SUBMISSION

TO:	The Primary Production Select Committee
FROM:	Apiculture New Zealand
SUBMISSION ON:	The Inquiry into Honey
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EXECUTIVE SUMMARY

ApiNZ's vision for our sector is that:

> *"The New Zealand honey industry is a vibrant and growing contributor to New Zealand's economy, nationally respected, internationally recognised."*

New Zealand's Apiculture sector is currently experiencing strong growth and will continue to deliver strongly for New Zealand, so long as we work together on key issues while we protect and promote our resources. Over the past ten years, increases in total honey export earnings have been running at 23% year on year, to reach $330m as at the end of June 2017.

New Zealand's Apiculture industry is estimated to be worth well over five billion dollars to the New Zealand economy annually. This compares to dairy exports of around $17 billion, meat and wool exports of around nine billion dollars annually, and log exports of around six billion dollars.

To help support growth in our industry, ApiNZ has focused its work programme around four priority areas that directly relate to the areas of inquiry raised by the Primary Production Select Committee. These are outlined below, along with ways in which we require Government assistance to support our industry.

New Zealand must lift biosecurity measures and protect bee health

- Our industry faces increasing biosecurity threats, which require increased Government commitment and resource. This means:
    - Greater targeting of specific threats.
    - Greater collaboration between industry and Government.
    - More research to ensure that threats and their impacts are better understood.
- In acknowledging the active role that industry needs to play, a priority for ApiNZ is the signing of a Government Industry Agreement (GIA) to ensure the apiculture industry is actively involved in the biosecurity decision-making process.
- New Zealand must maintain its ban on honey and bee product imports from countries of known risk. This remains one of New Zealand's best protections against biosecurity threats.
- New Zealand must maintain funding for the annual Colony Loss and Survival survey. ApiNZ does not support the Government's decision to end funding for this survey.
- Stronger Government support and action is needed on pesticide use; more coordinated and integrated research on pesticides and their impact in New Zealand.

Efforts must continue to build and maintain consumer trust and market confidence

Mānuka honey science definition

- ApiNZ seeks commitment from Government to work closely with industry on wider issues affecting the enforcement of the definition within New Zealand and adoption of the definition in other markets.

- The definition requires a programme of science-based continuous improvement to validate concerns raised and introduce changes.

- The formation of an Industry and MPI Science Working Group is underway and supported by industry. It now needs full commitment and resources from Government to ensure that we can have confidence in this definition moving forward.

Indigenous issues relating to branding and international branding

- ApiNZ supports the work of the Mānuka Honey Appellation Society to trademark the name mānuka honey to ensure that the term is only used on genuine mānuka honey, produced in New Zealand.

- This includes recognising that the word 'mānuka' is a Māori name which should be protected for the benefit of all New Zealanders.

- We will require ongoing Government support to ensure that New Zealand protects this valuable indigenous resource to realise its full potential and deliver ongoing value to New Zealand.

- ApiNZ recognises that Māori engagement and involvement are critical to advancing a sustainable apiculture industry. We progress key Māori policy initiatives and issues via ApiNZ's Māori Engagement Focus Group, the Miere Group.

New Zealand needs to focus more strongly on developing the skills of its workforce

- As our sector grows, so do the opportunities for increased jobs and employment.

- ApiNZ has developed an apprenticeship scheme to attract and support New Zealanders into beekeeping to meet the increasing demand and lift industry skills.

- Apiculture needs to be included in conversations about immigration priorities if we are to sustain our current growth levels. We expect immigration to continue to play a strong role in supplying required staff levels in the short to medium term.

Our industry requires ongoing investment to promote sustainable growth

- ApiNZ intends to seek a mandate for a commodity levy to fund key areas of sustainable industry development in the following areas:
    - **Protection** – biosecurity and bee health
    - **Value creation** – research and leveraging research funding
    - **Growth** – ensuring market access and identifying opportunities for growth.

- This will help ApiNZ meet its industry needs, however, Apiculture will continue to need strong levels of ongoing Government support to ensure that growth aspirations are met sustainably. This is particularly the case for investment in biosecurity and research.

Additional Priorities

Security issues

- Given the growth of our industry and related criminal activity, ApiNZ urges more Police resources in this area, while recognising the need to also lift security preparedness by its members.

Apiculture in New Zealand

KEY FACTS

New Zealand honey production for the year to June 2017 has been estimated at **14,855 tonnes**, **down 25%** on the previous year.

Significant periods of unsettled weather, above average rainfall, and cool temperatures were the main reasons for this decline.

