional medicines, it would maintain current exemptions in the Medical Act and not include the small-scale dispensing of rongoā by rongoā practitioners and traditional Māori healers.⁶⁰

Prior to this, in 2000, the idea to develop a joint regime had been agreed to in principle by the governments of both countries. Once agreed to, officials from both countries developed the proposed joint agency over an 18-month period, consulting with a range of stakeholder groups including industry and consumer representatives and professional associations.⁶¹ No consultation was undertaken with Māori. The Crown's position was that because the ANZTPA would not include rongoā, Māori did not need to be consulted with in its development.⁶²

In his brief of evidence presented to the Waitangi Tribunal, Michael Cushman, a pharmacist and executive director of an Auckland-based natural dietary supplements company, outlined the numerous concerns the natural healthcare products industry raised about the proposed ANZTPA during the consultation period. Referring to the 2002 paper they wrote, he highlighted their analysis which showed the huge additional costs the industry would face by imposing an unwarranted 'close to pharmaceutical standard' regulatory approach to products that were safe and had never caused a single reported medical injury or death.⁶³

The Crown signed the agreement to establish the ANZTPA on 10 December 2003, which would be brought into effect through the passage of legislation in New Zealand and in Australia. The Crown's aim was to table an ANZTPA bill in Parliament in October 2006.⁶⁴

60 Waitangi Tribunal. (2006b). The Further Interim Report of the Waitangi Tribunal in Respect of the ANZTPA Regime. Wellington: Legislation Direct, pp 1-2, 5.

61 Sykes & Pou, 2007, p 16.

62 Sykes & Pou, 2007, pp 26-30.

63 Natural Healthcare Product Industry. (2002). Analysis of issues relating to the proposed trans-Tasman harmonisation of natural health care products regulation.

64 Waitangi Tribunal. (2006b). The Further Interim Report of the Waitangi Tribunal in Respect of the ANZTPA Regime. Wellington: Legislation Direct, p 1.

Consultation with Māori | Te akoako ki a ngāi Māori

It was not until mid-2006 that the Crown first sought to meet with Māori in relation to the proposed ANZTPA. It was then that we first learned of the proposed ANZTPA. That first meeting took place on 10 July 2006, and was held in Rotorua. Instead of consultation, however, Māori were advised that the ANZTPA would not affect rongoā nor any claims within the Wai 262 inquiry – and so Māori “need not have any concerns”. As stated by Te Waka Kai Ora's legal counsel, it was apparent that:⁶⁵

“Government officials and politicians had tried to contain the potential for dissent through carefully managed dialogue and ... a very non-existent, absent consultation process.”

Following the hui, we lodged a claim in the Wai 262 inquiry to stop the proposed ANZTPA bill from proceeding. On 8 September 2006, after considering our claim, the Waitangi Tribunal issued an urgent interim report on the ANZTPA. Instead of recommending the bill be stopped, it recommended that the Crown engage with us and other Wai 262 claimants in a consultation process in respect of the issues we'd raised.⁶⁶ That process consisted of a single meeting held on 21 September 2006 in Wellington. It was attended by four representatives from Te Waka Kai Ora (Maanu Paul, Angeline Greensill, Jessica Hutchings, Mike Cushman) along with others from Ngāti Kahungunu and Ngā Ringa Whakahaere, along with representatives of the Crown. No Crown ministers attending the meetings.

In her further brief of evidence presented to the Waitangi Tribunal, Angeline Greensill gives details of that single meeting and the ways in which it breached good faith consulting processes, including:

- Being advised of the meeting at late notice (the day before), which meant significant disruption to claimants' lives to be there, and the inability to be briefed by legal counsel ahead of the meeting;
- Claimants' request for the hui to be recorded was refused by the Crown's representatives on the basis that it “would inhibit full and frank discussion”;
- Claimant's request that the Crown undertake a Treaty-compliant consultation process on the ANZTPA was not committed to, because those who were there from the Crown did not have the authority to do so and “could only make recommendations that might be followed”;
- Claimants' request that the ANZTPA bill be deferred to allow this process to happen was similarly unable to be committed to; and
- The limited scope of the korero, which consisted of being “essentially just told how things would go”.

As a result, Angeline said that:

“Given the number of publications written by government agencies, I remain absolutely appalled at the process implemented by the Crown which ... fails to take into account what they themselves say constitutes good process ... [early, meaningful and ongoing]. ... The process that we underwent was as far from this as I can imagine.”

Impacts on tino rangatiratanga | Ngā pānga ki te tino rangatiratanga

One of the key issues being raised by claimants was that the Crown cannot and should not define what rongoā

65 Sykes & Pou, 2007, p 30.

66 Waitangi Tribunal. (2006a). The Interim Report of the Waitangi Tribunal in Respect of the ANZTPA Regime Wellington: Legislation Direct.

is or isn't in the absence of Māori. As noted above, rongoā was to be excluded from regulation under the ANZTPA. But what was unpacked with the Crown was that this exclusion would only apply if a rongoā treatment was not developed into a commercial product. This meant that for any commercially available rongoā product, ANZTPA would have the power and authority to impose its regulatory standards on its use rather than this being determined by Māori.

