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Treasured relations: Towards partnership and the protection of Māori relationships with *taonga* plants in Aotearoa New Zealand

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Abstract

For more than three decades, the system of intellectual property for plants in Aotearoa New Zealand has been the subject of controversy. Critics claim that the system fails to fulfil the promises of the nation's founding document, *Te Tiriti o Waitangi|The Treaty of Waitangi* (1840), which guarantees that Māori will retain *tino rangatiratanga* (absolute sovereignty) over their *taonga* (treasured and significant) plant species. The 2021 Plant Variety Rights Bill aims to address this concern while also complying with international obligations that New Zealand undertook when it joined the *Comprehensive and Progressive Agreement for Trans-Pacific Partnership* (2018). Thus, the Bill endeavours to uphold the government's commitments under Te Tiriti and to give effect to the 1991 Act of the UPOV Convention. These plural and sometimes divergent goals manifest a deeper tension that underlies how legal systems in Aotearoa New Zealand conceptualise human relationships with nonhuman beings and environments. While a Pākehā (Western/European) approach to intellectual property conceives of plants as alienable economic objects, *tikanga Māori* (customary protocols and values) understands that like humans, plants possess *mauri* (life

force) and *whakapapa* (genealogy) that connect these beings with the environments they inhabit. This article explores how tensions between ontological, legal, and political systems imbue the Plant Variety Rights Bill. While the proposal represents a progressive reform, it may fall short of living up to its aspirations for authentic partnership between Māori and the Crown.

KEYWORDS

Aotearoa New Zealand, Indigenous knowledge, mātauranga Māori, multispecies relations, plant variety rights, political ontology

1 | INTRODUCTION

Like many countries throughout the world, Aotearoa New Zealand recognises that certain varieties of plants may be protected as intellectual property. Proprietary claims to plant varieties are regulated under the *Plant Variety Rights Act 1987*, which is modelled on the 1978 Act of the *Union for the Protection of New Varieties of Plants* ('UPOV 1978') and is essentially indistinguishable from similar laws that other countries have enacted.[1] However, unlike most other countries, the legal system of Aotearoa New Zealand is grounded in an agreement executed between Indigenous leaders (Māori *rangatira* or chiefs) and a colonial state (the British Crown). In the version of the agreement recorded in *te reo Māori* (Māori language), *Te Tiriti o Waitangi*|*The Treaty of Waitangi* (1840)[2] guarantees that, reflecting their partnership with the Crown, Māori will retain *tino rangatiratanga* (absolute sovereignty) over their *taonga* (treasured and significant objects or resources), including plants.[3]

Since the *Plant Variety Rights Act 1987* was passed more than three decades ago, Māori individuals and organisations have argued that the New Zealand system of intellectual property for plants fails to fulfil the promises of Te Tiriti. Critics of the Act contend that proprietary rights undermine *tino rangatiratanga* when they extend to cover *taonga* plants, such as those which are native to Aotearoa New Zealand. In the context of Māori relationships with *taonga* plants, policy makers have come to regard upholding *tino rangatiratanga* as synonymous with protecting *kaitiakitanga* (guardianship/the act of caretaking). This is because modifying the plant variety rights system to safeguard *kaitiaki* (guardian/caretaker) relationships with *taonga* would require extending new powers to *iwi* and *hapū*[4] to determine how humans relate to and use plants, according to practices that are embedded in the diverse environments that comprise Aotearoa New Zealand.

Designed in part to address the failure of the *Plant Variety Rights Act 1987* to fulfil the promises of Te Tiriti, in May 2021 a new Plant Variety Rights Bill was introduced in the New Zealand Parliament. The Bill recognises novel protections for *kaitiaki* relationships with *taonga* plants, which the framework defines as 'the relationship that any particular *iwi*, *hapū*, individual of Māori descent, or Māori entity has, or Māori in general have, as guardian, trustee, or caretaker of an indigenous plant species; or a nonindigenous plant species of significance'.[5] The Bill also aims to safeguard the *mātauranga Māori* (Māori Indigenous knowledge and ways of knowing) that forms the foundation of *kaitiaki* relationships.[6] While the Bill aspires to fulfil the promises of Te Tiriti, a parallel purpose of the framework is to give effect to the intellectual property obligations that Aotearoa New Zealand undertook when the country adhered to the *Comprehensive and Progressive Agreement for Trans-Pacific Partnership* ('Trans-Pacific Partnership'; 2018).[7] The essential goal of this multilateral free trade deal is to promote international commerce,[8] which, in the context of plant breeding, equates to enabling exclusive private rights to be granted for novel plant varieties consistent with the 1991 Act of the *Union for the Protection of New Varieties of Plants* ('UPOV 1991').[9]

At first glance, the plural motivations of the 2021 Plant Variety Rights Bill appear to be in tension with one another. The obligation that the New Zealand government assumed under the Trans-Pacific Partnership to 'give effect to' UPOV 1991[10] reflects the conventional assumption that 'strong' intellectual property protections promote innovation in the development of anthropocentrically useful plant varieties,[11] fomenting capitalistic economic growth.[12] Meanwhile, the provisions in the Bill that take seriously the incorporation of *tikanga Māori* (customary protocols and values)[13] into the plant variety rights regime[14] and which aim to fulfil the Crown's promises under Te Tiriti, ostensibly reject the settler-colonial focus on economic globalisation in favour of an Indigenous approach to the governance of human–plant relations.[15] Rather than view these goals as incompatible, the Plant Variety Rights Bill presumes that the realisation of both is not only achievable, but synergistic. The present article tests this assumption, analysing the Bill's attempt to achieve Crown–Māori partnership as envisaged in Te Tiriti.[16]

The assumption that *kaitiakitanga* and intellectual property may be made compatible with one another is complicated by the divergence between how *iwi* and *hapū* understand *kaitiaki* relationships with *taonga* plants and Pākehā (Western/European) justifications for proprietary rights. Intellectual property laws are generally defended based on the idea that it is necessary to incentivise and reward people who 'improve' plants by acting upon them as scientific and commercial objects.[17] In contrast, *kaitiaki* relationships, with both plants and other beings such as animals, rivers, or mountains, grow out of *mātauranga Māori* and are grounded in the notion of *whanaungatanga* (kinship), where kinsfolk have obligations to nurture or care for their relations with the nonhuman subjectivities that comprise *te taiao* (the environment/the natural world).[18] Unlike the concept of rights, *kaitiakitanga* should be understood as comprising interactions grounded in reciprocal and mutual obligations.[19] These relationships acknowledge that *taonga*, including plants, are *tūpuna* (ancestors) of Māori, so *kaitiaki* have direct *whakapapa* (genealogical) connections to them.[20] The embeddedness of *whanaungatanga* and *whakapapa* in *kaitiakitanga* means that *kaitiaki* relationships with *taonga* are inherently local, occurring within specific tribal *takiwā* (regions of authority).[21]

The Plant Variety Rights Bill purports to accommodate these different ways of relating to plants by continuing to recognise private rights for varieties which, like Pākehā New Zealanders themselves, are considered nonnative, while simultaneously excluding varieties of *taonga* species from intellectual property claims where *kaitiaki* relationships can be shown. This should be regarded as a key development both in the national context of recent efforts to reinvigorate the promises of Te Tiriti and in the realm of international legal efforts to recognise and protect Indigenous peoples' rights in relation to biodiversity and traditional knowledge. However, the mere inclusion of Māori terms and concepts in the Bill will not necessarily manifest a substantive partnership between Māori and the Crown. As historian Te Maire Tau has observed, in the political and legal arenas of contemporary Aotearoa New Zealand, *kaitiakitanga* is a term that 'is used with such regularity that it is now meaningless', 'by Māori and Pākehā bureaucrats as a gap-filler to mean everything and yet nothing'.[22] Furthermore, the concept of *tino rangatiratanga* aligns more closely than *kaitiakitanga* with Western notions of property, although *tino rangatiratanga* refers to collective rather than individual sovereignty in relation to the use of resources, including *taonga* plant species. Therefore, some *iwi* and *hapū* have claimed that by declining to recognise that *kaitiaki* hold rights analogous to property in relation to *taonga*, the Bill misunderstands the promises of Te Tiriti.

By engaging with these conceptual tensions, the present article presents arguments made by prominent Māori individuals and organisations, which claim that despite its progressive ambitions, the Plant Variety Rights Bill falls short of instantiating a genuine partnership between Māori and the Crown. Critics of the Bill representing different *iwi* and *hapū* contend that although the framework would increase the *kāwanatanga* (authority) that *kaitiaki* may exercise in relation to *taonga* plants, it fails to advance *tino rangatiratanga* or the related concept of *mana motuhake* (autonomy; self-determination).[23] This article discusses these criticisms and lays the foundation for future research that will investigate what it would mean for the system of intellectual property for plants in Aotearoa New Zealand to effectively guarantee *tino rangatiratanga* and *mana motuhake*, and thereby to realise the promises of Te Tiriti.

Part 2 of the article introduces the contemporary legal frameworks in Aotearoa New Zealand that are relevant to protecting plants as both intellectual property and as *taonga* for which *kaitiaki* obligations apply. Part 3 analyses the reforms that the 2021 Plant Variety Rights Bill would make to the national system of intellectual property for plants, focussing on the provisions that are designed to protect *kaitiaki* relationships with *taonga* species and *mātauranga Māori*. Part 4 engages with the ways that Māori individuals and organisations have reacted to the Bill, and explores arguments about how the proposed reform missed opportunities to embody a more equitable partnership between Māori and the Crown. The Conclusion presents a series of considerations for how the plant variety rights framework might be reformulated to achieve a Crown-Māori partnership, as contemporary interpretations of Te Tiriti envisage, potentially enabling the formation of a new, uniquely Aotearoa conception of human–plant relations.

2 | HOW TAONGA, MĀTAURANGA MĀORI, AND INTELLECTUAL PROPERTY FOR PLANTS INTERACT IN THE LAW OF AOTEAROA NEW ZEALAND

To understand the significance of the recent proposal to reform the New Zealand system of intellectual property for plants, it is necessary to situate the *Plant Variety Rights Act 1987* in the context of *Te Tiriti o Waitangi*|*The Treaty of Waitangi*. Te Tiriti, signed in 1840 by several dozen Māori *rangatira*[24] and representatives of the British Crown, is broadly understood as the founding document of Aotearoa New Zealand. The version of Te Tiriti that was drafted in *te reo Māori* laid the foundation for a partnership to be established between the Crown and Māori, in which the Crown would receive the right to govern, while *iwi* and *hapū* would retain *tino rangatiratanga* over their *whenua* (lands) and *taonga*.[25] However, by the end of the 19th century, the rapid influx of Pākehā settlers into Aotearoa, a colonial economy based on the exploitation of native biodiversity and geology, the killing and dislocation of thousands of Māori during the New Zealand Wars (1840–1870), and the alienation of Māori land through the operation of the Native Land Court (established under the *Native Land Act 1862*), the Crown had thoroughly undermined any notion of partnership.[26]

It was not until the latter half of the 20th century that the Crown officially acknowledged that it had not upheld its pledge of partnership with Māori. Under the *Treaty of Waitangi Act 1975*, the Waitangi Tribunal was created to hear claims alleging breaches of the promises that the Crown made in Te Tiriti.[27] Since that time, the Crown has entered into a total of 120 Deeds of Settlement[28] with *iwi* and *hapū* across Aotearoa New Zealand. In these Deeds of Settlement, the government formally recognised that it failed to honour its obligations to *iwi* and *hapū*, including by not acknowledging their *tino rangatiratanga* over *taonga*.[29] Furthermore, the Deeds of Settlement support the idea that an important component of *rangatiratanga* is the protection of *kaitiakitanga*, a concept that encompasses not only the obligations that humans as *kaitiaki* owe to other beings in the environments in which they live, but also the duties that nonhuman *kaitiaki* have in their relations with *tangata whenua* (local people/people of the land).[30]

In parallel to the Deeds of Settlement, the notion of a 'Lex Aotearoa' began to emerge in the late 20th and early 21st century, as Parliament and judges rediscovered Te Tiriti and began to incorporate *tikanga Māori* into both legislation and case law.[31] For instance, the *Resource Management Act 1991* requires all persons who exercise functions and powers under the Act in relation to managing the use, development, and protection of 'natural and physical resources' must take *kaitiakitanga* into account.[32] The 2021 Plant Variety Rights Bill is another manifestation of Lex Aotearoa, in that it explicitly recognises and respects the Crown's obligations under Te Tiriti,[33] as evidenced by its incorporation of novel protections for *kaitiaki* relationships with *taonga* plants and *mātauranga Māori*.[34]

In Aotearoa New Zealand as in other countries that have grappled with the question of how to remediate the violence of settler-colonial hegemony, an important challenge that the Plant Variety Rights Bill faces is how to take Māori ontologies seriously while avoiding the translation of non-Western principles to conform with dominant legal

categories.[35] The Bill also raises several broader and as yet unresolved questions about how to integrate inherently local ideas and practices grounded in *tikanga Māori* and *mātauranga Māori*, with a legal philosophy that has universalist pretentions and is undergirded by liberal justifications for private property rights based on the need to reward the innovative activity of individual creators. To understand the breadth of these tensions in the New Zealand system of intellectual property for plants, it will be helpful to review the background and history of the *Plant Variety Rights Act 1987* and previous calls for law reform.

