

SUBMISSION ON

Proposed amendments to the import health standard Dried and Preserved Plant Materials

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To: The Ministry for Primary Industries (MPI)

Name of Submitter: Horticulture New Zealand

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OVERVIEW

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Our submission

Horticulture New Zealand (HortNZ) thanks the Ministry for Primary Industries (MPI) for the opportunity to submit on the proposed amendments to the Import Health Standard: Dried and preserved Plant Material and welcomes any opportunity to work with MPI to discuss our submission.

The details of HortNZ's submission and the alterations we are requesting to be made to the proposed amendments and the risk management proposal are set out in our submission below.

This submission is supported by:

- Citrus New Zealand
- New Zealand Apples and Pears Incorporated
- New Zealand Avocado
- New Zealand KiwiBerry Growers Incorporated
- New Zealand Passionfruit Growers Association
- Onions New Zealand
- Summerfruit New Zealand
- Potatoes New Zealand
- Tararua Growers Association
- Tomatoes New Zealand

HortNZ's Role

Background to HortNZ

Horticulture New Zealand represents the interests of 6000 commercial fruit and vegetable growers in New Zealand, who grow around 100 different crop types and employ over 60,000 workers.

There is approximately 80,000 ha of horticultural land in New Zealand on which fruit, berries and vegetables are grown.

It is not just the economic benefits associated with horticultural production that are important. The rural economy supports local communities and food production defines much of the rural landscape. Food production values provide a platform for long term sustainability of communities, through the provision of food security.

HortNZ's purpose is to create an enduring environment where growers prosper. This is done through enabling, promoting, and advocating for growers in New Zealand.



HortNZ's Biosecurity Involvement

On behalf of its grower members, HortNZ takes a significant interest in biosecurity regulations, planning and operations. As well as advocating on behalf of growers in discussions with MPI and other regulators, HortNZ and other industry groups also work to raise the awareness of fruit and vegetable growers about the roles they themselves can play in helping to keep their farms, orchards and wider New Zealand protected from unwanted pests and diseases.

Executive Summary

1. The Ministry for Primary Industries (MPI) proposes to remove all import requirements for all consignments of Pacific-style handwoven mats or tapa cloth mats (including fine mats) from Part 4.5 of the Import Health Standards (IHS) for Dried and Preserved Plant Materials.
2. Simultaneous to removing import requirements, MPI is proposing to extend the overall scope to the commodity that would effectively enable unrestricted importation of any woven mat made from any plant material from any country.
3. HortNZ and the supporting industry bodies listed above **request that MPI does not go ahead and publish the proposed amendments to this Import Health Standard** due to strong industry concerns about the scientific reasoning underpinning the Risk Management Proposal.
 - a. We do not agree that the evidence provided by the two surveys supports the proposed removal of all phytosanitary measures on this pathway.
 - i. Unwanted organisms have been identified, which indicates that this is a risk pathway.
 - ii. The design and sample size of the 2022 survey is inadequate to support the withdrawal of control measures.
 - iii. These surveys have been conducted under the current IHS requirements and may not be representative of the risks posed by an unmanaged pathway.
 - b. We question the assessments that invasive ant species cannot establish after arriving on this pathway and that if they did establish the impacts would be low.
 - c. We are concerned that the proposal to open this pathway up without control measures in place is being taken in the absence of a full, systematic import risk assessment of all priority pests in the countries of origin that may enter on this pathway.
 - d. We are concerned that there has been no risk assessment conducted to assess whether expanding the definition of the scope of the commodity will alter the risks posed on this pathway.

Submission

1. Introduction

Horticulture New Zealand (HortNZ) welcomes the opportunity to provide feedback to MPI on the proposed amendments to the Import Health Standard for Dried and Preserved Plant Materials and thanks MPI for the opportunity to discuss these changes before submitting this feedback.

HortNZ understands that MPI wishes to remove all import requirements for all consignments of Pacific-style handwoven mats or tapa cloth mats (including fine mats) from Part 4.5 of this IHS while simultaneously extending the overall scope of the commodity itself.