Total registered hives at 30 June 2017 were **811,357,** with close to 8000 registered beekeepers (commercial and non-commercial) in New Zealand.

These numbers have **doubled** in the past five years and look set to continue, with 10% growth in the last eight months alone

Honey export earnings to 30 June 2017 were **$330 million**, **up 5%** on the previous year, an almost ten-fold increase over ten years **($38.4m in 2006)**.

The UK and China are New Zealand's largest export markets.

1. INTRODUCTION

1.1. Apiculture New Zealand (ApiNZ) welcomes the opportunity to make this submission to the Primary Production Select Committee Inquiry into Honey. The committee has asked submitters to cover:

- The definition of mānuka
- Health issues for bees
- How security and workforce issues affect the honey industry
- Indigenous issues relating to the branding of honey
- International branding.

1.2. Strong growth in New Zealand's apiculture sector is delivering many opportunities for New Zealand. To ensure that our sector is sustainable and continues to deliver, it is important that this growth is managed sustainably and in partnership with key stakeholders.

1.3. New Zealand's Apiculture industry is estimated to be worth over five billion dollars to the New Zealand economy annually. This figure was established 15 years ago. Since then the value of horticulture has doubled and our sector has grown strongly. This value is derived from an increasingly diverse revenue stream from honey and bee products, as well as increasing demand from other primary based sectors, notably for pollination services spanning both agriculture and horticulture.

1.4. For the mānuka honey industry alone, there is a Government lead target of $1.2 billion in value by 2028.

1.5. Over the past ten years, increases in total honey export earnings have been running at 23% year on year, to reach $330m as at the end of June 2017.

1.6. This growth is at risk, unless all parties work together to ensure that key aspects of our sector are supported and aligned. It was a strong desire of Government to have a single strong peak industry body, which was established in June 2016 with the formation of ApiNZ. This remains a critical requirement for industry stability.

1.7. ApiNZ is concerned that our future success will be unnecessarily constrained unless we see an improvement in the way in which industry and its regulators work together. Regrettably, the approach that MPI took establishing a scientific definition for mānuka honey fell short of meeting good regulatory process. While we do not want to re-litigate these issues here, we do submit that we expect a much stronger level of genuine engagement from our regulators going forward. ApiNZ will continue to play a strong role to ensure this happens, but we rely on our stakeholders and partners to share this vision and to do the same.

1.8. Bee health and biosecurity also represent significant threats to our industry. A healthy bee population is critical to New Zealand's primary sector, New Zealand's food supply, and our ecosystems. We must therefore, maintain and enhance efforts to understand the health of New Zealand's bee population and ensure its ongoing health and resilience. Once again, effective partnerships and engagement with our regulators, on-shore and off-shore, are key to ensuring that this happens.

1.9. This submission focuses on opportunities for our sector, the issues and challenges we face, ApiNZ's work programme, and areas where our industry requires support.

2. ABOUT APICULTURE NEW ZEALAND

2.1. ApiNZ is the peak national body representing the apiculture industry in New Zealand. ApiNZ aims to support and deliver benefit to the New Zealand apiculture industry by creating a positive industry profile, business environment, and opportunities for members.

2.2. ApiNZ is helping to progress key industry priorities, both through its management team and via the work of five industry focus groups which are representative of its membership base. These focus groups are:

- Education and Skills
- Standards, Compliance and Regulatory
- Science and Research
- Biosecurity and GIA
- Māori Engagement.

3. BEE HEALTH AND BIOSECURITY

- As our industry faces increasing threats to our bee colonies, our ability to respond effectively requires increased Government resources, targeting specific industry threats, and requiring greater collaboration between industry and Government.
- Areas where industry requires support for additional research include: the impact of pesticides in New Zealand and the ongoing development of mānuka honey science.
- The health of New Zealand bees is closely tied to role of biosecurity which is critical in safeguarding New Zealand's apiculture industry and ensuring the economic viability of the wider primary sector, including horticulture.
- Maintaining New Zealand's ban on honey imports remains one of our best defence mechanisms against new biosecurity threats.
- A priority for ApiNZ is the signing of a Government Industry Agreement (GIA) to ensure the apiculture industry is actively involved in the decision-making process on biosecurity matters with Government and other industry partners.
- We urge that the Government continue funding for the annual New Zealand Colony Loss and Survival Survey. Good bee health is the foundation of our industry and requires regular monitoring to target and direct our bee health priorities.
- We ask that the Government consider how its one billion tree's programme could be used to assist planting trees to promote enhanced bee habitat.