As anthropologist Karine Peschard has noted, when plant variety rights legislation was first enacted in Aotearoa New Zealand in 1973, breeding activity was concentrated in the public sector and there was little demand for exclusive ownership of propagating material.[36] In this context, the organisation of a campaign to adopt a law that became the *Plant Varieties Act 1973* is attributed to the renowned rose breeder Sam McGredy, who reportedly made his emigration from Ireland contingent on the availability of intellectual property for his flowers (Figure 1).[37] According to botanist Gillian Wratt, the creation of a domestic plant variety rights regime 'stimulated' the involvement of private enterprise in New Zealand breeding activity.[38] The increased influence of industry actors motivated the country to join the 1978 Act of the UPOV Convention in 1980.[39] Seven years later, Parliament adopted the *Plant Variety Rights Act 1987*, which has remained in force for over three decades with only minor amendments.

The *Plant Variety Rights Act 1987* essentially reproduces the 1978 Act of UPOV, with the exception of provisions in the New Zealand legislation that recognise longer periods of exclusive rights in comparison to UPOV 1978.[40] References to other legal regimes such as Te Tiriti, or to concepts including *tino rangatiratanga*, *kaitiakitanga*, *taonga*, and *mātauranga Māori* do not appear anywhere in the *Plant Variety Rights Act 1987*. Instead, the New Zealand legislation is generic, devoid of any references to Māori ontologies. In this way, the law reflects the science

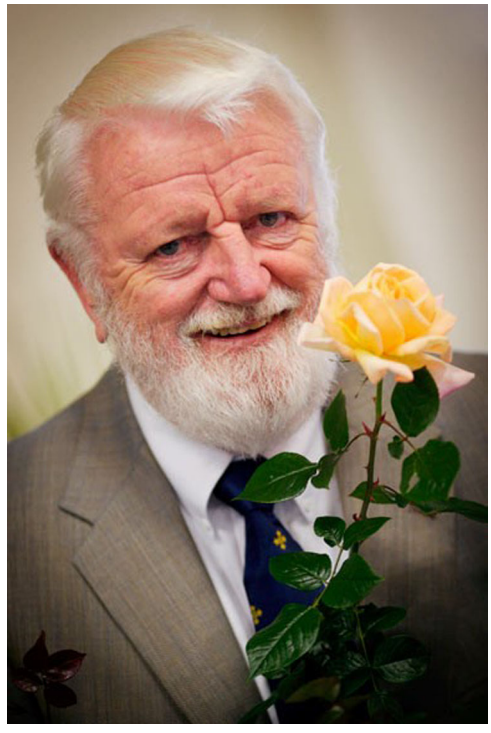

FIGURE 1 Rose breeder Sam McGredy.
Source: Te Ara Encyclopedia. [Color figure can be viewed at wileyonlinelibrary.com]

and practice of institutionalised plant breeding in the country, which, rather than focus on endemic flora, is based nearly entirely on cultivars from plant species that have been introduced from other world regions.[41]

Nevertheless, it is important to recognise that following the adoption of the *Plant Variety Rights Act 1987*, numerous varieties of plants that are considered native to Aotearoa New Zealand have been claimed as intellectual property. Examples include many species that have been identified as *taonga*, including in formal legal frameworks such as the Deeds of Settlement entered into between the Crown and Māori under the *Treaty of Waitangi Act 1975*. For instance, the *Ngāi Tahu Claims Settlement Act 1998* lists plants such as *harakeke* (flax; *Phormium tenax*), *kāpuka* (broadleaf; *Griselinia littoralis*), *korokio* (wire-netting bush; *Corokia cotoneaster*), *kōwhai* (*Sophora microphylla*), *tī rākau/tī kōuka* (cabbage tree; *Cordyline australis*), and *whaririki* (mountain flax; *Phormium cookianum*) as *taonga*. Varieties pertaining to these and several other species that have *taonga* status have been the subject of intellectual property claims under the *Plant Variety Rights Act 1987*.

The operation of the intellectual property regime to grant exclusive economic rights to non-Māori owners for varieties of *taonga* species is illustrated by the case of *harakeke*. This plant, known generically in English as New Zealand flax, is one of the most emblematic plants of Aotearoa, for which *iwi*, *hapū*, and *whānau* (extended families) across the country hold extensive *mātauranga Māori*. As of February 2022, 27 plant variety rights applications had been granted by the New Zealand Intellectual Property Office for varieties of *Phormium tenax*,[42] notwithstanding the existence of diverse *kaitiaki* relationships that Māori maintain with this *taonga* species. Examples include the Licorice and Lime variety, for which rights were granted to Bruntwood Nurseries of Hamilton in April 2015 (Figure 2), and a variety known simply as PHOS4, which was protected in April 2017 by Benara Nurseries of Carabooda, Western Australia (Figure 3). Neither of these owners is a Māori entity, let alone a person holding *kaitiaki* obligations towards *harakeke*.

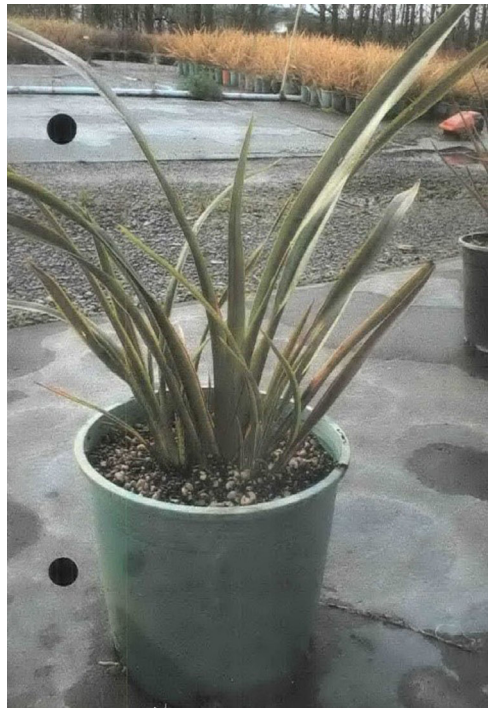

FIGURE 2 Licorice and Lime variety of *Phormium tenax*.
Source: New Zealand Intellectual Property Office. [Color figure can be viewed at wileyonlinelibrary.com]

FIGURE 3 PHOS4 variety of *Phormium tenax*.
Source: New Zealand Intellectual Property Office. [Color figure can be viewed at wileyonlinelibrary.com]

The possibility that the national intellectual property regime could undermine Te Tiriti by failing to protect *kaitiaki* relationships between Māori and *taonga* plants provoked criticism nearly immediately after the *Plant Variety Rights Act 1987* entered into force in June 1988. Three years later, in 1991, Haana Murray (representing Ngāti Kurī), Hema Nui a Tawhaki Witana (representing Te Rarawa), Te Witi Mc Math (representing Ngāti Wai), Tama Poata (representing Ngāti Porou), Kataraina Rimene (representing Ngāti Kahungunu), and John Hippolite (representing Ngāti Koata) filed a legal action on behalf of themselves and their *iwi* before the Waitangi Tribunal. The action, known as 'WAI 262: the flora and fauna claim', focussed on Crown laws, policies, and practices related to *te tino rangatiratanga o te Iwi Māori* (absolute Māori sovereignty) over indigenous flora and fauna.[43] WAI 262 was a complex claim and required the Waitangi Tribunal to investigate the frameworks of more than 20 government departments and agencies in relation to *mātauranga Māori*, biodiversity, and genetic resource use, in addition to cultural heritage productions such as *whakairo* (customary carvings in wood, stone, and bone).

In WAI 262, the claimants argued that their *kaitiaki* relationships with *taonga* species, and the *mātauranga Māori* which forms the basis of these human–plant interactions, should be legally recognised, and that the law should prioritise *kaitiakitanga* over the interests of science and commerce (Figure 4).[44] Some claimants further contended that New Zealand law should grant ownership rights to *iwi* and *hapū* for the genetic and biological resources of *taonga* species and associated *mātauranga Māori*.[45] Alternatively, other claimants maintained that at minimum *kaitiaki* should be given a 'decisive say' in relation to any research or commercial utilisation of *taonga* species and that *kaitiaki* should also participate in any benefits derived from the commercialisation of these species.[46]

After 20 years of gathering and weighing evidence, in 2011 the Waitangi Tribunal finally released its report on WAI 262, entitled Ko Aotearoa Tēnei ('This is New Zealand'). The publication of the report marked the first time that the Tribunal employed a 'whole-of-government' approach, in which it recommended sweeping reforms to laws and policies affecting Māori culture and identity and called for the Crown–Māori relationship to move beyond grievance to enter into a new era of partnership. Ko Aotearoa Tēnei is an extensive and dense document, containing nearly 300 pages and spanning issues related to *taonga* cultural artefacts and intellectual property, genetic and biological resources of *taonga* plant and animal species, New Zealanders' relationship with the environment, and Crown control of *mātauranga Māori*, among others.

In its analysis of *kaitiaki* relationships with *taonga* plants, the Tribunal concluded that 'existing law provides some protection at the margins, but fails to recognise or understand the power of *kaitiakitanga* and fails therefore to accord it the protection it deserves'.[47] However, the Tribunal also stated that it would be possible for the law to

FIGURE 4 A hearing for the WAI 262 claim by the Waitangi Tribunal at Ōrākei Marae. *Source*: Te Ara Encyclopedia. [Color figure can be viewed at wileyonlinelibrary.com]

respect *kaitiakitanga* without undermining the interests of science, commerce, or the wider community, while rejecting the idea that *iwi* and *hapū* have or should be granted any special proprietary rights in relation to the genetic and biological resources of *taonga* plant species.[48] Ko Aotearoa Tēnei further acknowledged that there are significant tensions that different legal regimes in Aotearoa New Zealand must navigate, including in relation to the divergent ways that Māori and Pākehā approach the question of access to knowledge. While Pākehā science and commerce are premised on the idea that knowledge should be freely available except where restrictions are deemed necessary to incentivise innovation, the right to access *mātauranga Māori* must be earned, because this knowledge is imbued with *mauri* (life force), *tapu* (sacredness), and *whakapapa*.[49]

To resolve the tension between Pākehā and Māori approaches to the governance of human–plant relationships and knowledge, Ko Aotearoa Tēnei provided specific recommendations for how the plant variety rights system should be reformed to align with *Te Tiriti o Waitangi*. Based on the principle of *tino rangatiratanga*, the law should grant *kaitiaki* reasonable control over the uses of *taonga* plants to ensure that the *kaitiaki* relationship is protected.[50] Ko Aotearoa Tēnei concluded that what constitutes reasonable control will depend on context, given that the roles of *taonga* species may vary situationally, and that these species may be perceived differently by diverse *iwi* and *hapū*.[51] The Tribunal found that the law should also recognise rights of *kaitiaki* in relation to their *mātauranga Māori*, including the right to be acknowledged as the source of knowledge and the right to have a reasonable degree of control over uses of *mātauranga*.[52]