This issue was central to our concerns about the proposed ANZTPA. As detailed in Maanu Paul's brief of evidence, Te Waka Kai Ora is strongly opposed to the Crown's taking of power and authority from Māori, which is seen as a gross breach of the Te Tiriti obligation to protect it:

“Kāore e tika kia whoatu noa iho tōku mana whanaketanga, ko te take ka mate tāku oranga, ā, he taonga tāku oranga, ā, ka mate hoki ko au. I hara anō te Karauna nō te mea kua tīmata rātou ki te haina kawenata kia tukua te mana motuhake a ngāi tāua mō ngā momo tipu me ngā momo kararehe o Aotearoa ki tētahi rōpū a hiahia ana rātou ki te whakaara mai arā ANZTPA. ...

E whakahē ana mātou, a Te Waka Kai Ora, ki ngā mahi a tēnei rōpū, a ANZTPA nō te mea ehara kei te Karauna te mana motuhake ki te tuku i ō mātou tino rangatiratanga mō ā mātou momo tipu me ngā momo kararehe o Aotearoa.

Me mutu te mahi a te Karauna i te takatakahi i tō mātou mana motuhaketanga. ...

E tika ana māku te Māori te mahi whakamana i te ngākau tapatahi, ehara mā ANZTPA.”

In her brief of evidence, Jessica also raises the way in which international agreements and bodies like the ANZTPA undermine the Tiriti relationship and marginalise the mana and tino rangatiratanga of Māori. Drawing on the work of law professor, Jane Kelsey, she explains that:

“International agreements and regulatory authorities such as the ANZTPA provide an interlocking web of agreements that represent a ‘new constitutionalism’. This ‘new constitutionalism’ supersedes and goes beyond domestic constitutional norms and agreements countries have with Indigenous People and places legal limits on the authority of governments.”

[Impacts on rongoā Māori practitioners and Māori traditional healers | Ngā pānga ki ngā mātanga rongoā Māori, ki ngā tohunga whakaora Māori](#)

Not only would the ANZTPA impose its regulatory standards on any rongoā product that was to be commercially sold, effectively shutting down the ability of rongoā practitioners and Māori traditional healers to develop their own kaupapa and tikanga-based standards, it would also impose high costs to meet those standards. Michael's brief of evidence refers to analysis which showed it would cost an estimated \$55,000 to have a product verified under the ANZTPA regulatory regime.⁶⁷ He saw this cost as working to prevent many Māori from developing commercial rongoā products. Further to this, his brief provides additional analysis which shows the high cost the ANZTPA regime would impose on small to medium-sized companies in the natural remedies sector,⁶⁸ and yet more analysis which shows an estimated fifty percent would go out of business as a result.⁶⁹

These points are underscored in the brief of evidence presented by Ian Brighthope, professor of medicine, president of the Australasian College of Nutritional and Environmental Medicine and head of an Australian natural health products company. Adding to this, he points out that the ANZTPA would force companies to use off-shore manufacturers or move their entire operations off-shore to save production costs and stay afloat.

[Impacts on rongoā, flora and fauna and mātauranga Māori | Ngā pānga ki te rongoā, ki a ngāi tipu, ki a ngāi kīrehe, ki te mātauranga Māori hoki](#)

In her brief of evidence, Jessica raises further objections about the proposed ANZTPA. Her concern is that the purpose of the ANZTPA to minimise trade barriers would open up markets for rongoā products. This would incentivise non-Māori commercial interests to develop products that use Indigenous flora and fauna and mātauranga Māori for their own commercial interests, and to do so without seeking permission from or engaging with Māori. Ian Brighthope also raises this risk in his brief of evidence, where an open market would likely lead to the copying of rongoā products, flooding the New Zealand market with so-called rongoā products that are not made by Māori.

This concern is especially relevant in light of the fact that there are almost no legal protections to prevent non-Māori from accessing, researching, privatising and exploiting our Indigenous flora and fauna and mātauranga relating to rongoā. In a Western knowledge system, the developers of therapeutic products have their ownership rights to those products protected by patents. As mātauranga tuku iho, rongoā are not patentable and are instead protected by a Māori knowledge system which is based on having whakapapa connections to knowledge to access and use it. As Jessica explains in her brief of evidence:

“Although Māori and other Indigenous Peoples share some of our knowledge and it is in the public domain, it doesn't mean it's there for the unfettered use by anybody.”