New Zealand must maintain a strong biosecurity focus

3.1. Strong biosecurity systems play a key role in the ongoing protection of our bee colonies and contribute to a thriving beekeeping industry. Despite New Zealand's strong biosecurity efforts, we must remain vigilant to new and emerging threats.

3.2. To continue to protect our country from pests and disease, it is critical that biosecurity is well-funded and supported by Government, key threats are treated seriously, and their prevention resourced appropriately with thorough screening and testing. Also, to prevent any arrival at the border, biosecurity must be supported by strict reinforcement of biosecurity requirements.

3.3. The Ministry for Primary Industries (MPI) represents the front-line of protection. MPI's role is imperative to the continued safety of our bees from exotic threats. One mistake has the potential to seriously affect bee health, and therefore our businesses, through loss of bee pollination services, product supply, or closed market access.

Key biosecurity threats

3.4. There are many threats from which we need to protect our bees. Some of these include:

- Small Hive Beetle
- Israeli Paralysis Virus

- European Foulbrood Disease
- Parasitic Fly (Braula coeca)
- Tracheal Mite (Acarapis woodi)
- Asian Mite (Tropilaelaps clareae)
- African and Africanised honeybees
- Cape Honeybee (Apis mellifera capensis)
- Other exotic Apis species such as the Asian Honeybee (Apis cerana).

3.5. The biosecurity risk of imported bee products entering New Zealand needs to be a primary focus. The impact of their entry on our bee health (stock) would be devastating and we have already identified existing risks around entry (particularly through online channels) with MPI, highlighting the need for greater resources and monitoring of online channels.

3.6. In many cases, the greatest incursion threats are microscopic in the form of viruses or spores. For example, honey can easily harbour the spores of European foulbrood (Melissococcus plutonius) or viruses such as Israeli Acute Paralysis Virus, which are not currently present in New Zealand.

3.7. Another scenario that would possibly be far more devastating for beekeepers, would be the consequences of the Small Hive Beetle (Aethina tumida) larvae arriving in New Zealand. This could happen as easily as a handful of larvae-infested earth jammed under a pallet.

3.8. These, and other threats (for example, Myrtle Rust) reinforce the need to continue a strong biosecurity focus on bee-related pests and to ensure that adequate resources are being allocated to managing biosecurity risks appropriately.

Government Industry Agreement (GIA)

3.9. Our ability to respond effectively to incursion risk requires both adequate resourcing and a collaborative approach with Government, one that considers both immediate response and long term management, including investment in research.

3.10. We recognise the need for industry to be involved in biosecurity, but currently we have a limited say in deciding how the biosecurity needs of our members are met. We need a partnership with Government to achieve this through a Government Industry Agreement (GIA). This will ensure our industry is actively involved in the decision-making process, and at 'the table' when decisions affecting our industry are made by other related-industry groups.

3.11. A recent survey of ApiNZ members and other registered beekeepers showed overwhelming support for a Government Industry Agreement (GIA) as the preferred direction required to protect the future of our industry in biosecurity matters.

3.12. There are many reasons why we consider a GIA to be imperative, including:

- The apiculture industry has a huge investment to protect.
- The whole industry depends on the health of our bees.
- There are many biosecurity risks that can detrimentally affect our bees, therefore we need to be in a position where our industry knowledge and expertise is an active part of any biosecurity decision-making process.
- Apiculture is a vital component of larger horticulture and farming industries, especially regarding pollination.

- We need to be in control of our own costs.

3.13. As part of the GIA process, consideration needs to be given to other primary industries that depend on our bees for the pollination of their crops. As recognised beneficiaries, they also have a vested interest in maintaining the good health of our bees and could potentially be a party to biosecurity response cost sharing, involving future apiculture operational agreements.

3.14. These industries, our primary business partners, have an expectation that the apiculture industry will also become a GIA signatory.

3.15. Due to the nature of our industry, we also need to be aware of the threats from biosecurity incursions which do not affect us directly but will affect hive movements and access. For example, an outbreak of foot-and-mouth disease would mean that we would not have access to our apiaries on affected farms. We also need to be wary of future implications to our livelihoods and businesses from response decisions made following incursions such as myrtle rust or similar land-based incursion incidents.

New Zealand must continue the New Zealand Colony Loss and Survival Survey

3.16. For the past three years, ApiNZ has partnered with MPI and Landcare Research in conducting the first internationally recognised part of an international-based survey programme investigating New Zealand bee health issues. The survey is called the NZ Colony Loss and Survival survey which aims to monitor bee health. This survey is funded by MPI and has gained international recognition[1].