Ultimately, Ko Aotearoa Tēnei endorsed a plan that would reform the plant variety rights regime by enabling the New Zealand Intellectual Property Office to refuse claims where *kaitiaki* relationships with *taonga* species would be affected.[53] The report further recommended the creation of a Māori 'advisory committee' to support the Commissioner of Plant Variety Rights in balancing the interests of *kaitiaki* against those of intellectual property applicants and the wider public.[54] Finally, Ko Aotearoa Tēnei determined that *kaitiaki* do not have a proprietary interest in *taonga* species or *mātauranga Māori*, while also concluding that *kaitiaki* relationships with plants should still receive some form of legal protection based on the cultural significance of these interactions.[55]

Nearly a decade after the Ko Aotearoa Tēnei report was published, in 2020 the New Zealand government unveiled Te Pae Tawhiti, a comprehensive, whole-of-government approach designed to address the issues raised in the WAI 262 claim. The intervention was conceived as a means to strengthen the Māori–Crown relationship and to reimagine how the government organises itself in relation to *kaitiakitanga* issues.[56] Te Pae Tawhiti is structured around three *ketes* (baskets of knowledge), with Kete 2 centring on *taonga* species and *mātauranga Māori*. The government has identified several areas of potential policy reform related to this theme, including an official review of the *Plant Variety Rights Act 1987*.[57]

The overarching questions that the New Zealand government expects will drive legal change related to *taonga* species and *mātauranga Māori* under Te Pae Tawhiti include: How can we better enable *kaitiaki* to more fully exercise *kaitiakitanga* over *taonga* species and *mātauranga Māori*? How should we protect *taonga* species and *mātauranga Māori*? and How should we make decisions affecting *taonga* species and *mātauranga Māori* in New Zealand and who should make them?[58] These queries suggest that the Crown is now more committed to taking partnership with Māori seriously than it has been under previous governments. The Kete 2 questions also provide a convenient framework for analysing the reforms contained in the 2021 Plant Variety Rights Bill, enabling an examination of the extent to which the Bill represents a genuine Crown–Māori partnership in the governance of human–plant relationships.

3 | HOW THE PLANT VARIETY RIGHTS BILL AIMS TO PROTECT KAITIAKITANGA AND MĀTAURANGA MĀORI

Beginning in February 2017, the New Zealand Ministry of Business, Innovation and Employment initiated a formal review of the *Plant Variety Rights Act 1987* based on the parallel goals of fulfilling the promises of *Te Tiriti o Waitangi* and complying with the Trans–Pacific Partnership. Concurrent with the release of an Issues Paper on matters implicated by the proposed reform, in September 2018, the Ministry published a Māori Engagement Plan, which outlined how it would work with *iwi*, *hapū*, and *whānau* to review the plant variety rights regime.[59] The Plan was conceived as a 'living document' that the Ministry pledged to update, based on feedback from *iwi* and *hapū*, at subsequent stages of the review process.[60] The overarching objectives of the Plan were to support robust discussions about *kaupapa* (topics for discussion) that are important to Māori; provide Māori with meaningful opportunities to become informed of the various interests implicated in the review of the Act and to inform the Crown of the interests of Māori; and to ensure that the Crown is well-informed before taking any action that would affect Māori.[61]

In accordance with its Māori Engagement Plan, in November and December 2018 the Ministry convened seven regional *hui* (gatherings) with representatives of *iwi* and *hapū* throughout Aotearoa New Zealand to discuss *kaupapa* including *taonga* plant species, *mātauranga Māori*, and the intersection of Te Tiriti and the plant variety rights regime.[62] These *hui* were held *kanohi ki te kanohi* (face to face), which has been recognised as the preferred form of engagement with *kaitiaki* because in-person discussions demonstrate mutual respect and allow for transparency.[63] After holding the seven regional *hui* and receiving written submissions from Māori individuals and organisations, the Ministry generated an Options Paper, which it released for public consultation in July 2019.[64] One month later, in August 2019, the Ministry hosted a central *hui* in Wellington to discuss the Options Paper, which focussed on ensuring that the prospective Plant Variety Rights Bill would be consistent with Te Tiriti.[65] A further round of consultation to address outstanding issues was opened in 2020, and it included a national *hui* held virtually due to COVID-19 restrictions, in addition to the opportunity for members of the public to submit written comments.[66] After completing this outreach process with *iwi* and *hapū*, and following concurrent consultations with representatives of industry and non-Māori New Zealanders, the Ministry introduced the Plant Variety Rights Bill to Parliament in May 2021.[67]

In parallel to the activities the Ministry of Business, Innovation and Employment was undertaking as part of its Māori Engagement Plan, the Ministry of Foreign Affairs and Trade was involved in separate negotiations to finalise the Trans-Pacific Partnership free trade agreement. The partnership was initially signed in February 2016 and the Crown ratified the deal in May 2017, a mere 3 months after the *Plant Variety Rights Act 1987* review was launched. When Australia, the sixth country to join the agreement, submitted its notice of ratification, the Partnership entered into force in December 2018. This initiated a 3-year period during which Aotearoa New Zealand would need to either give effect to or join UPOV 1991 by 30 December 2021. At the time of writing in February 2022, the Plant

Variety Rights Bill was still undergoing the second reading in Parliament, meaning that the Crown was not in compliance with its obligations under the Trans-Pacific Partnership.

Since negotiations towards the Trans-Pacific Partnership commenced in 2015, many Māori individuals and organisations have criticised both the substantive content of the deal and the Crown's lack of engagement with *iwi* and *hapū* throughout the negotiation process.[68] One significant reason for this opposition was the belief that the Partnership would directly threaten the promise of Te Tiriti that Māori will retain *tino rangatiratanga* over their *taonga*.[69] Concerns over the Partnership prompted numerous prominent Māori academics, former members of Parliament, government officials, and individuals acting on behalf of *iwi*, *hapū*, and *whānau* across Aotearoa New Zealand to lodge claims before the Waitangi Tribunal beginning in June 2015 (collectively known as WAI 2522).[70] After holding hearings on the WAI 2522 claims and reviewing evidence, in May 2016 the Tribunal concluded that the Trans-Pacific Partnership did not amount to a breach of Te Tiriti,[71] given the inclusion of a clause in the text which permits the Crown to accord more favourable treatment to Māori than to other parties in fulfilment of its obligations under Te Tiriti.[72]

It is notable that during the first stage of WAI 2522 deliberations, the Waitangi Tribunal did not consider intellectual property issues or the potential impact that giving effect to UPOV 1991 could have for *kaitiaki*.[73] However, at that time the Tribunal specifically stated that it was not closing off consideration of Māori interests in relation to UPOV 1991, which could potentially be raised depending on how the Ministry of Business, Innovation and Employment would engage with *iwi* and *hapū* during the *Plant Variety Rights Act 1987* review process.[74] The Tribunal also directed the Crown to file a plan and timeline for conducting outreach with Māori in relation to the plant variety rights regime, which effectively formed the basis for the Māori Engagement Plan described above.[75]

In December 2019, the Waitangi Tribunal reconvened to consider matters related to the prospective reform of the national system of intellectual property for plants and UPOV 1991. The primary issue that the Tribunal weighed at this second stage of deliberation was whether the Ministry's process for engagement with *iwi* and *hapū* when considering changes to the plant variety rights regime and possible accession to UPOV 1991 was consistent with the Crown's obligations under Te Tiriti.[76] During hearings before the Tribunal, the claimants argued that the Crown was not sufficiently informed to make decisions on behalf of Māori when the Te Tiriti exception in the Trans-Pacific Partnership was negotiated, or during the review of the *Plant Variety Rights Act 1987*.[77] Furthermore, the claimants contended that the text of the Partnership imposed external constraints on the domestic review and engagement processes, thereby predetermining what could be negotiated with *iwi* and *hapū* during the review, in addition to circumscribing the time available and the possible outcomes.[78] Despite these arguments, ultimately the Tribunal did not find a breach of Te Tiriti or its principles, instead determining that the Crown had engaged with Māori in good faith during Trans-Pacific Partnership negotiations. The Tribunal also concluded that the Plant Variety Rights Bill reflected the characterisation of *kaitiakitanga* that the Tribunal itself had articulated in its Ko Aotearoa Tēnei report.[79]

Thus, various legal and policy developments, including the Waitangi Tribunal's reports in response to the WAI 262 and WAI 2522 claims, the exceptions that the Crown secured in the Trans-Pacific Partnership, the need to give effect to UPOV 1991, and the feedback received by the Ministry of Business, Innovation and Employment under its Māori Engagement Plan all informed the making of the 2021 Plant Variety Rights Bill. The three principal purposes of the Bill reflect these diverse developments, as the framework aims to protect *kaitiaki* relationships with *taonga* species and *mātauranga Māori* in the plant variety rights system,[80] to comply with the government's obligations under the Trans-Pacific Partnership in relation to UPOV 1991,[81] and to promote innovation and economic growth 'by providing incentives for the development and use of new plant varieties'.[82] These divergent goals reveal the tensions inherent in a proposal that aspires to take seriously *tikanga Māori* and *mātauranga Māori* while retaining the overarching structure and essential assumptions of a Western legal framework, whose basic purpose is to convert certain kinds of plants into proprietary objects.

Although the express recognition of *kaitiakitanga* and the need to protect *taonga* and *mātauranga Māori* represent substantial departures from the precedent established in the *Plant Variety Rights Act 1987*, the version of

the Bill that was current in February 2022 largely reproduced a conventional paradigm for the protection of plants as intellectual property, based directly on the UPOV Convention. Consistent with UPOV 1991, the Bill would empower plant variety right-holders to control commercial uses of protected varieties, the scope of which would include propagating and harvested materials and extend to essentially derived and dependent varieties.[83] Conditions for plant variety rights in the Bill mirror the UPOV 1991 criteria of novelty, distinctness, uniformity, and stability, which are universal standards that varieties in all UPOV member countries must meet to be awarded protection.[84] The periods of private rights that the Bill would grant also conform to UPOV 1991, at 25 years for 'woody plants' (e.g., trees and vines) and 20 years for all other species.[85] While the Bill would recognise certain exceptions to plant variety rights for uses of protected varieties for private, experimental, and breeding purposes[86] and by farmers for conditioning, reproduction, and storage of the seeds of protected varieties on their own holdings,[87] these exemptions are permitted under the UPOV Convention framework.

The main areas where the Plant Variety Rights Bill deviates from the *Plant Variety Rights Act 1987* and the UPOV Convention relate to the procedures that breeders would need to follow when they lodge intellectual property claims. Where a breeder is aware that a *hapū*, *iwi*, individual of Māori descent, or Māori entity has asserted that they have a *kaitiaki* relationship with the species to which the claimed plant variety pertains, the Bill would require the breeder to include certain information in their application for plant variety rights. These details would need to encompass, at minimum, the name of the *kaitiaki* and a summary of the engagement that the breeder has had with the *kaitiaki*.[88] If available, the breeder would also need to provide a copy of the *kaitiaki*'s assessment of the potential effects on the *kaitiaki* relationship if plant variety rights were granted, and how the breeder and *kaitiaki* have agreed to mitigate these effects.[89]

Another significant change that the Bill proposes is the creation of a Māori Plant Varieties Committee, whose role would be to provide input during the intellectual property examination process where *kaitiaki* relationships are implicated. The Committee would be exclusively comprised of individuals who have demonstrated cultural qualifications, including knowledge of *mātauranga Māori*, *tikanga Māori*, *te ao Māori* (the Māori worldview), and *taonga* species.[90] Members would be appointed by the Commissioner of Plant Variety Rights, but the Commissioner would be required to consult with Te Puni Kōkiri (the Ministry of Māori Development) for all appointments.[91] These requirements were designed to ensure that members of the Committee have appropriate expertise relevant to making determinations about *kaitiakitanga*.[92]

If the Bill is adopted, the Māori Plant Varieties Committee would hold the power to nullify or cancel plant variety rights that have adverse effects on *kaitiaki* relationships,[93] in addition to the authority to decide whether any conditions should be imposed on the grant of a plant variety rights application.[94] The decisions of the Committee would have binding effect, subject to a limited right of appeal. Rather than be channelled into a standard administrative or judicial forum,[95] all appeals of Committee decisions would be heard by the Māori Appellate Court.[96] This Court is a specialised institution created under the *Te Ture Whenua Māori Act 1993*, and its purpose is generally to hear appeals of disputes related to Māori land. The inclusion of a right of appeal to the Māori Appellate Court in the Bill was based on the recognition that decisions made by the Māori Plant Varieties Committee should only be reviewed by a judicial body with the necessary cultural expertise, not by a tribunal of general jurisdiction.[97]

While the Māori Plant Varieties Committee would hold important powers under the Bill, its authority would be limited to reviewing plant variety rights applications that claim varieties which are wholly or partly derived from 'indigenous plant species' or 'nonindigenous plant species of significance'.[98] Furthermore, the Committee would only be able to review plant variety rights applications where the plant material used to develop the claimed variety was obtained from Aotearoa New Zealand.[99] This second limitation creates a gap that breeders could potentially exploit to evade review by the Committee. That is, if a breeder obtains the material of a plant species that is indigenous to Aotearoa New Zealand, such as *harakeke* (*Phormium tenax*), from a germplasm collection or nursery located overseas, the Bill would not allow the Committee to review the breeder's plant variety rights application. This would be the case even where an *iwi*, *hapū*, or Māori individual or entity asserts a kaitiaki relationship with the plant species to which the variety pertains.