HortNZ and the industry groups supporting this submission have several concerns regarding these proposed changes to phytosanitary measures and the risk assessments they are based upon. These concerns and our related requests are detailed below.

2. Comments on the proposed amendments

HortNZ has grave concerns about the scientific reasoning being used to develop this Risk Management Proposal (RMP) and Import Health Standard (IHS).

- The RMP does not provide adequate scientific justification for the total withdrawal of measures on this pathway, and
- Due to a lack of clarity and definitions, the potential scope of this IHS could be understood to be any woven mat made from any plant material originating from any country.

HortNZ and the supporting industry bodies listed above strongly request that **the assumption that this is a low-risk pathway needs further verification before all phytosanitary measures are withdrawn**. More details about our concerns are provided below.

2.1. Incomplete assessment of risks on this pathway

Inadequate risk assessments have been conducted to understand the risks posed to New Zealand by the complete removal of biosecurity measures on this pathway.

1. HortNZ requests that MPI conducts a systematic risk assessment of the likelihoods of all priority pests present in the countries of origin, including Australia, being able to hitchhike into New Zealand via these mats.
2. HortNZ suggests that the consequences and impacts of all priority pests that may hitchhike in on this pathway need to be assessed AND the current assessments for invasive ant species need to be reassessed.

3. HortNZ requests that MPI conducts climatic modelling to check the assumption that unwanted organisms hitchhiking in on these mats will not be able to establish in New Zealand.

2.1.1. INADEQUATE SAMPLE SIZES TO MAKE STRONG CONCLUSIONS

Neither of the surveys the RMP is based upon is statistically valid enough to justify the removal of all risk management measures on this pathway.

The 2010 survey included 1,227 mats, which constituted all mats arriving over the month of August. The 2022 survey included 69 mats, which constituted 50% of mats arriving over a three-month period from September to November.

The only conclusion supported by this evidence is that **the importation of tapa mats acts as a pathway for the entry of hitchhiking pests into New Zealand.**

In fact, eight different species of biosecurity concern were identified in 2010, including yellow crazy ants (*Anoplolepis gracilipes*), black crazy ant (*Paratrechina longicornis*), rose beetle (*Adoretus versutus*), and Siamese grain beetle (*Lophocateres pusillus*) that are all classified as unwanted organisms under the Biosecurity Act 1993 (ONZPR 2023).

The 2022 survey found 36% of mats were contaminated with invertebrates and 32 specimens were identified and all found to be species of low to negligible risk.

The lack of unwanted organisms among the contaminants in the 2022 survey is mathematically unsurprising. The proportion of mats contaminated with unwanted organisms in the 2010 survey was $8/1,227 = 0.0065$. If this is a true representation of the pathway, then one would estimate that 0.45 unwanted organisms would be detected from inspecting 69 mats. Therefore, a lack of unwanted organisms in 2022 should not be taken to mean that this is a “clean pathway”.

2.1.2. SURVEYS CONDUCTED WITH IMPORT MEASURES IN PLACE

The two surveys support an assessment of the residual risks posed by this pathway with the current importation requirements in place. They do not allow for an estimation of the risks posed by the pathway if all importation requirements are removed.

2.1.3. A LIMITED SET OF PEST RISK PROFILES HAVE BEEN ASSESSED

Risk profiles for the full range of pests that potentially could be introduced into New Zealand on this pathway do not appear to have been considered. The surveys are simply two snapshots of the hitchhiking pests that could come into the country on these mats, they do not constitute a complete list of what may come in on this pathway.

2.1.4. NO INFORMATION CONSIDERED ABOUT NATURE OF PATHWAY

The conclusion that the pathway is of such low risk that no importation measures are required has been made without an assessment of the pathway itself including important social epidemiological features.

Most pests and diseases only move long distances due to the actions of people. Understanding the people aspects of a pathway as well as the biological ones allows for a more complete assessment of the risks that pathway represents.

Before removing all importation requirements on this pathway, it would be pertinent to understand factors such as:

- The number of mats coming into New Zealand on an annual basis and any patterns associated with that. For instance, has there been a significant decrease

in the number of mats arriving between 2010 and 2022? Or do these two results represent an expected variation in mats coming in during different months of the year?