3.17. MPI has indicated that they will no longer fund this annual survey. In our view this is short-sighted as the NZ Colony Loss and Survival Survey is a vital tool for understanding the health of our bee population and identifying key threats early. Many of our members have given extensive in-kind support for NZ Colony Loss and Survival Survey over the past three surveys. Discontinuing the survey now reflects poorly on the value placed on these efforts.

3.18. The 2015 and 2016 national survey show that beehive loss is low compared to other countries with only 9.78% colony loss, compared to 12% in the northern hemisphere for the 2016 year. The results from the 2017 colony loss survey are due in March 2018.

3.19. At face value, the results confirm that New Zealand has a healthy bee population however we know that there are a suite of contributing factors comprised of pathogens, pests such as varroa, pesticides, and reduced bee forage that adversely collectively impact bee health medium to long term.

3.20. For that reason, it is important this survey continues, and with funding now at an end (or being reviewed), we strongly urge Government to consider ongoing funding of this critical project, at least until an industry levy is established to support industry sustainability.

[1] Colony Loss Survey - Winter 2016 Honey Bee Colony Losses in New Zealand. P Brown[1], LE Newstrom-Lloyd[2], BJ Foster[3], PH Badger[4], JA McLean accepted for publication in the Journal of Apicultural Research 180112

Pesticide use and impacts on bee health

3.21. The use of pesticides and their potential impact on bees is an area where we are seeing growing public interest. ApiNZ works closely with regulators, such as the Environmental Protection Agency (EPA) and MPI to identify and understand key issues and risks in this area. We also work

3.22. closely with regulators to ensure the public and landowners understand their responsibilities in ensuring safe pesticide use around bees.

3.23. Many of our native honeys are wild gathered crops such as mānuka, rewarewa, rata ,and tawari, are harvested by and large from hill country and bush which is not affected by pesticide use. In addition, there are many differences in the way in which neonicotinoids and other systemic pesticides are used in New Zealand. The differences include:

- The type of crops grown
- The way we grow our crops
- Our regulatory framework

3.24. New Zealand does not have its own research to understand the long-term effects of these pesticides and their metabolites on our own environment, let alone to mitigate any adverse outcomes from them.

3.25. New Zealand also has no research to quantify the number of neonicotinoids and other pesticides used in New Zealand. In this respect we are behind many of our trading partners, particularly in Europe. There is clearly a level of sufficient international science on the adverse effects of neonicotinoids to warrant a scientific investigation into their build up in our soils and impacts on the environment[2].

3.26. In developing this research, we need to recognise that New Zealand's situation is different to that of other jurisdictions. This means that it isn't helpful or right to simply apply the findings of international research to New Zealand's situation.

3.27. There are two additional areas of key concern;

1) The large number of products applied in a wide and dispersed manner over New Zealand crops that are exempt from MPI approvals under the Agricultural Compounds and Veterinary Medicines Act 1997

These include Adjuvants and Foliar applied nutrition and plant health products. Any of these could present a risk to our trade in bee products, bee security, and to food safety. Of major concern is the widespread use of surfactants used in spray tank mixes as spreaders, penetrants, and stickers, which have no eco toxicological data supporting their wide use in the environment. Their use is increasing, particularly with aerial application. Examples of these losses have been experienced with the use of herbicide spraying of flowering gorse and with pasture renewal

[2] Environmental fate and exposure; neonicotinoids and fipronil. J.-M. Bonmatin & C. Giorio & V. Girolami & D. Goulson & D. P. Kreutzweiser & C. Krupke & M. Liess & E. Long & M. Marzaro & E. A. D. Mitchell & D. A. Noome & N. Simon-Delso & A. Tapparo. 2015.

while bees are foraging on these sources leading to major localised impacts on hives within foraging range.

2) The malicious use of pesticides to kill bees

It concerns us that insecticides marketed for the control of fleas in dogs and cats can end up in sugar mixed baits to kill wasps but inadvertently and sometimes deliberately, kill honey bees. Analysis of dead bees in bee kills regularly shows these chemicals as being present. We need stronger product stewardship guidelines to be followed by the pesticide industry to prevent this misuse.

Trees for Bees and the one billion tree's planting programme

3.28. Planting trees to support bees promotes direct economic benefits from increased bee activity as well as supporting the Government's aspirations for regional economic development. ApiNZ would like to work with the Government as it develops its Billion-Tree Planting Programme.