Although one of the express purposes of the proposed reform to the *Plant Variety Rights Act 1987* is to protect *kaitiaki* relationships with *taonga* species, the Bill does not define the concept of *taonga*. Instead, the framework would ensure that the Māori Plant Varieties Committee has the necessary authority to review applications that claim rights to varieties of indigenous and nonindigenous plant species of significance. The Bill conceptualises indigenous plant species as native species that are endemic to Aotearoa New Zealand or have arrived to the country without human assistance.[100] Meanwhile, a nonindigenous plant species of significance is understood as a species believed to have been brought to Aotearoa before 1769[101] on *waka* (canoes) migrating from other parts of the Pacific region.[102] These definitions are designed to cover the full range of *taonga* plant species, with a specificity that is ostensibly intended to avoid any potential issues that could have arisen from importing the vague conceptualisation of *taonga* species from the Ko Aotearoa Tēnei report.[103] However, it is notable that limiting the scope of *kaitiaki* relationships to only indigenous and nonindigenous species of significance does not allow for the concept of *taonga* to evolve over time. In other words, *taonga* is understood as a static category, which effectively closed with the arrival of Europeans to Aotearoa New Zealand.

Under the protocols that the Bill would establish, if the Commissioner of Plant Variety Rights receives an application that claims rights to a variety of a *taonga* plant species, the application must be referred to the Māori Plant Varieties Committee for review.[104] The Committee would then be charged with assessing whether a *kaitiaki* relationship would be adversely affected if the application were granted.[105] In making this determination, the Committee would first need to ascertain whether an *iwi*, *hapū*, or Māori individual or entity has asserted that they have a *kaitiaki* relationship with the plant variety claimed in the application.[106] Where a *kaitiaki* relationship is asserted, the Committee would then decide whether the relationship with the variety and any associated *mātauranga Māori* has in fact been demonstrated.[107] As a final step, if the relationship is demonstrated, the Committee would be required to consider the *kaitiaki*'s own assessment of the prospective effect of plant variety rights on the relationship, any agreement reached between the *kaitiaki* and the breeder, and any evidence that the *kaitiaki* or breeder have not acted in good faith.[108]

If no specific *kaitiaki* relationship has been asserted in relation to a particular plant variety rights application, the Committee would be empowered to consider the nature of *kaitiaki* relationships that Māori in general have with the claimed variety, and the effect that a grant of rights would have on these relationships.[109] Notwithstanding whether the *kaitiaki* relationship is specific to a particular group or exists between Māori in general and the claimed plant variety, the Committee would need to evaluate whether any adverse effects expected to result from granting intellectual property rights could be adequately mitigated.[110] Strategies for mitigation could include conditions attached to the grant, which the breeder would need to negotiate directly with the relevant *iwi*, *hapū*, Māori individual or entity,[111] or which the Committee itself would formulate in the case of generalised *kaitiaki* relationships.[112]

Supplementing its responsibility to assess plant variety rights applications that implicate *kaitiaki* relationships with *taonga* species, the Māori Plant Varieties Committee would be charged with providing advice to the Commissioner of Plant Variety Rights about certain issues. First, if the Committee determines that the proposed denomination (i.e., the commercial name) of a plant variety likely would be offensive to Māori, it should advise the Commissioner accordingly.[113] Second, the Committee would be responsible for providing counsel to the Commissioner about the criteria for the protection of indigenous and nonindigenous varieties of significance.[114] This advice could be especially relevant to the evaluation of the novelty and distinctness criteria for awarding plant variety rights, because the specialised cultural knowledge of the Committee may be necessary to determine whether a claimed variety of a *taonga* species is, in fact, new and different in comparison to extant varieties. However, it is important to recognise that the Commissioner would not be bound by the Committee's recommendations about proposed denominations or about the criteria for protection; the Bill would only require the Commissioner to consider such advice.[115]

In addition to the standard procedure that the Māori Plant Varieties Committee would follow to review intellectual property claims that implicate *kaitiaki* relationships, if enacted, the Bill would permit any person to apply

to the Commissioner at any time for the nullification or cancellation of a plant variety right where *kaitiakitanga* is jeopardised.[116] The Commissioner would then be required to refer the application to the Committee, which would have the authority to order nullification if it determines that there was an adverse effect on a *kaitiaki* relationship at the time when the right was granted.[117] In parallel, if the Committee finds that the owner of the plant variety right has breached any condition that was designed to mitigate an adverse effect on a *kaitiaki* relationship, the Committee could order cancellation of the ownership right.[118] However, if the Committee concludes that there has been no adverse effect on a *kaitiaki* relationship and that no conditions attached to the grant of rights were breached, it would need to dismiss the application for nullification or cancellation.[119]

The various powers that the Plant Variety Rights Bill would grant to the Māori Plant Varieties Committee are consistent with the Ko Aotearoa Tēnei report, which recommended that the New Zealand system of intellectual property for plants should decline to recognise proprietary rights over *taonga* species where *kaitiaki* relationships can be demonstrated, and which proposed the creation of a specialised Māori advisory committee to review plant variety rights applications. Furthermore, while the Committee's powers would be limited in certain regards, as will be discussed further in Part 4 of this article, its structure nevertheless represents an improvement over prior attempts to introduce Māori oversight into the New Zealand intellectual property system. For instance, the Patents Māori Advisory Committee created under the *Patents Act 2013* has been roundly criticised because it is only able to provide advice on a patent application if the Commissioner of Patents refers the application to the Committee, and because any advice that the Committee gives is not binding.[120]

While the Plant Variety Rights Bill would introduce certain progressive reforms into the New Zealand system of intellectual property for plants, it would also adhere to the terms of the Trans-Pacific Partnership. This compliance is made possible by the exception that the Crown was able to secure in the Partnership, affording Aotearoa sufficient policy space to adopt measures that the government deems necessary to protect certain plant species in fulfilment of its obligations under Te Tiriti.[121]

Clearly, the express recognition of the significance of the *kaitiaki* relationships that *iwi*, *hapū*, and *whānau* have with *taonga* plants is a step towards actualising the kind of Crown–Māori partnership that Te Tiriti envisages, especially when the Bill is compared with the *Plant Variety Rights Act 1987*. This Act effectively imported a system of intellectual property for plants that a small number of mostly European governments devised, without regard to local political ontologies. However, the most recent version of the Bill leaves several pragmatic and conceptual issues unresolved, ranging from specific procedural questions about how the new framework would operate in practice, to broader considerations about how the law should govern interactions between different human groups and with the world beyond the human.

4 | HOW MĀORI HAVE RESPONDED TO THE PLANT VARIETY RIGHTS BILL

Following the introduction of the Plant Variety Rights Bill to Parliament in May 2021, a period of public comment was opened to allow anyone to submit feedback and advice for lawmakers to consider. In total, 53 submissions were received from Māori individuals and entities, private companies and industry associations, government research institutions, legal practitioners and academics, and non-Māori members of the general public. Given the breadth of interests represented, it is logical that commentators' perspectives about intellectual property for plants and *kaitiakitanga* were diverse and diverging.

Unsurprisingly, one of the overarching themes that emerged in submissions made by some parties, especially representatives of large agricultural and horticultural firms, was that the Bill does not go far enough to align the New Zealand legislation with UPOV 1991. Another criticism that non-Māori submissions launched against the Bill was that the provisions designed to protect *kaitiaki* relationships with *taonga* species are vague and discriminatory, which could disincentivise innovation in plant breeding and agricultural competitiveness.[122] In contrast,

representatives of different *iwi* and *hapū* contended that the framework falls short of a genuine Crown–Māori partnership and therefore that the proposed reform fails to fulfil the promises of *Te Tiriti o Waitangi*. Setting aside critiques grounded in Pākehā approaches to access to knowledge and capitalistic economic arguments, the following section focusses on Māori criticisms of the Plant Variety Rights Bill and categorises these critiques into two broad areas, spanning several procedural and substantive issues that submissions to Parliament identified.

4.1 | Procedure

As described in Part 2 of this article, in August 2019 the New Zealand government released a comprehensive proposal to address the issues raised in the WAI 262 claim and the Ko Aotearoa Tēnei report. The result was Te Pae Tawhiti, a whole-of-government approach that delineated three work plans conceived as *ketes*, with Kete 2 focussing on the protection of *taonga* species and *mātauranga Māori*. Concretely, this *kete* encompasses an official review of the *Plant Variety Rights Act 1987*, targeted towards ensuring that the Act systematically responds to WAI 262 and Ko Aotearoa Tēnei. This is significant, because if conducted based on appropriate engagement with *iwi* and *hapū*, the Te Pae Tawhiti approach has the potential to enact the kind of Crown–Māori partnership in the context of protecting *kaitiaki* relationships with *taonga* plants that the WAI 262 claimants sought.

However, several of the submissions that Māori individuals and organisations made to Parliament in response to the Plant Variety Rights Bill pointed out that the essential structure and timeline for the development of the framework were driven by the Trans-Pacific Partnership rather than by Te Pae Tawhiti. Although the review of the *Plant Variety Rights Act 1987* was brought within the purview of the partnership-based, whole-of-government approach to address WAI 262 issues in 2019, by then the basic form that the Plant Variety Rights Bill would need to take had already been determined. Furthermore, the initial draft of the Bill was generated independently by the Ministry of Business, Innovation and Employment, rather than through an interministerial collaboration, which Te Pae Tawhiti envisages. While the Ministry of Business, Innovation and Employment did conduct outreach activities with *iwi* and *hapū* during the development of the Bill, as described in Part 2 above, Māori organisations have argued that the Crown did not follow a comprehensive engagement strategy before including provisions on *kaitiakitanga*, *taonga* plant species, and *mātauranga Māori* in early drafts of the Bill.[123]

In addition to the procedural issues implicated in the development of the Plant Variety Rights Bill, some submissions to Parliament by Māori individuals and organisations claimed that the protocols the Bill would require parties to follow are not culturally appropriate. For example, the Bill outlines a process that the Māori Plant Varieties Committee would need to undertake when it evaluates *kaitiaki* relationships with plant varieties claimed under the law, stating that the Committee must consider submissions made by *iwi*, *hapū*, and Māori individuals and entities that assert *kaitiaki* relationships. However, the Bill does not specify how *kaitiaki* should lodge their claims with the Committee. In response to this ambiguity, one submission suggested that the Bill should empower *kaitiaki* to address the Committee through an *ā-kanohi* (in-person) process, given the importance of *kanohi ki te kanohi* discussion in Māori culture as a means to appropriately recognise the *mana* (status) of the parties.[124]

Representatives of diverse *iwi* and *hapū* voiced similar concerns about the cultural appropriateness of the process through which members would be appointed to the Māori Plant Varieties Committee. Specifically, some submissions to Parliament noted that the Commissioner of Plant Variety Rights, a person appointed by and accountable to the Crown, who may or may not be Māori (and who is not required to possess any specific background or experience),[125] is not qualified to assess potential members of the Committee for their *mana*, knowledge of *mātauranga Māori*, *tikanga Māori*, *te ao Māori*, and *taonga* species.[126] Instead, only Māori themselves should have the authority to appropriately evaluate the cultural qualifications of prospective Committee members.[127]

The broad powers that the Bill would grant to the Commissioner of Plant Variety Rights have also been criticised, specifically in relation to the appointment and removal of members of the Māori Plant Varieties

Committee. The original version of the Bill granted appointment and removal authority exclusively to the Commissioner, without any oversight by *iwi* or *hapū*. After hearing testimony and reviewing comments from the public, the Parliamentary Economic Development, Science and Innovation Committee released a revised draft of the proposal in November 2021, which would require the Commissioner to consult the chief executive of Te Puni Kōkiri (the Ministry of Māori Development) before selecting a person for membership on the Māori Plant Varieties Committee.[128] However, the version of the Bill that was current as of May 2022 would still allow the Commissioner to remove members from the Committee without cause and without oversight by *iwi* or *hapū*.[129] This unchecked authority could jeopardise the ability of Committee members to act independently, undermining the possibility that cultural considerations might outweigh the economic interests of plant breeders in the New Zealand intellectual property system.