- Who is bringing these mats and why? Are they more likely to be bringing special mats that have been used already in their country of origin, or are the mats more likely to be freshly woven and taken to New Zealand for special occasions?
- Are there riskier times of year when unwanted organisms are present in high numbers and moving around looking for shelter or nesting spots, and high numbers of mats are being taken to New Zealand?
- What is the balance of commercial importations versus mats brought in as personal effects? These two pathways represent different risk profiles.

2.1.5. UNTESTED ASSUMPTION ABOUT THE DESTINATIONS OF TAPA MATS

To illustrate the importance of having a true understanding of the pathway, HortNZ challenges the assumption in the RMP that tapa mats will most likely end up in highly populated urban areas. No data have been provided to back this assertion and we point out that there are strong links between the Pacific Islands and New Zealand's horticulture and viticulture industries.

Every year, thousands of Pacific Island nationals travel to New Zealand to work in these industries as part of the Recognised Seasonal Employer (RSE) scheme. In 2022, Immigration NZ increased the annual cap from 16,000 to 19,000 RSE workers due to workforce shortages in the sector¹.

These valued RSE workers live on or very close to the growing sites. Under the proposals in the risk management plan, a RSE worker could enter New Zealand with a woven mat without anyone inspecting it. Then they could travel straight to a horticultural enterprise taking the mat with them.

2.2. Reconsider aspects of the risk of establishment and impacts of invasive ant species

HortNZ appreciates the RMP including summary information about the assessments conducted of the eight unwanted species identified in 2010. The information provided was of a suitable level to allow us to understand the reasoning behind the assessments of likelihood of establishment and impact. However, people can only assess the information provided, so it is important to ensure that these summaries contain details about all the key influential aspects of the assessment made.

From the information provided, the reasoning appears to be generally sound. However, HortNZ refutes some aspects of these assessments and requests that these areas are reconsidered.

2.2.1. OVER EXTRAPOLATION FROM SURVEY IDENTIFICATIONS

Assessments have been made of the actual organisms that were identified and the assumption seems to have been made that these are the only types of organisms that could come in.

¹ [Recognised Seasonal Employer Scheme cap increased to 19,000 | Immigration New Zealand](#)

For example, the RMP states that mated queen ants and colonies have never been found on this pathway. However, HortNZ suggests that a previous lack of identification of queen ants does not mean queen ants do not and could not arrive on these mats.

Taking yellow crazy ants as an example, a nest was found at the Port of Auckland in April 2002². How the founding members of this nest arrived is not reported and may well not be known. HortNZ suggests that a box of woven mats inside a shipping container could act as a potential route of entry. Yellow crazy ants have entered Australian ports in sea cargo containers³. This illustrates, why it is important to understand the pathway itself to ascertain the risks posed on the pathway.

2.2.2. RISKS OF ENTRY OF QUEEN ANTS

HortNZ proposes that single mats taken from the floor of a building could harbour a queen ant either on her own or accompanied by just one or two worker ants and this may be enough to enable a nest to be formed. Due to time constraints, the following points are made solely about yellow crazy ants as an illustrative example.

- Nests of yellow crazy ants can contain up to 320 queens⁴. New colonies are formed through budding, when a queen walks away from the main nest often with a small group of workers.
- The reproductive behaviours of yellow crazy ants are complex, and more is being discovered about them. Recent evidence suggests that individual young queens can form nests on their own^{5,6}. This would mean that a solitary queen entering New Zealand could establish a nest.
- Solitary ants have been found on these mats in the past, workers not queens but that does not mean a queen could not come in via this pathway.

2.2.3. RISKS OF ESTABLISHMENT

The risk management proposal states that climatic conditions in New Zealand are unfavourable for the long-term establishment of pest species that may hitchhike in on these mats. However, no actual climatic modelling of unwanted pest species has been conducted.