3.29. There is opportunity with the Government's one billion trees planting programme to expand the current focus on a predominance of pine plantation towards achieving some win-win situations with landowners in the choice of trees for riparian management, erosion control, shade, natural habitat, and in some cases, high quality timber, while providing a vital link in for pollination security and honey production. There is also the opportunity to extend the project to include mānuka plantations.

3.30. Creating a supportive environment for bees to thrive provides critical supplies of pollen and nectar, allowing hives to build up sufficient strength to provide pollination services and a honey crop.

3.31. Many of ApiNZ members are founders of the successful Trees for Bees research project **http://www.treesforbeesnz.org/home**. This research has to date identified a wide range of native and exotic species of trees that provide good levels of protein in pollen and nectar that are vital to sustain bee health particularly in the autumn and spring periods when there is often a shortage of pollen.

3.32. To date, the Trees for Bees project has some 22 demonstration farms in a variety of situations and farm types that provide a good practical working repository of knowledge on how to implement the inclusion of Trees for Bees within the proposed Billion Trees Project.

American Foulbrood Management Programme (AFB)

3.33. American Foulbrood (AFB) is the most serious honey bee disease in New Zealand and world.

3.34. The role of ApiNZ as the management agency for AFB Pest Management Plan is to ensure the objectives and obligations as set out by the Biosecurity Act are fulfilled. It ensures this is achieved via the AFB Pest Management Board.

3.35. We have read and support the submission made by the AFB Pest Management Board.

More resources and research are required to manage Varroa

3.36. The parasitic Varroa Mite is the most serious pest of honey bee colonies worldwide.

3.37. All beekeepers manage Varroa in hives with miticides and other measures, incurring significant costs as a result.

3.38. In many parts of the world, Varroa mites have become resistant to the standard miticides and there is evidence that this is now occurring in New Zealand. This represents a major threat to our industry. Finding new strategies to manage resistant mite populations is critical.

3.39. New Zealand requires a more an integrated research approach and additional funding to effectively manage this parasite. Research is currently underway, aimed at improving bee genetics and mite resistance to miticides, however, current levels of funding and research are not regarded as sufficient.

3.40. The Varroa mite was first detected in New Zealand in 2000 and is endemic throughout New Zealand, apart from the Chatham Islands. By piercing the bee's cuticle, the mite introduces viruses such as the Deformed Wing Virus, which usually result in colony death. Bees that are under stress from Varroa are also more susceptible to infection of all kinds.

Bee health and good practice

3.41. Rapid industry growth has brought with it many key challenges, including, multiple new entrants, pressure on resources, and (in some areas) over crowding. It is essential to bee health and the sustainability of this industry that all industry participants have a high awareness of good beekeeping practices.

3.42. To help manage issues relating to rapid industry growth and to help educate all New Zealand bee keepers, ApiNZ has developed an industry Code of Conduct[3]. ApiNZ members are expected to adhere to this Code of Conduct and it is available on our website for all beekeepers to refer to.

3.43. Specific pressures that have the potential to impact on bee health include:

- Locating bees near boundaries and deriving income from other people's property/investment/resource.
- Hives being brought into areas without regard for existing stock levels. This has potentially negative impacts on existing operations and drives generally poor conditions for bee health.

3.44. ApiNZ has been working with Local Authorities across the country as they update relevant bylaws in relation to boundary practices, recognising this will need consistency at a national level. We have ensured that they include references to principles outlined in ApiNZ's Code of Conduct into beekeeping practice.

3.45. The ApiNZ Board and members, through industry workshops, have discussed how we could proactively manage stocking rates. This is a work in progress with discussions ranging from the recommendation of legislation to enforce ethical guidelines, to the provision of basic education in animal husbandry linking overstocking, bee health and sustainability.

[3] https://apinz.org.nz/wp-content/uploads/2017/02/ApiNZ-Beekeeper-Code-of-Conduct.pdf

4. THE DEFINTION OF MĀNUKA HONEY

- The Government-regulated mānuka honey science definition provides an initial stake in the ground for industry and consumers. To ensure continuous improvement, ApiNZ urges the following:
    - A formalised and explicit commitment to agreed, joint work programmes between industry and government that ensures the science is international best practice; the definition itself is 'fit for purpose' and universally supported.
    - A robust process that includes access to, and understanding of, all relevant science, including peer reviewed, published science.
    - An understanding of the economic impact of the definition. A comprehensive Economic Impact Assessment needs to be undertaken to accurately inform decision making.
    - A timeline from Government committing to legal enforcement within New Zealand.
- Consumer trust and market confidence are critical to the success of our industry. New Zealand must continue to work hard to maintain both if we are to meet the needs of our consumers and trading partners, and therefore deliver on our growth aspirations. Our consumers expect safe and genuine product, backed up by a transparent and robust quality assurance and regulatory framework.
- Foreign regulators and trading partners also need confidence in the work of our regulators, including the our mānuka definition before they will accept it and apply it within their own marketplace.