Another procedural issue that submissions to Parliament raised relates to the responsibilities that the Māori Plant Varieties Committee would have to review proposed plant variety denominations that may be offensive to Māori. While the Committee would have the authority to advise the Commissioner of Plant Variety Rights about whether the commercial name selected for a variety to be protected under the law is likely to be offensive, the Commissioner would only need to consider this advice, not act upon it. In other words, the Commissioner would not be bound by Committee determinations about varietal denominations.[130] Similarly, the Bill would empower the Committee to provide recommendations relevant to the application of the novelty, distinctness, uniformity, and stability criteria that are required for plant variety rights to be granted, but again, the Commissioner would not be required to follow the Committee's suggestions.[131] Some Māori organisations have criticised this formulation, arguing that the Bill subordinates Māori interests to the discretion of a Commissioner who is directly appointed by the Crown and who is not subject to any oversight by *iwi* or *hapū*.[132]

4.2 | Substance

Māori individuals and organisations also identified several substantive issues with the Plant Variety Rights Bill in the submissions they made to Parliament in 2021. The concerns raised cover a range of gaps in the proposed framework, which according to critics indicate that the Bill does not manifest the kind of Crown–Māori partnership that Te Tiriti requires and the Ko Aotearoa Tēnei report envisages. For instance, the prospective reform would require *kaitiaki* to incur certain costs, but the Bill would not allocate any resources to help *iwi* and *hapū* adapt to the new plant variety rights regime. The costs involved were expected to include the time that *kaitiaki* would need to take when engaging with breeders who seek intellectual property for varieties of *taonga* species,[133] and the resources that *kaitiaki* would need to expend to demonstrate their relationships with *taonga* plants if they wish to contest a plant variety rights application.[134] Although plant breeders, especially in the commercial sector, are already well versed in the plant variety rights system and typically have adequate funding to lodge and maintain intellectual property claims, *kaitiaki* frequently lack the familiarity and resources required to assert their rights under the Bill.[135]

The second substantive issue relates to the enforcement mechanisms that the Plant Variety Rights Bill would create. As is standard in laws that grant intellectual property for plants worldwide, the Bill enumerates certain activities that constitute infringement of plant breeders' proprietary rights. These include the commercial exploitation of a protected plant variety without the authorisation of the owner or other right-holder and the use of the denomination of the protected variety without permission.[136] Where a person holding plant variety rights believes that infringement has occurred, the Bill would recognise that they have grounds to bring a legal action against the alleged infringer.[137] If a violation of a plant variety right is found, the right-holder would be entitled to different kinds of remedies, including an injunction to stop the infringing behaviour and monetary damages.[138] In contrast, the Bill does not propose any mechanism that would allow *kaitiaki* to bring legal actions against people who use *taonga* species in violation of the protections for *kaitiakitanga* that the framework purports to establish.[139]

The lack of remedies for breaches of *kaitiakitanga* in the Plant Variety Rights Bill follows from the conceptualisation of *kaitiaki* relationships as something other than proprietary in nature. While this conception is consistent with the findings of Ko Aotearoa Tēnei, which declined to recognise that *kaitiaki* have proprietary interests in *taonga* plant species, it is also indicative of the shallow form of protection that the Bill would offer. This is the third substantive issue that many of the submissions to Parliament from Māori individuals and organisations underscored, that is, the insufficiency of the measures designed to safeguard *kaitiakitanga* and *mātauranga Māori* in the Bill. Some Māori legal experts have suggested that this deficit could be remedied by amalgamating the plant variety rights regime with a framework for access and benefit sharing for uses of *taonga* plant species and *mātauranga Māori*. This could be done, for instance, by giving effect to the *Nagoya Protocol on Access and Benefit Sharing* (2014).[140] As of May 2022, Aotearoa New Zealand had not signed or ratified the Nagoya Protocol, although the country did have other access and benefit sharing obligations under the *Convention on Biological Diversity* (1993)[141] and the *United Nations Declaration on the Rights of Indigenous Peoples* (2007).[142]

In a parallel criticism, the fourth substantive issue that some Māori individuals and organisations identified in their submissions to Parliament centred on the individualistic, species-based form of protection that the Plant Variety Rights Bill would grant to *taonga* plants. Reflecting the epistemological approach of Pākehā botanical science and plant breeding, the Bill is concerned with recognising the relationships that exist between *kaitiaki* and discrete vegetal life forms that can be categorised according to the standards of Linnean taxonomy. In contrast to this approach, *iwi* and *hapū* have argued that a more appropriate form of protection would take into account the embeddedness of *kaitiaki* and *taonga* plants alike in *te taiao* (i.e., in local ecosystems) by evaluating plant variety rights applications holistically. Doing so would necessarily imply an ecological approach to intellectual property for plants.

A consideration of the ecosystemic effects that plant variety rights could have would require New Zealand law to take into account the effects that new (non-*taonga*) plant varieties could have on the *whenua* (land) and *te taiao* if they become invasive,[143] or if they naturally cross-breed with indigenous plants through horizontal gene transfer.[144] For example, one submission to Parliament described how, without human intervention, certain novel ornamental plant varieties have hybridised with species that are endemic to Aotearoa New Zealand, including the dwarf cabbage tree (*Cordyline pumilio*), *koromiko* (*Hebe stricta*), and *puawānanga* (*Clematis paniculata*) (Figure 5).[145] According to *rongoā* specialists (traditional Māori healers), hybridisation has decreased the effectiveness of the medicinal properties of these plants.[146] Given the potential impacts that novel varieties of any species could have on specific *taonga* plants and on *te taiao* in general, the Bill should enable the Māori Plant Varieties Committee to review all plant variety rights applications, rather than only those which are based on *taonga* species.[147]

At a broader, more conceptual level, some of the submissions that representatives of *iwi* and *hapū* made to Parliament signalled that the Plant Variety Rights Bill misunderstands certain ideas that are fundamental to *tikanga Māori* and *mātauranga Māori*, and to the realisation of the promises made in Te Tiriti. For instance, a major criticism of the Bill contended that although the proposed reform would be consistent with the principle of *kāwanatanga* (authority), it does not advance *tino rangatiratanga* (Māori sovereignty) or *mana motuhake* (autonomy; self-determination).[148] This critique is based, in part, on the fact that members of the Māori Plant Varieties Committee would be appointed, removed, and overseen by the Commissioner of Plant Variety Rights, rather than by *iwi* and *hapū*. Although the November 2021 revision of the Bill would require the Commissioner to consult the chief executive of Te Puni Kōkiri (the Ministry of Māori Development) before naming Committee members, appointment, removal, and oversight power would ultimately vest with the Crown, not with Māori.

Furthermore, although the Plant Variety Rights Bill expressly 'recognises and respects the Crown's obligations under the principles of *Te Tiriti o Waitangi*|*the Treaty of Waitangi* in relation to the law on plant variety rights',[149] the Bill focusses narrowly on protecting *kaitiaki* relationships with *taonga* species and *mātauranga Māori* in the plant variety rights system.[150] The Bill would not grant any power to Māori to make determinations about plant variety rights applications that concern species which are not indigenous or of significance to Māori, even though such plants could affect *taonga* through ecosystemic interactions including genetic hybridisation. Finally, it is notable that

FIGURE 5 Karo Kiri, a formerly plant variety rights-protected dwarf cabbage tree variety.
Source: Te Ara Encyclopedia [Color figure can be viewed at wileyonlinelibrary.com]

the concepts of *tino rangatiratanga* and *mana motuhake* are not referenced anywhere in the text of the Bill. These omissions deprive *iwi* and *hapū* of the autonomy and self-governance required to properly exercise *kaitiakitanga*,[151] calling into question whether the Crown will be able to fulfil its promises under Te Tiriti.

5 | CONCLUSION

The proposal to reform the *Plant Variety Rights Act 1987* of Aotearoa New Zealand, like previous attempts by other countries to reconcile an imported framework of intellectual property for plants with local biocultural interests,[152] is naturally encumbered with certain tensions. In the 2021 Plant Variety Rights Bill, these are laid bare in the express purposes of the proposal, which are to protect *kaitiaki* relationships with *taonga* plants and *mātauranga Māori*, while simultaneously fulfilling New Zealand's obligations under the Trans-Pacific Partnership and promoting innovation and economic growth.[153] According to some Māori perspectives, these objectives are discordant. While the latter goals align with dominant global capitalist and Western scientific epistemologies, the first aim of the Bill reflects the recent reinvigoration of a political ontology that is uniquely Māori and the emergence of a Lex Aotearoa.

On the other hand, if the Plant Variety Rights Bill is interpreted optimistically, the framework could be understood as a key success in the development of Lex Aotearoa. It is one of the first major pieces of legislation that the New Zealand Parliament has considered following the announcement of the Te Pae Tawhiti whole-of-government approach to addressing the WAI 262 claim.[154] The protections for *kaitiakitanga* that the Bill would implement can be achieved without undermining international obligations. This is because Aotearoa New Zealand was the only party to the Trans-Pacific Partnership that was able to successfully negotiate an exception to the requirement that members must join UPOV 1991.[155] A cursory review of the Bill in the context of the Partnership suggests that the Crown has found a way to have its cake and eat it too. The proposed reform would retain a

conventional, Pākehā system of intellectual property for plants, providing the kind of legal certainty and economic incentives that commercial plant breeders seek, while conferring a recognised legal status upon *kaitiaki* and empowering *iwi* and *hapū* to prevent the misappropriation of their *taonga* plants and *mātauranga*.

However, a closer analysis, in light of the promises that the Crown must fulfil under *Te Tiriti o Waitangi* and in recognition of the submissions to Parliament described in Part 4 of this article, suggests that the Plant Variety Protection Bill falls short of manifesting a veritable partnership between Māori and the Crown. The essence of the failure is the claim that although the Bill aligns with the principle of *kāwanatanga* (authority), it would not ensure that *iwi* and *hapū* can exercise *tino rangatiratanga* (sovereignty) and *mana motuhake* (self-government) when making determinations about *kaitiaki* relationships with *taonga* plants. This suggests that although the Bill undoubtedly reflects a commitment to take Māori authority seriously, the form of protection for *kaitiakitanga* and *mātauranga Māori* that the regime would create prioritises the capitalistic interests of plant breeders over ways of relating to vegetal beings that are grounded in guardianship, reciprocity, and care.

Māori individuals and organisations have recommended several solutions for how the framework could be altered to achieve a more balanced partnership. For instance, certain changes could be made to the operation of the Māori Plant Varieties Committee that would bring the Bill into closer alignment with the principles of *tino rangatiratanga* and *mana motuhake*. The autonomy of the Committee could be enhanced by ensuring that *iwi* and *hapū* are free to exercise appointment and removal power, rather than vesting this authority in the Plant Variety Rights Commissioner, a (likely non-Māori) person who would be accountable only to the Crown. Furthermore, the Bill could strengthen what are currently merely advisory functions of the Committee, for example, by mandating that the Commissioner must adhere to Committee determinations about varietal denominations that are likely to be offensive to Māori.

