



APICULTURE
NEW ZEALAND

SUBMISSION

TO: Ministry for Primary Industries
Myrtle Rust Strategic Advisory Group

FROM: Apiculture New Zealand

SUBMISSION ON: Myrtle Rust Science Plan

DATE: 29 May 2019

CONTACT DETAILS: Apiculture New Zealand
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- 1.1. Apiculture New Zealand (ApiNZ) welcomes the opportunity to make this submission to the Myrtle Rust Strategic Science Advisory Group on the Myrtle Rust Science Plan.
- 1.2. The arrival of myrtle rust into New Zealand is of considerable concern to the New Zealand apiculture community, particularly in relation to its potential impact on the manuka plant species.
- 1.3. The New Zealand manuka honey industry is worth over \$350 million in export earnings and is projected to grow strongly as we continue to invest in ongoing research and development, both into new product innovations and manuka plantations.
- 1.4. The myrtle rust incursion has also highlighted our vulnerability to invasive plant pathogens and underscored the need for ongoing research and dedicated resources to support our knowledge and tools to improve New Zealand's ability to mitigate and adapt to future threats.
- 1.5. The submission has been prepared by the Apiculture New Zealand Research & Science Focus Group. Members of this Group include; Barry Foster (Chair), Dr Oksana Borowik, Dr Mark Goodwin, Don MacLeod, John McKay, Dr John McLean, Martin Laas, Dr Pike Brown.

2. FEEDBACK ON PROPOSED CLAUSES

The table below provides a clause by clause commentary on ApiNZ's view on MPI's science plan, as it relates to beekeeping.

Theme A: Surveillance, monitoring and impact of disease

Theme B: Epidemiology, ecosystems and resilience

Theme C: Te Ao Māori and Mātauranga Māori

Other feedback

Theme A: Surveillance, monitoring and impact of disease
<ol style="list-style-type: none"> 1. MPI need more feet on the ground - full support is given to MPI to increase surveillance and monitoring in the long term. 2. We urge MPI to consider long-term measures to address the impact of the disease, not short-term measures which would suggest that MPI is cost cutting or has given up. 3. Our native flora and fauna contribute significantly to the national economy through tourism, and as we have highlighted in our introduction a healthy myrtaceae species is critical to the long-term success of New Zealand's beekeeping industry. 4. Short term approaches will be detrimental given both Tourism and Apiculture are long term investments.
Theme B: Epidemiology, ecosystems and resilience
<ol style="list-style-type: none"> 1. There is a clear need to understand myrtaceae species as hosts, plus also understand the taxonomy of our myrtaceae species. For example; Manuka seeds sent to Australia for testing by exposure to myrtle rust had a very low germination rate - 11% which is a lot lower than commercial nurseries obtain in NZ. Manuka was sent to Australia in family groups, as no one has defined to date regional strains of <i>Leptospermum scoparium</i>.
Theme C: Te Ao Māori and Mātauranga Māori



Theme 4: Te Ao Māori

Theme D: Socioecological complexity and socioeconomic consequences

Theme E: Species conservation, disease control and management

Other feedback

If you have any other feedback about the plan overall, please include that here:

Feedback on MPI Myrtle Rust Science Plan

- 1) Our indigenous myrtaceae species Manuka, Kanuka, Rata and Pohutukawa are significant sources of nectar and pollen for NZ beekeepers. They create high value honey that is sought round the world.
- 2) New Zealand beekeepers have a major investment in harvesting honey from indigenous myrtaceae flora in bees, hives, plant and equipment. They harvest this honey crop from publicly and privately- owned land.
- 3) New Zealand beekeepers whose bees harvest indigenous myrtaceae species are very concerned about the likely long-term effects of myrtle rust on native flora. The 2019 Colony Loss Survey Report conducted by Landcare Research clearly identifies the importance of myrtaceae species for honey in New Zealand.
<https://www.landcareresearch.co.nz/science/portfolios/enhancing-policy-effectiveness/bee-health/2018-survey/pollen-and-nectar-sources>
- 4) Our recommendation is that MPI continues funding this excellent survey for the next five years to measure any adverse effects from myrtle rust and assess overall impact of the incursion.

- 5) What we do not have is any baseline data on the indigenous natural ecosystem from which we can assess the loss of value that myrtle rust may or may not cause. There is a clear need to understand the current biological and economic benefits of our native flora and fauna so proper measurements of change can be made and value lost assessed.
- 6) The MPI Science plan does not address immediate action items with respect to controlling the spread of myrtle rust. In particular, nursery husbandry and release of plants from nurseries.
- 7) In Australia, plants distributed from nurseries helped establish myrtle rust across vast distances. Can the same happen in New Zealand?
- 8) Nurseries are an excellent place to host myrtle rust, the plants are kept in a monoculture existence and watered regularly (overhead irrigation) – ideal conditions for myrtle rust to grow and multiply. They are difficult to survey due to regular spraying with fungicides.
- 9) The concern is that nursery plants are often moved large distances and immediately after transplanting are under stress which may result in transfer of myrtle rust and or increased susceptibility to myrtle rust infection.
- 10) MPI needs a communication plan for the Science Plan. The latest news update on www.myrtlerust.org.nz website is April 2nd.
- 11) **Priority Research Needs.** ApiNZ members/beekeepers should become a stakeholder in this process. The annual Landcare Colony Loss survey can be used to assess long term effects in real time and enable MPI to have a current scenario model available for honey production.
- 12) **Species Conservation.** There appear to be a number of different organisations collecting germplasm. Fully support the standardising the storage parameters and testing their efficacy. Designated storage facilities need to have guidelines in place how they access and use that germplasm, in order that it is not lost. MPI needs to ensure that ownership of indigenous flora is in the correct name. Not sure if the Plant Variety Rights (PVR) Act 1987 should apply for indigenous plants – can MPI decide on this issue?
- 13) **Monitoring Science Research Projects.** ApiNZ Science and Research Focus Group fully support the creation of a page on the Myrtle Rust website dedicated to the Myrtle Rust Science Plan and tracking its implementation. Please add links to the published papers and ensure they are in the open domain. Government money is being spent so papers and results need to be accessible to all. For example, we only learnt at the Bio Heritage Challenge meeting in early May that there were nearly 46 different science projects underway – Landcare Lincoln data (note not MPI data).

5. ABOUT APICULTURE NEW ZEALAND

Apiculture New Zealand is the 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. More information can be found at www.apinz.org.nz