New Zealand mānuka honey

4.1. New Zealand mānuka honey exports are estimated at around $260 million per annum with strong investment and research going into value-add products including new medical products and supplements. This is projected to increased more than quadruple, to $ 1.2 billion, over the next 10 years.

4.2. With the burgeoning success of mānuka honey, there has been a growing recognition of the need for a robust definition of New Zealand mānuka honey to underpin industry based initiatives to protect and grow the sector – a definition that is clear on what mānuka is, and isn't, which gives consumers confidence in the integrity and authenticity of the product. A definition which is enabled by regulation, and is recognised and enforceable in overseas markets and jurisdictions by counterpart regulatory, trade, and consumer protection agencies.

ApiNZ supports the development of a scientific definition for mānuka honey

4.3. ApiNZ supported MPI's goal to develop a regulatory, science-based definition for mono-floral and multi-floral mānuka honey, sharing its stated objective that "the science definition is essential to maintain New Zealand's premium position in overseas markets and for the continued growth of our export honey industry."

4.4. ApiNZ also supported MPI's criteria for the incorporation of chemical markers in a definition, including that they be abundant, stable, characteristic, unique, and discriminatory in the honey sourced from the nectar of Leptospermum scoparium, not easily able to be synthesised to minimise the potential for adulteration. ApiNZ notes that some of the markers selected will be found to be deficient against at least one criterion. We therefore submit that there needs to be commitment to an on-going science programme to overcome these challenges.

4.5. ApiNZ's June 2017 submission on the draft definition welcomed the overall approach in incorporating chemical markers but flagged these and a number of other issues including the proposed DNA test producing false negative results for the honey that would by another measure be considered high-purity mānuka honey, and concern that the proposed chemical markers would not accurately discriminate mānuka honey.

Significant work and investment is required to progress the definition and develop this market

4.6. Today, with the new definition in place, ApiNZ continues to emphasise the need for a genuine and explicit commitment by Government to work collaboratively with industry and have a process in place for continuous improvement around the science, including the application of new technology that will be adopted in the market by offshore customers and regulators.

4.7. This is currently being formalised through the Industry and MPI Mānuka Honey Science Group and will include key factors that industry has raised as critical to a robust science programme including; monitoring the performance of the current definition, understanding regional and seasonal variability in the chemical markers, a full national sample library, and evaluation of new science and technology.

4.8. ApiNZ notes the process surrounding the Government science definition for mānuka honey has been unnecessarily challenging and protracted, and we would urge the PPSC to support the following industry requests to avoid a repeat of this experience:

- **Ongoing effort to develop science and technology is required**

  We are pleased to see the formation of MPI's Mānuka Honey Science Group. Science and technology is constantly evolving and the definition needs to be 'Fit for Purpose.' We need explicit undertakings from government that MPI will commit to ongoing consultation and continuous improvement concerning the incorporation of evolving best practice science, optimal chemical markers, new technologies (e.g., NMR) which will require agreement on, and adoption of a transparent and effective change control process.

  Overseas regulators and jurisdictions require evidential level science, with its application referenced back to a validated national database of representative verified samples as a basis to enforce standards. If the science incorporated in the definition is open to question or challenge (which has already commenced), overseas regulators will continue to defer from pursuing enforcement action. Regulators for example, do expect that product is consistently 'true to label' through the declared shelf life of the product, including that the nominated markers are stable through the declared shelf-life.

- **Work needs to take place to fully understand the economic impact of the definition**

  A comprehensive Economic Impact Assessment needs to be undertaken to accurately inform ongoing decision making relating to this process.

There is currently minimal understanding of how the definition will impact quantitatively either regionally or nationally, other than some summary analysis developed by industry stakeholders. This is not a sufficient basis from which to progress a change as comprehensive as this.

Growth is ultimately a function of market demand. There is no analysis of the current drivers of consumer demand and the preparedness of consumers to pay a premium for mānuka honey, nor how this will be impacted by the new definition

MPI has also failed to accurately consider how this work will impact Māori economic development. Adverse economic impact on the mānuka sector will negatively impact the achievement of all industry and government growth objectives, including Māori economic development.