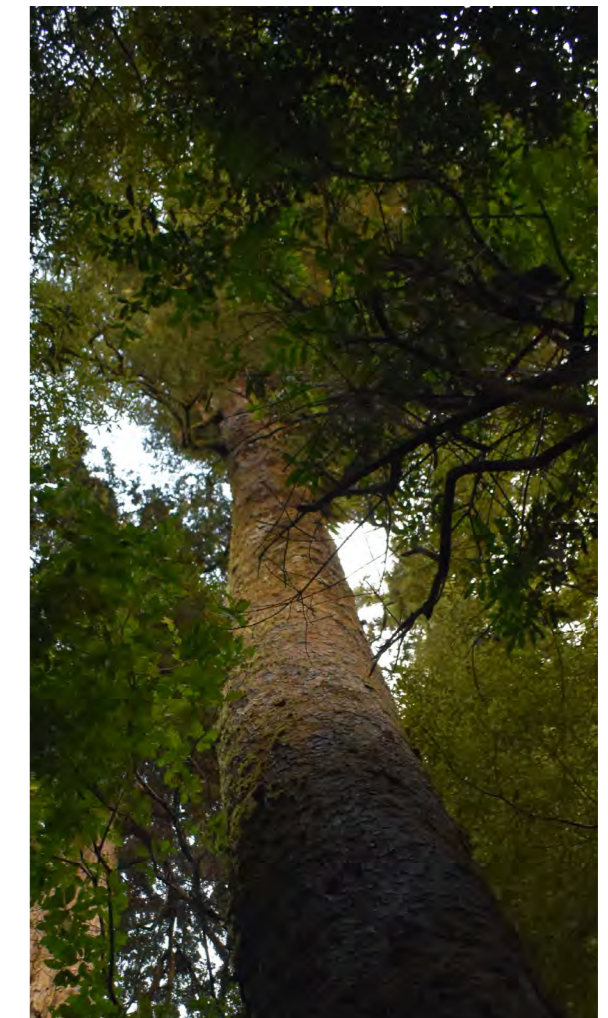
[The fate of the ANZTPA | Te otinga atu o te ANZTPS](#)

The Therapeutic Products and Medicines Bill was introduced into Parliament on 5 December 2006. The first reading of the Bill commenced on 12 December and when it was passed, it was referred

to Parliament's Government Administration Select Committee for closer examination. The committee reported back to Parliament on the bill on 15 July 2007, but it was never progressed any further.⁷⁰

[Current developments | Ngā whanaketanga o nāiane](#)

As a result of the Mediation Agreement that came out of the Wai 2522 claim against the Crown's support of the Trans-Pacific Partnership Agreement (TPPA), a Māori entity to work alongside the Crown in the development of international agreements is currently being established. Known as 'Ngā Toki Whakarururanga', the aim is that this entity will enable a Te Tiriti-compliant process and generate outcomes that are beneficial to both partners to Tiriti o Waitangi.




⁷⁰ See, https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/00DBHOH_BILL7738_1/therapeutic-products-and-medicines-bill, accessed 5 July 2022.

⁶⁷ Johanson, V. (undated). Report on the impact of trans-Tasman harmonisation on the New Zealand natural healthcare industry.

⁶⁸ Wilson, R. (undated). Impact of Australia New Zealand Therapeutic Goods Authority on a medium size natural healthcare products company.

⁶⁹ Law, R. (undated). Briefing paper: explanation of industry statement regarding economic impact.



**PART THREE:
RECOMMENDATIONS
WĀHANGA TUATORU:
NGĀ TŪTOHUNGA**

PART THREE: RECOMMENDATIONS | WĀHANGA TUATORU: NGĀ TŪTOHUNGA

On 2 July 2011, twenty years after the Wai 262 claim had been lodged, the Waitangi Tribunal finally released their report entitled *Ko Aotearoa Tēnei*.⁷¹ It took until 2019 for the Crown to respond, publishing *Te Pae Tawhiti* which outlined its preliminary proposals for how it will organise its response to the claim and the Waitangi Tribunal's report.⁷² A work programme and Crown action plan was devised in 2020.⁷³



Despite these developments, little has happened to advance the remedies we sought when lodging our claim in 2006. For example, the Crown has not banned the use of all organochlorine pesticides to protect the mauri of te taiao (2,4-D products are still available), and nor has it banned research into the development of GMOs. The Crown has also not responded to our call to support the kaupapa of Hua Parakore.

To continue to advance the remedies we seek, Te Waka Kai Ora recommends the following:

- That the Crown allocates baseline funding to Te Waka Kai Ora to ensure our kaupapa of Hua Māori, Hua Whenua and Hua Parakore for a pollutant-free taiao is protected and sustainable into the future;
- That the Crown supports the development of a programme to promote and elevate the Hua Parakore validation and verification system for kai production, as a pathway to transition Māori growers and producers into organic regenerative agriculture;
- That a further allocation is made from the Crown to resource Te Waka Kai Ora to implement and promote the Hua Parakore system with Māori growers and producers, including funding for on-farm Hua Parakore extension officers to support Māori growers and producers to transition to Hua Parakore;
- That the Crown works to introduce legislative and regulatory changes to stop the sale and use of organochlorines and other hazardous substances in agriculture and food production and on te ao tūroa;
- That the Crown works to introduce legislative and regulatory changes to prevent any further research into the use of GM and GMOs in New Zealand given its incongruence with tikanga Māori; and
- That the Crown funds a Hua Māori, Hua Whenua and Hua Parakore programme of research, including research into:
 - the health and wellbeing benefits of Hua Māori, Hua Whenua and Hua Parakore; and
 - the development of Hua Māori, Hua Whenua and Hua Parakore educational resources for use in kōhanga reo, kura kaupapa Māori, wharekura, whare wānanga and other education providers.



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Te Waka Kai Ora
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