Another way that the Plant Variety Rights Bill could fortify the form of protection it recognises for *kaitiaki* relationships with *taonga* plants and *mātauranga Māori*, and thereby support *tino rangatiratanga*, would be to incorporate enforcement provisions similar to those which plant breeders can invoke. Doing so would enable *kaitiaki* to bring legal actions against parties who allegedly use *taonga* plant species or *mātauranga Māori* without authorisation or in violation of the *kaitiakitanga* protocols that the Bill would adopt. A more drastic option would be to reconsider whether it would be appropriate to recognise that the interests which *kaitiaki* have in *taonga* plants are analogous to a proprietary right. Although this strategy was not endorsed by the Waitangi Tribunal in its Ko Aotearoa Tēnei report, it is conceivable that some *iwi* and *hapū* might wish to take advantage of the kind of economic opportunities that intellectual property rights can afford.[156] The potential monetary benefits that intellectual property exploitation might beget contrast with the Bill's extant *kaitiakitanga* provisions, which are narrowly formulated as cultural protections. By recognising that *iwi* and *hapū* have economic rights and not merely cultural interests in *taonga* plants, the Bill could catalyse interactions between *kaitiaki* and non-Māori plant breeders, leading to the formation of new partnerships and the attainment of different kinds of benefits.

Prospective changes to the Plant Variety Rights Bill should generally consider how to best ensure that long-term engagement with *iwi* and *hapū* is feasible and culturally appropriate. For instance, funding mechanisms should be identified to allocate resources to *kaitiaki* to prepare them for future interactions with plant breeders individually and with the plant variety rights system in general. Furthermore, officials from the New Zealand Intellectual Property Office could be required to conduct local trainings with *kaitiaki*, *kanohi ki te kanohi*, so that they are aware of their rights in relation to *taonga* plants and *mātauranga Māori*. The plant variety rights system could also guarantee that *kaitiaki* will be compensated for any time that they are required to spend in negotiations with plant breeders who wish to use a *taonga* species to develop a new variety. Notably, none of these suggested changes to the Bill would undermine the international obligations that the New Zealand government has assumed through the Trans-Pacific Partnership. This is because the recommended amendments would leave intact the basic system of protection, which recognises time-limited, exclusive commercial rights for plant varieties that are new, distinct, uniform, and stable, and therefore appropriately gives effect to UPOV 1991.

It is also important to recognise that several of the submissions to Parliament suggested that the Plant Variety Rights Bill should incorporate a system of access and benefit sharing based on the Nagoya Protocol. Doing so would recognise a more comprehensive set of rights that *iwi* and *hapū* would hold to govern the access and utilisation of *mātauranga Māori*. If made consistent with the Nagoya Protocol, the scope of these rights would extend to *mātauranga* that Māori hold in relation to both *taonga* and other plant genetic resources that might not fit the statutory definitions of indigenous species or nonindigenous species of significance. Furthermore, such a framework would entitle the providers of *mātauranga Māori* to share in any monetary and nonmonetary benefits derived from the utilisation of their knowledge. Given these additional layers of protection, it is easy to understand why some *iwi* and *hapū* have advocated for the inclusion of access and benefit sharing provisions in the Plant Variety Rights Bill.

There is nothing in the Trans-Pacific Partnership to suggest that the Crown would be in breach of its obligations if the New Zealand system of intellectual property for plants incorporated an access and benefit sharing framework for *mātauranga Māori*. To the contrary, the Partnership explicitly recognises the importance of the relationship between intellectual property, traditional knowledge, and genetic resources, and acknowledges that signatories have already made international commitments or adopted national measures related to access and benefit sharing.[157] Furthermore, the Partnership requires member countries to cooperate to enhance their understanding of issues that arise out of the relationship between intellectual property and access and benefit sharing laws.[158]

Nevertheless, the amalgamation of plant variety rights and access and benefit sharing regimes could prove difficult in Aotearoa New Zealand for several reasons. Foremost, the country has not ratified or even signed the Nagoya Protocol. The only international obligations that the government has assumed in relation to the regulation of plant biodiversity and traditional knowledge are contained in the *Convention on Biological Diversity*, and the *United Nations Declaration on the Rights of Indigenous Peoples*, which contain less comprehensive access and benefit sharing regimes than the Nagoya Protocol. Furthermore, even if New Zealand had already joined the Nagoya Protocol, the country would likely face significant challenges in implementing the framework, as experiences in other parts of the world have demonstrated. The scope of the Protocol is controversial, and different governments have enacted divergent interpretations of its provisions in their domestic legal frameworks.[159]

At a more basic level, uncertainty exists about whether a country can recognise access and benefit sharing provisions in its system of intellectual property for plants and still give effect to UPOV 1991. Few governments have attempted to do this, and the most prominent examples, specifically India and Thailand, are not UPOV members.[160] The UPOV Council has emphasised that the purpose of the UPOV Convention is to encourage the development of new plant varieties. Therefore, to the extent that restrictions on access to plant genetic resources impede breeding, they may be incompatible with the UPOV 1991.[161] However, recent proposals suggest that there are ways for countries to both enact laws that regulate access and benefit sharing for genetic resources and associated traditional knowledge, and ensure that their systems of intellectual property for plants are consistent with the UPOV Convention.[162]

Irrespective of the technical difficulties that could arise from adopting the changes to the plant variety rights regime that this article has discussed, the greatest challenge for Aotearoa New Zealand is to reconcile Crown and Māori approaches to governing human relationships with plants within the framework of Te Tiriti. Whereas the former sees only vegetal objects that serve anthropocentric purposes and may therefore be owned, the latter approach seeks to utilise flora based on localised decision making, while also understanding that plants, like humans and all other beings who interact in *te taiao*, possess *mauri* and *whakapapa* and therefore they must be respected and cared for. By following the suggestions discussed throughout the article, it may be possible to reimagine the plant variety rights system in a way that would more fully actualise the kind of partnership between Māori and the Crown that Te Tiriti envisages. Doing so will require confronting and grappling with the basic assumptions that underpin the New Zealand system of intellectual property for plants. Until these assumptions are laid bare and recognised as manifestations of merely one political ontology in a pluriverse[163] of ecological relations, true Crown-Māori partnership in Aotearoa New Zealand will remain ephemeral.

6 | GLOSSARY OF TERMS IN TE REO MĀORI[164]

ā-kanohi: with one's own eyes; to see in-person.

hapū a kinship group, clan, tribe, or subtribe that constitutes a section of a wider kinship group and the primary political unit in traditional Māori society.

hui gathering, assembly, meeting.

iwi extended kinship group, tribe, nation, people, nationality, race; often a large group of people descended from a common ancestor and associated with a distinct territory.

kaitiaki guardian, trustee, minder, custodian, caregiver, steward.

kaitiakitanga guardianship, stewardship; an innate sense of responsibility to care for and nurture the *whenua* and its *taonga*.

kanohi ki te kanohi face-to-face, in person, in the flesh.

kāwanatanga government, governorship, rule, authority, dominion.

kete basket or kit (e.g., of knowledge or resources).

Māori (n) Indigenous New Zealander, Indigenous person of Aotearoa New Zealand.

Māori (v) to be Māori, or to apply in a Māori way (e.g., in relation to *tikanga Māori*).

mana prestige, authority, control, power, influence, status, spiritual power, charisma; mana is a supernatural force in a person, place or object.

mana motuhake separate identity, autonomy, self-government, self-determination, independence.

mātauranga Māori Māori knowledge; the body of knowledge originating from Māori ancestors, including the Māori worldview and perspectives, Māori creativity and cultural practices.

mauri life principle, lifeforce, vital essence; the essential quality and vitality of a being or entity. Also used for a physical object, individual, ecosystem, or social group in which this essence is located.

Pākehā New Zealander of European descent; foreign, exotic, introduced from or originating in a foreign country.

rangatira chief, chieftain, leader, high ranking, chiefly.

rangatiratanga chieftainship, the right to exercise authority, self-determination.

taiao the natural world, the environment, nature, the Earth, country.

takiwā district, area, territory.

tangata whenua local people, Indigenous people, people born of the *whenua*.

taonga treasures; applied to anything considered to be of value including socially or culturally valuable objects, resources, phenomena, ideas, and techniques.

tapu to be sacred, prohibited, restricted, or set apart.

tikanga correct procedure, custom, rule, convention, protocol; the customary system of values and practices that have developed over time and are embedded in a broader social context.

tūpuna ancestors.

waka canoe, vehicle, vessel.

whakapapa genealogy, lineage, kinship descent.

whānau family group, extended family.

whanaungatanga kinship, relationships with a sense of belonging or family connection, kinship rights and obligations, familial friendship.

whenua land, country, territory, nation, ground.

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DATA AVAILABILITY STATEMENT

The author confirms that the data supporting the findings of this study are available within the article.

ENDNOTES

[1] As of February 2022, the other countries that adhered to the 1978 Act of UPOV were Argentina, Bolivia, Brazil, Chile, China, Colombia, Ecuador, Italy, Mexico, Nicaragua, Norway, Paraguay, Portugal, South Africa, Trinidad and Tobago, and Uruguay. UPOV. (3 November 2021). Members of the International Union for the Protection of New Varieties of Plants <https://www.upov.int/edocs/pubdocs/en/upov_pub_423.pdf> accessed 18 February 2022

[2] *Te Tiriti o Waitangi/The Treaty of Waitangi* is considered the founding document that lays the groundwork for the modern nation of Aotearoa New Zealand. It was signed between the British Crown and Māori *rangatira* (chiefs) on 6 February 1840 in Waitangi, Bay of Islands. See *Treaty of Waitangi Act 1975*. Preamble.

[3] The relevant text states, 'Ko te Kuini o Ingarani ka wakarite ka wakaae ki nga Rangatira ki nga hapu-ki nga tangata katoa o Nu Tirani te tino rangatiratanga o o rātou wenua o rātou me o rātou taonga katoa" (Ko te Tuarua). *Treaty of Waitangi Act 1975*, Schedule 1. Notably, the text of Te Tiriti in English does not translate *tino rangatiratanga* as 'absolute Māori sovereignty', and furthermore it employs a very narrow translation of the concept of *taonga*. The relevant text guarantees to Māori the 'exclusive and undisturbed possession of their lands and estates, forests, fisheries and other properties'. *Treaty of Waitangi* (1840), Second Article. The differences between the English and Māori versions of the text have been widely debated, and are beyond the scope of the present article, whose analysis adheres to the language employed in the *te reo Māori* version.

[4] The term *iwi* (tribe) refers to the largest political grouping in Māori society. *Iwi* frequently consist of several related *hapū* (clans or descent groups). Te Ara Encyclopedia of New Zealand. (n.d.). Tribal organisation <https://teara.govt.nz/en/tribal-organisation/page-1> accessed 18 February 2022.

[5] *New Zealand Plant Variety Rights Bill*. (2021), s 5.

[6] ibid at s 3(b).

[7] ibid at s 3(a).

[8] Specifically, the purposes of the Trans-Pacific Partnership include, among others, to 'promote[] economic integration to liberalise trade and investment [and] bring economic growth…' *Comprehensive and Progressive Agreement for Trans-Pacific Partnership*, opened for signature 8 March 2018, entered into force 30 December 2018. Preamble.

[9] ibid at Art. 18.7(2)(d).

[10] ibid at Annex 18-A(1).

[11] See, for example, R Jördens and P Button, 'Effective System of Plant Variety Protection in Responding to Challenges of a Changing World: UPOV Perspective' (2011) 16(2) JIPR 74.

[12] See, for example, WG Park and JC Ginarte, 'Intellectual Property Rights and Economic Growth' (1997) 15(3) CEP 51.