- **Ongoing performance monitoring of the definition**

  MPI and industry embarked on their respective science programmes with the over-arching objective being able to verify the authenticity of mānuka honey consistent with Codex, and that the retail product was 'true to label'. KPI's need to be established to objectively measure the performance of the definition and its implementation in terms of achieving regulatory and industry objectives, with appropriate governance oversight.

- **Ongoing consultation**

  Beyond any natural justice requirement to consult with affected stakeholders in the case of mānuka honey, the Crown has concurrent obligations to consult with Māori – as directly impacted economic entities (business owners, investors and similar) as guardians of large parts of the national 'mānuka estate (i.e., landowners) and as having Whakapapa over the word mānuka itself. Accordingly, the government and MPI have specific obligations under the Treaty of Waitangi to consult with Māori.

- **Thinking beyond mānuka**

  New Zealand has a suite of other unique and distinctive native mono-floral honeys, including for example rewarewa, kamahi, pohutukawa, kanuka and others – each with their own attributes and benefits, and story to tell. The opportunity for a unique product basket of native New Zealand honeys, leveraging off the success of mānuka, is obvious. Exploiting this opportunity will depend on whether or not we succeed with establishing the definition and standard for mānuka honey and transferring the model for authenticity and value to these other floral sources.

Additional market dynamics

4.9. The mānuka definition is only relevant to product exported from New Zealand. Sales that are currently excluded from the definition include:

- All product sold in New Zealand
- Sales to tourists and through on-line channels (estimated to be 30% of sales)
- All honey that that is subsequently blended, packed and labelled offshore.

4.10. This leads to a patchwork of product definition and offers in international markets. This is not sustainable and will do long term harm to New Zealand's mānuka product.

4.11. To be adopted in foreign markets we need to demonstrate a commitment to applying it domestically within New Zealand. ApiNZ requests a timeline from Government committing to legal enforcement within New Zealand.

5. INDIGENOUS ISSUES RELATING TO THE BRANDING OF HONEY

- ApiNZ supports the work of the Mānuka Honey Appellation Society to trademark the name MANUKA HONEY to ensure that the term is only used on genuine mānuka honey produced in New Zealand. It supports the view that the word 'mānuka' is a Māori name which should be protected for the benefit of all New Zealanders.
- ApiNZ recognises that Māori engagement and involvement are critical in advancing a sustainable apiculture industry. ApiNZ progresses key policy initiatives and issues via our Māori Engagement Focus Group, the Miere Group.

Mānuka Honey Appellation Society

5.1. ApiNZ supports the work of the Mānuka Honey Appellation Society to trademark the name mānuka honey to ensure that the term is only used on genuine mānuka honey produced in New Zealand.

5.2. Securing the name will give consumers greater confidence that honey purchased anywhere in the world which bears the mānuka honey name, will be what it claims to be – sourced from the nectar of *Leptospermum scoparium* from New Zealand.

5.3. The increasing global demand for mānuka honey is resulting in a variety of other honeys from different parts of the world claiming to be mānuka honey. This threatens to undermine the success of New Zealand's mānuka honey product.

5.4. Genuine mānuka honey is sourced from the nectar of *Leptospermum scoparium*, which is found almost exclusively in New Zealand. In addition, the word 'mānuka' is a Māori name which should be protected for the benefit of all New Zealanders.

5.5. It is vital that we safeguard the heritage and the provenance of such an iconic honey which is so intrinsically identified as being from New Zealand.

6. WORKFORCE AND SKILLS

- Robust growth in the sector has seen a strong increase in demand for qualified staff. We estimate that New Zealand requires around 2000 qualified beekeepers based on current hive numbers. We are currently well short of this.
- ApiNZ has developed an apprenticeship scheme to help attract and support New Zealanders into beekeeping to meet the increasing demand and lift industry skills.
- The apiculture industry in New Zealand provides a significant opportunity for Māori economic development, including regional development and employment opportunities.
- While there is a strong focus on domestic skills and training, ApiNZ expects that immigration will continue to play an important role in ensuring that the sector has access to sufficient staff to meet its needs and continue on its current growth path.

Supporting growing workforce demands

6.1. The significant growth of the New Zealand apiculture industry has seen a shortage of skilled workers across the spectrum of skills, from experienced beekeepers to scientists and researchers involved in innovation and new product development.

6.2. Working with both skills development and immigration will give our industry confidence to invest while also developing the skills and training for their staff.

6.3. ApiNZ understands the current focus on immigration levels and the focus on ensuring that we access skilled migrants in areas where there are labour shortages. In the short to medium term at least there are shortages across most areas in our sector. Therefore, ApiNZ requests that we be included in conversations about immigration levels.

New Zealand Apprenticeship in Apiculture

6.4. ApiNZ has developed an apprenticeship scheme (New Zealand Apprenticeship in Apiculture) to attract and support New Zealanders into beekeeping to meet the increasing demand and lift industry skills. This scheme is currently being piloted and tested.

6.5. This work has been led by ApiNZ, along with its dedicated Education and Skills Focus Group. The Focus Group has worked closely with Primary ITO, the national agency that supports the primary sector with training, to develop initial draft content which is currently with the New Zealand Qualifications Authority for approval.

6.6. The scheme has been designed to:

- Build a skilled beekeeping workforce to overcome current and expected ongoing shortages of skilled staff to meet increasing demand
- Lift industry skills, including more consistent beekeeping practices, to ensure better bee health and compliance
- Attract young New Zealanders to the beekeeping profession.

6.7. ApiNZ expects that this will help to meet skills shortfalls and provide a quality, consistent and well recognised apprenticeship scheme.

7. INDUSTRY INVESTMENT TO SUPPORT SUSTAINABLE GROWTH

- Increased investment in the industry is imperative if we are to continue to meet growth expectations sustainably.
- ApiNZ intends to seek a mandate for a commodity levy to help fund key areas of sustainable industry development in the following areas:
    - Protection – biosecurity and bee health
    - Value creation – research and leveraging research funding
    - Growth – ensuring market access and identifying opportunities for growth.
- Even with a levy in place, partnership with Government will be critical to progress key focus areas, particularly in the areas of biosecurity and research.

A commodity levy to fund industry investment

7.1. We will be looking for Government support in implementing the Commodity Levy, one that is fair and equitable across all industry and aimed at supporting the long-term success of the industry. This is a priority for ApiNZ heading into the 2018 year.

7.2. As our industry has grown (880,000 registered beehives in 2017 compared with 400,000 five years ago; 8000 beekeepers compared with 4000 five years ago), long-term, significant investment is needed to maximise the growth opportunities, while maintaining a healthy bee population.

7.3. ApiNZ is a voluntary organisation with limited funds. This makes undertaking expensive work programmes, for example, the New Zealand Colony Loss and Survival survey, is beyond our financial capability.

7.4. ApiNZ will be seeking an industry mandate to collect levies to invest in critical industry activities such as research and development, biosecurity and bee health, industry training and education, and market access and opportunities. This will address some of the issues around the need for more research and a biosecurity investment as outlined in this submission, however, most programmes, particularly those relating to biosecurity and research, will require an ongoing partnership and support with Government.

8. SECURITY

- ApiNZ works closely with its members and the NZ Police to help prevent and respond to beehive theft.
- Given our high levels of growth and evidence of increased criminal activity, ApiNZ urges more Police resources in this area, while recognising the need to also lift security preparedness by its members.

8.1 Beehive and honey theft has become increasingly prevalent[4] throughout New Zealand and is estimated to cost industry millions of dollars each year. The increasing value of New Zealand honey, particularly for mānuka honey, is a key factor driving this theft, making beehive and honey theft attractive to organised crime.

8.2 These are serious crimes, and for beekeepers the loss of their bee livestock is devastating. Beekeepers have also raised their concern around personal safety for themselves and their staff, particularly in isolated rural areas.

8.3 ApiNZ has worked closely with NZ Police to lift their knowledge in how they deal with beehive and honey theft, and while NZ Police are more responsive and have developed initiatives with ApiNZ as outlined below, we have urged Police to devote more resources to address this issue.

8.4 Key activities ApiNZ has supported with NZ Police include:

- Improving the intelligence held on beehives, honey and those stealing them, as well as better investigative methods when the theft does occur
- Developing a regional contact database of beekeepers for NZ Police to support their inquiries and provide reach to the wider beekeeping community.
- Working with existing Rural Crime prevention networks (via NZ Police and MPI) to share knowledge and information.

8.5 In addition, NZ Police are working on a centralised database to make sure that information about thefts are shared more efficiently with Police around the regions.

8.6 ApiNZ keeps its members updated on theft and investigations around the country as well as using its monthly NZ Beekeeper Journal to outline preventative measures and increasing security.

[4] NZ Police report 228 report beehive thefts over May to Dec 2017.