[13] One approach to understanding *tikanga Māori* is to view *tikanga* as an essential part of *mātauranga Māori*, such that *tikanga* provides the means to put *mātauranga* into practice. It is important to recognise that the ideas and practices of *tikanga Māori* differ from one tribal region to another. HM Mead, *Tikanga Māori: Living by Māori Values* (Huia Publishers 2016). For the purposes of this article, the *tikanga Māori* of Ngāi Tahu *iwi* applies, given that the author resides in Ōtautahi|Christchurch, which is part of the *takiwā* (territory) of Ngāi Tahu. Taking *tikanga Māori* seriously in the context of the dominant legal regimes of Aotearoa New Zealand represents a formidable challenge. As Māori scholars have noted, historically New Zealand laws and policies have been based on Western, liberal beliefs and values, while Indigenous beliefs and values have been marginalised. In this way, attempts have been made to ensure that legal

constructs such as rights make allowance for Māori concepts, including *tikanga*, but in doing so Western ideas have been regarded as 'norm', while Indigenous systems are treated as 'other'. A Mikaere, 'Seeing human rights through Māori eyes' in L. Te Aho (ed.), *Yearbook of New Zealand Jurisprudence* (pp. 53–58) (University of Waikato School of Law 2007). Against this backdrop, recently there has been a growing recognition that three distinct legal systems have existed in Aotearoa New Zealand, with the first being 'Kupe's Law', which was *tikanga Māori*, followed by 'Cook's Law', which was English common law, while a third body of law, 'Lex Aotearoa' began to emerge in the 1980s and continues to evolve today. J Williams, 'Lex Aotearoa: An heroic attempt to map the Māori dimension in modern New Zealand law' (2013) 21 WLR 1. See also J Ruru, 'First laws: Tikanga Māori in/and the law' (2018) 49 VUWLR 211.

[14] The Plant Variety Rights Bill does not expressly state that one of its purposes is to incorporate *tikanga Māori* into the system of intellectual property for plants. Nevertheless, the Bill would require that members of the Māori Plant Varieties Committee (discussed in Parts 3 and 4 of this article) hold appropriate knowledge of *tikanga* to be appointed. *New Zealand Plant Variety Rights Bill*. (2021), s 55(3) <https://www.legislation.govt.nz/bill/government/2021/0035/latest/LMS352239.html?src=qs> accessed 18 February 2022.

[15] It is crucial to avoid romanticising what an Indigenous approach to the governance of human–plant relations might look like in the laws of Aotearoa New Zealand. While the concept of *kaitiakitanga* recognises the existence of relationships of guardianship and care that transcend species boundaries, this is not to say that Māori never intend to use plants for social, cultural, and economic benefit. Instead, the point is that the law should enable *iwi* and *hapū* to realise these benefits in a sustainable and culturally appropriate way. See, for example, L-P Dana and W Hipango Jr, 'Planting Seeds of Enterprise: Understanding Māori Perspectives on the Economic Application of Flora and Fauna in Aotearoa (New Zealand)' (2011) *5*(3) JECPPGE 199.

[16] Beginning in the 1970s, following the success of a Māori rights movement that emerged after the Second World War, the aspiration of Crown–Māori partnership has encompassed numerous areas of political reform, officially aimed at redressing and reconciling legacies of historical and contemporary forms of violence for which the settler-colonial state was responsible. J Terruhn, 'Settler colonialism and biculturalism in Aotearoa/New Zealand' in S Ratuva (ed.), *The Palgrave Handbook of Ethnicity* (pp. 1–17, Palgrave Macmillan 2019).

[17] M Campi, 'The co-evolution of science and law in plant breeding: Incentives to innovate and access to biological resources' (2018) 23(4–5) JIPR 198.

[18] Te Taumata Tuatahi, *Ko Aotearoa Tēnei: A report into claims concerning New Zealand law and policy affecting Māori culture and identity*. WAI 262 Waitangi Tribunal Report. Wellington: Legislation Direct. p. 65 (2011).

[19] ibid at 105.

[20] N Dennis-McCarthy, 'Indigenous Customary Law and International Intellectual Property: Ascertaining an Effective Indigenous Definition for Misappropriation of Traditional Knowledge' (2020) 51 VUWLR 597, 617.

[21] C Bennett and others, 'Mana Whenua Engagement In Crown And Local Authority-initiated Environmental Planning Process: A Critique Based On The Perspectives Of Ngāi Tahu Environmental Kaitiaki' (2021) NZG 63-75.

[22] Te Maire Tau, *Water Rights for Ngāi Tahu: A Discussion Paper* (p. 15, Ngāi Tahu Research Centre 2017).

[23] It is important to note that the concept *mana motuhake* does not appear in Te Tiriti itself. Rather, it is a notion that came to the fore starting in 2007, when the Crown initiated a review of the *Māori Community Development Act 1962*, which had granted statutory recognition and powers to Māori self-government institutions. In response, representatives of a number of *iwi* and *hapū* lodged a claim before the Waitangi Tribunal (WAI 2417). The Tribunal determined that the Crown should accept the recognition of *mana motuhake* in all future administration, policy development, and law reform that impact on institutions established by Māori people for their own self-government. Waitangi Tribunal, *Whaia Te Mana Motuhake|In Pursuit of Mana Motuhake: Report on the Māori Community Development Act Claim* (Legislation Direct 2015). See also R Jones and N Coyle, Self-government (2015) 11 MLR 21.

[24] About 40 *rangatira* signed Te Tiriti on 6 February 1840. By the end of that year, approximately 500 other Māori individuals had signed, including 13 women. New Zealand History. (n.d.). *Treaty signatories and signing locations* <https://nzhistory.govt.nz/politics/treaty/making-the-treaty/signing-the-treaty> accessed 31 January 2022

[25] *Te Tiriti o Waitangi*, *supra* note 3.

[26] I Pool, *Colonization and Development in New Zealand Between 1769 and 1900: The Seeds of Rangiatea* (Springer International Publishing 2015).

[27] *Treaty of Waitangi Act 1975*, Art. 5-6. Initially, the Waitangi Tribunal could not investigate retrospective claims, however, under the *Treaty of Waitangi (Amendment) Act 1985*, the Tribunal can now hear claims arising out of Crown breaches occurring on or after 6 February 1840 (Art. 3).

[28] New Zealand Government. (n.d.). *Find a Treaty Settlement* <https://www.govt.nz/browse/history-culture-and-heritage/treaty-settlements/find-a-treaty-settlement/> accessed 18 February 2022.

[29] See, for example, *Ngāi Tahu Claims Settlement Act 1998*, s 5–6.

[30] For example, the *Ngāi Tahu Claims Settlement Act 1998* describes the relationship that the Ngāi Tahu *iwi* has with the Kaikōura coastal area and the whales that frequent it: 'The well-known rangatira (chief) and brave warrior of the Kāti Kurī hapū of Ngāi Tahu, Te Rakaitauneke, was said to have a kaitiaki whale, named Mata mata, who dwelt in the sea opposite Te Rakaitauneke's home in Tāhuna Tōrea (Goose Bay). Mata mata's sole duty and purpose in life was to do Te Rakaitauneke's bidding, to serve all his needs and to guard him against harm. … After Te Rakaitauneke's death, Mata mata was not seen along the Kaikōura coast for some time, and it was rumoured that he had gone away and died of sorrow at the loss of his master. There were those, however, who remembered Te Rakaitauneke's prediction that after his death Mata mata would only return when one of his descendants was facing imminent danger or death'. ibid at Schedule 100.

[31] Williams, *supra* note 14 at 11–12.

[32] *Resource Management Act 1991*, s 7.

[33] *New Zealand Plant Variety Rights Bill*. (2021), s 3A <https://www.legislation.govt.nz/bill/government/2021/0035/latest/LMS352239.html?src=qs> accessed 18 February 2022.

[34] ibid at s 3(b).

[35] See, for example, I Watson, *Aboriginal Peoples, Colonialism and International Law: Raw Law* (Routledge 2014).

[36] K Peschard, *Searching for Flexibility: Why Parties to the 1978 Act of the UPOV Convention Have Not Acceded to the 1991 Act* (Association for Plant Breeding for the Benefit of Society 2021). p. 37, note 170.

[37] Ibid. See also New Zealand Herald. (August 28, 2019). *NZ growers pay tribute to world-renowned rose breeder Sam McGredy who has died* <https://www.nzherald.co.nz/nz/nz-growers-pay-tribute-to-world-renowned-rose-breeder-sam-mcgredy-who-has-died/NMVSVELK22BTNFXJZBMXTBX64E/> accessed 18 February 2022.

[38] GS Wratt and HC Smith (eds.), *Plant Breeding in New Zealand* (Butterworths of New Zealand Ltd 1983). p.10.

[39] World Intellectual Property Organization. (November 24, 1980). Ratification by New Zealand. UPOV Notification No. 16 <https://www.wipo.int/treaties/en/notifications/upov/treaty_upov_16.html> accessed 18 February 2022.

[40] The periods of protection granted under the *Plant Variety Rights Act 1987* are 23 years for 'woody plants' and their rootstocks, and 20 years for all other kinds of plants. *Plant Variety Rights Act 1987*, Art. 14(2). In contrast, the minimum periods of protection specified in the 1978 Act of UPOV are 18 years for vines, forest trees, fruit trees, and ornamental trees, and 15 years for all other species. *International Convention for the Protection of New Varieties of Plants of December 2, 1961, as Revised at Geneva on November 10, 1972 and on October 23, 1978*. Art. 8.

[41] Wratt & Smith, *supra* note 38 at 9.

[42] Based on a search of the New Zealand Intellectual Property Office database on 18 February 2022 <https://app.iponz.govt.nz/app/Extra/IP/PVR/Qbe.aspx?sid=637792235940895001> accessed 18 February 2022.

[43] Waitangi Tribunal. (July 2, 2011). *Ko Aotearoa Tēnei: Report on the Wai 262 claim released* <https://waitangitribunal.govt.nz/news/ko-aotearoa-tenei-report-on-the-wai-262-claim-released/>.

[44] Te Taumata Tuatahi, *Ko Aotearoa Tēnei: A Report into Claims Concerning New Zealand Law and Policy Affecting Māori Culture and Identity*. WAI 262 Waitangi Tribunal Report (Legislation Direct 2011). p. 63.

[45] Ibid.

[46] Ibid at 68.

[47] Ibid at 63–64.

[48] bid at 64.

[49] Ibid at 71–72.

[50] Ibid at 87.

[51] Ibid.

[52] Ibid at 88.

[53] Ibid at 94.

[54] Ibid.

[55] Ibid.

[56] Te Puni Kōriki, *Wai 262—Te pae tawhiti: Targeted Engagement Report* (Te Puni Kōriki 2020). p. 5.

[57] Ibid at 6.

[58] Ibid.

[59] Ministry of Business, Innovation & Employment. *Māori engagement plan: Review of the Plant Variety Rights Act 1987* (Ministry of Business, Innovation & Employment 2018) <https://www.mbie.govt.nz/assets/f2c13d08fa/pvr-maori-engagement-plan.pdf> accessed 18 February 2022.

[60] Ibid at 1.

[61] Ibid at 4.

[62] Ibid at 6.

[63] Bennett, et al., *supra* note 21 at 72.

[64] Ministry of Business, Innovation & Employment, *Māori Engagement Plan* (n.d.) <https://www.mbie.govt.nz/business-and-employment/business/intellectual-property/plant-variety-rights/plant-variety-rights-act-review/maori-engagement-plan/> accessed 18 February 2022.

[65] Ministry of Business, Innovation & Employment, *Plant Variety Rights Act 1987 Review: Options Stage Consultation Hui* (August 2019) <https://www.mbie.govt.nz/assets/pvr-options-hui-notes-and-report.pdf> accessed 18 February 2022.

[66] Ministry of Business, Innovation & Employment, *supra* note 64.

[67] Ibid.

[68] A Kawharu, 'Process, Politics and the Politics of Process' (2016) 17 MJIL 1.

[69] Waitangi Tribunal, *Report on the Trans-Pacific Partnership agreement* (WAI 2522) (Legislation Direct 2016). p. 13. See also C David-Ives, 'New Transnational Neoliberal Frameworks and Indigenous Peoples: Māori Response to the Trans-Pacific Partnership in New Zealand' (2020) 23 CC 109.

[70] Waitangi Tribunal, ibid.

[71] Waitangi Tribunal, *supra* note 69 at 41.

[72] *Comprehensive and Progressive Agreement for Trans-Pacific Partnership*. (2018). Ch. 29, Art. 29.6.

[73] Waitangi Tribunal, *supra* note 69 at 33.

[74] Ibid at 42.

[75] Ibid at 43.

[76] Waitangi Tribunal, *The Report on the Crown's Review of the Plant Variety Rights Regime: Stage 2 of the Trans-Pacific Partnership Agreement Claims* (Legislation Direct 2020). p. 4-5.

[77] Ibid at 7-8.

[78] Ibid at 8.

[79] Ibid at 41.

[80] *New Zealand Plant Variety Rights Bill*. (2021), s 3(b).

[81] Ibid at s 3(a).

[82] Ibid at s 3(c).

[83] Ibid at s 14.

[84] Ibid at s 30.

[85] Ibid at s 18. Note that the Bill would also grant 25 years of exclusivity for potatoes, which under the 1991 Act of the UPOV Convention are by default entitled to 20 years of protection.

[86] Ibid at s 16.

[87] Ibid at s 15.

[88] Ibid at s 37(a) & 37(b).

[89] Ibid at s 37(c).

[90] Ibid at s 55(3).

[91] Ibid at s 55(2A).

[92] Report from the Parliamentary Economic Development, Science and Innovation Committee on the *New Zealand Plant Variety Rights Bill* (November 19, 2021). p. 6 <https://www.parliament.nz/resource/en-NZ/SCR_117872/9a49cdd4adc820a40ac0bd225db6231d262318d9> accessed 18 February 2022.

[93] *New Zealand Plant Variety Rights Bill*. (2021), s 52(c).

[94] ibid at s 64.

[95] The ability to appeal Committee decisions to the Māori Appellate Court contrasts with the judicial procedures mandated by other New Zealand laws that impact on Māori customary interests. For example, the *Marine and Coastal Area (Takutai Moana) Act 2011* requires claims to be filed in the High Court, which is a judicial body of general jurisdiction. See *Marine and Coastal Area (Takutai Moana) Act 2011*. Art. 98.

[96] *New Zealand Plant Variety Rights Bill*. (2021), s 68A.

[97] Report from the Parliamentary Economic Development, Science and Innovation Committee on the *New Zealand Plant Variety Rights Bill*, *supra* note 92 at 5.

[98] *New Zealand Plant Variety Rights Bill*. (2021), s 53(a).

[99] Ibid at s 53(b).

[100] Ibid at s 54.

[101] According to the historical record, 1769 is the year when Europeans first stood on the shores of Aotearoa New Zealand, when Captain James Cook landed on the east side of the Tūranganui River, near present-day Gisborne. V O'Malley, *The Meeting Place: Māori and Pākehā Encounters, 1642–1840* (Auckland University Press 2012). p. 21.

[102] *New Zealand Plant Variety Rights Bill*. (2021), s 54.

[103] In the Ko Aotearoa Tēnei report, *taonga* species are broadly described as 'the species of flora and fauna for which an *iwi*, *hapū*, or *whānau* (family) says it has kaitiaki relationships'. Te Taumata Tuatahi, *Ko Aotearoa Tēnei: A Report into Claims Concerning New Zealand Law and Policy Affecting Māori Culture and Identity*. WAI 262 Waitangi Tribunal Report (Legislation Direct 2011). p. 65.

[104] *New Zealand Plant Variety Rights Bill*. (2021), s 59.

[105] Ibid at s 60(1).

[106] Ibid at s 60(2)(a).

[107] Ibid at s 61(a).

[108] Ibid at s 61(b).

[109] Ibid at s 60(2)(b).

[110] Ibid at s 64.

[111] Ibid at s 64(b).

[112] Ibid at s 64(a).

[113] Ibid at s 56(c).

[114] Ibid at s 56(d).

[115] Ibid at s 57.

[116] Ibid at s 67.

[117] Ibid at s 67(a).

[118] Ibid at s 67(b).

[119] Ibid at s 67(c).

[120] B Marriner, 'Disclosure of origin in the patents regime: A call to shift towards meaningful engagement on Māori terms' (2021) 51(4) VUWLR 673, 682.

[121] *Comprehensive and Progressive Agreement for Trans-Pacific Partnership*, opened for signature 8 March 2018, entered into force 30 December 2018. Annex 18-A(2).

[122] See, for example, Submission by BLOOMZ New Zealand Ltd to the Parliamentary Economic Development, Science and Innovation Committee. (July 1, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1123/96397b804406ec79d801035fa8fff1316631c062> accessed 18 February 2022; Submission by AJ Park to the Parliamentary Economic Development, Science and Innovation Committee. (1 July 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED925/ac306ed5363cdf9411995375867ea84b4e26ab17> accessed 18

February 2022; Submission by T&G Global Ltd to the Parliamentary Economic Development, Science and Innovation Committee. (July 1, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1140/f08cd1bb64cd4509d42acecaef9a1217a19a4b2f> accessed 18 February 2022; Submission by TopFruit (Pty) to the Parliamentary Economic Development, Science and Innovation Committee. (July 1, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1145/334cc0d86398505a9a4b422cf82bce3c120858da> accessed 18 February 2022; Submission by Waimea Group Ltd to the Parliamentary Economic Development, Science and Innovation Committee. (July 1, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1146/831946633a1ed36c643234246be7c61997ee8564> accessed 18 February 2022; Submission by Zespri International Ltd to the Parliamentary Economic Development, Science and Innovation Committee. (July 1, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1148/7728f3a669a9fb8e385ff35daf41f2eaf89fdd93> accessed 18 February 2022.

[123] Submission by Waikato-Tainui to the Parliamentary Economic Development, Science and Innovation Committee. (July 1, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1175/8d2546e6c5225fdf99d4affeb9e4ff41e2ff74f4> accessed 18 February 2022.

[124] Submission by Wakatū Incorporation to the Parliamentary Economic Development, Science and Innovation Committee. (July 1, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1147/ef7c1dbcf863033dd5a7ebd16baca10be763b5c1> accessed 18 February 2022.

[125] Submission by Professor Jane Kelsey to the Parliamentary Economic Development, Science and Innovation Committee. (June 30, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1128/46b8b93f1c5743ab91bbcb8e3085f931a6c52eda> accessed 18 February 2022.

[126] Submission by Angeline Greensill on behalf of Tainui Hapū to the Parliamentary Economic Development, Science and Innovation Committee. (July 1, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1139/baa6ce33210206c05ce4425fea598f3a5586aee7> accessed 18 February 2022; Submission by Te Kāhui Rongoa Trust to the Parliamentary Economic Development, Science and Innovation Committee. (July 1, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1142/71bb40e5886ec42a1fc2d9ecf68abe6933a79658> accessed 18 February 2022.

[127] Ibid.

[128] *New Zealand Plant Variety Rights Bill*. (2021), s 55(2A).

[129] Ibid at s 55(2).

[130] Ibid at s 57.

[131] Ibid.

[132] Submission to Parliament on the Plant Variety Rights Bill by Te Hunga Rōia Māori. (26 November 2021). p. 2 <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1141/4bc5a2bf8676ed93328df92d4ca9f36541a40235> accessed 18 February 2022.

[133] Ibid.

[134] Submission by Professor Jane Kelsey, *supra* note 125.

[135] Ibid.

[136] *New Zealand Plant Variety Rights Bill*. (2021), s 21(1) & 21(2).

[137] Ibid at s 26.

[138] Ibid at s 27.

[139] Submission by Te Kāhui Rongoā Trust, *supra* note 132.

[140] Submission by Te Hunga Rōia Māori o Aotearoa, *supra* note 132.

[141] The *Convention on Biological Diversity* (1993) requires members to implement measures designed to ensure the conservation and sustainable use of biological diversity, and to enable access to genetic resources subject to fair and equitable benefit sharing conditions (Articles 8, 9, 10, and 15).

[142] The *United Nations Declaration on the Rights of Indigenous Peoples* (2007) states that Indigenous peoples have the right to the resources that they have traditionally owned or otherwise used or acquired (Article 26.1), the right to own, use, develop, and control these resources (Article 26.2), and a right to redress through restitution or just, fair, and equitable compensation where their traditionally owned or used resources have been taken or used without their free, prior, and informed consent (Article 28.2). The Declaration also recognises that Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their resources (Article 29.1), and the

right to maintain, control, protect, and develop their traditional knowledge, including knowledge of the properties of fauna and flora (Article 31.1).

[143] Submission by Hema Wihongi on behalf of Ngā Kaiawhina o Wai 262 to the Parliamentary Economic Development, Science and Innovation Committee. (July 1, 2021) <https://www.parliament.nz/resource/en-NZ/53SCED_EVI_111271_ED1192/1c47b7ee306e7e33dbbf3be61d00795ea173eaff> accessed 18 February 2022.

[144] Submission by Angeline Greensill on behalf of Tainui Hapū, *supra* note 126.

[145] Submission by Hema Wihongi on behalf of Ngā Kaiawhina o Wai 262, *supra* note 143.

[146] Ibid.

[147] Ibid.

[148] See, for example, submission by Professor Jane Kelsey, *supra* note 125.

[149] *New Zealand Plant Variety Rights Bill*. (2021), s 3A.

[150] ibid at s 52.

[151] Submission by Professor Jane Kelsey, *supra* note 125 at 2.

[152] Prominent examples include Ecuador, India, Malaysia, and Thailand, among others. See DJ Jefferson, *Towards an Ecological Intellectual Property: Reconfiguring Relationships Between People and Plants in Ecuador* (Routledge 2020). pp. 53–60.

[153] *New Zealand Plant Variety Rights Bill*. (2021), s 3.

[154] Other significant law reform efforts that are underway pursuant to Te Pae Tawhiti include the *Climate Change Response (Zero Carbon) Amendment Act 2019* and the 2021 Crown Minerals (Decommissioning and Other Matters) Amendment Bill.

[155] For a more detailed discussion, see DJ Jefferson and K Adhikari, 'Intellectual property, traditional knowledge, and native biodiversity: Convention and progression in the Trans-Pacific Partnership' (2021) 27 PB 98.

[156] As Mead (2002) notes, "M[ā]ori of today are dynamic and diverse—some want to pursue global trade—a growing number are entering into business…. Their innovation needs protection. And, our culture needs protection from exploitation and inappropriate usage. Both levels of protection are possible." A Mead, 'Understanding Māori Intellectual Property Rights' in *The Inaugural Maori Legal Forum* <http://news.tangatawhenua.com/wp-content/uploads/2009/12/MaoriPropertyRights.pdf> accessed 18 February 2022.

[157] *Comprehensive and Progressive Agreement for Trans-Pacific Partnership*, opened for signature 8 March 2018, entered into force 30 December 2018. Article 20.13(4).

[158] Ibid at Art. 18.16(2).

[159] B Sherman and RJ Henry, 'The Nagoya Protocol and Historical Collections of Plants' (2020) 6 NP 430.

[160] For a more detailed discussion of these countries' experiences, see K Adhikari and DJ Jefferson (eds.), *Intellectual Property Law and Plant Protection: Challenges and Developments in Asia* (Routledge 2019).

[161] E Tsioumani, 'Beyond access and benefit-sharing: Lessons from the law and governance of agricultural biodiversity' (2018) 21(3–4) JWIP 106.

[162] C Lawson, 'The Breeder's Exemption Under UPOV 1991, the Convention on Biological Diversity and its Nagoya Protocol' (2015) 10(7) JIPLP 526; J Cabrera Medaglia and others, Comparative study of the Nagoya Protocol, the Plant Treaty and the UPOV Convention: The interface of access and benefit sharing and plant variety protection. *Ottawa Faculty of Law Working Paper* (2019-29) (2019); S Roca, 'Compatibility of the intellectual property regime, the Convention on Biological Diversity and the Nagoya Protocol' (2021) 70(4) GRUR Int 349.

[163] The notion of pluriversality has emerged as a political ontological response to the dominance of the universalist way of understanding the world associated with Western (or in context of Aotearoa New Zealand, Pākehā) thought. In this way, rejecting the idea that we live in a universe in favour of a pluriverse acknowledges the coexistence of diverse cosmologies or worldviews, in which Western universalism is but one. A Escobar, *Designs For The Pluriverse: Radical Interdependence, Autonomy, And The Making Of Worlds* (Duke University Press 2017); M Blaser and M de la Cadena (eds.), *A World of Many Worlds* (Duke University Press 2018).

[164] The terms included in this Glossary were adapted, in part, from Te Aka Māori Dictionary. (n.d.) <https://maoridictionary.co.nz/> accessed 18 February 2022. Review of the Glossary was conducted by Lyndon Waaka, Kaiārahi Māori to Kaupeka Ture|the Faculty of Law at Te Whare Wānanga o Waitaha|the University of Canterbury.

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