MPI has been caught out with these sorts of assumptions before. When fall army worm was first detected in Tauranga, MPI announced that the species would not be able to overwinter here. Unfortunately, this was despite MPI's own risk assessment team having previously conducted climatic niche modelling and shown that it was likely to overwinter in the north of North Island. Fall army worm's ability to overwinter in Northland has subsequently been proven to be true.

Before removing all importation requirements, it would be prudent to check that priority hitchhiking pests present in the countries of origin cannot establish in more northerly

² Pascoe 2002 Stowaways 2 p12. Available here: [Stowaways Newsletter Number 2 \(landcareresearch.co.nz\)](https://www.landcareresearch.co.nz/stowaways/newsletter-number-2)

³ O'Dowd 2023 Global Invasive Species Database [GISD \(iucngisd.org\)](https://www.gisd.org/)

⁴ Chow-Yang 2022 Annual Review of Entomology [Biology, Ecology, and Management of the Invasive Longlegged Ant, *Anoplolepis gracilipes* \(annualreviews.org\)](https://www.annualreviews.org/)

⁵ Hoffmann 2014 J of Insect Science 14-25 [Quantification of supercolonial traits in the yellow crazy ant, *Anoplolepis gracilipes* | Journal of Insect Science | Oxford Academic \(oup.com\)](https://www.oup.com/journals/doi/10.1093/ise/iat014)

⁶ Asifiya W 2016 Entomological Science [Discovery of independent-founding solitary queens in the yellow crazy ant *Anoplolepis gracilipes* in East Java, Indonesia \(Hymenoptera: Formicidae\) - Ito - 2016 - Entomological Science - Wiley Online Library](https://onlinelibrary.wiley.com/doi/10.1111/ent.12200)

areas of the country. Particularly given the scientific uncertainty about the establishment potential of yellow crazy ants quoted in the RMP.

2.2.4. IMPACTS FOLLOWING ESTABLISHMENT

Should they establish, the impacts of any of the eight identified species have all been assessed to be low. However, the details provided in the RMP are scant and the suboptimality of the climate put forward as a protective factor.

HortNZ and the industry bodies supporting this submission consider that the impacts of invasive ants in particular have been under-estimated.

Taking yellow crazy ants as an example there are well documented impacts of this highly invasive species causing widespread impacts:

Horticultural nuisance: Like many ant species, yellow crazy ants feed on the honeydew secreted by sap-sucking horticultural pest species such as aphids. They have been documented to nurture these pests deliberately increasing their numbers, which causes crop losses through direct feeding issues and secondary issues with the sooty mould that grows on honeydew covered leaves.

Public health: Yellow crazy ants are known to swarm over sleeping vertebrates and squirt formic acid into their eyes. This is recognised in the Pacific Islands with people having to sleep indoors if the ants are about. There is also a documented case of a farmer in Australia being temporarily blinded due because of this behaviour.

Animal welfare: Due to the same ant behaviours, the welfare of livestock and pets would be compromised by high numbers of ants.

Conservation nightmare: Yellow crazy ants are renowned for killing small creatures such as crabs and young birds. What would this mean for New Zealand's native species such as geckos and ground dwelling birds?

On top of this, the climate is changing even more rapidly than was predicted ten years ago. An assumption that these tropical ants could not multiply up to nuisance levels due to the New Zealand climate needs to be tested properly using weather data from recent years and forecasted climate data for future years. There may well be pockets of the country where these ants could establish and cause local impacts. This may still be viewed as limited impact due to the localised nature of it, but the people living and working in those areas would be unlikely to consider living with crazy ants a desirable outcome.

2.2.5. LACK OF CONSISTENCY IN RISK ASSESSMENTS BEING CONDUCTED BY DIFFERENT MPI DIRECTORATES

The proposal to remove all risk management measures for these plant products stands in contrast to other programs that MPI invests in to minimize the risks of potential biosecurity threats to New Zealand. Examples would include the National Invasive Ant Surveillance (NIAS) program. How is it justifiable to let plant-products that have been shown to be a vehicle for hitchhiking ants or other risky organisms to enter New Zealand without even an inspection, while investing public money in a post-border surveillance programme to detect any unwanted hitchhiking ants?

2.3. Lack of clarity about the commodity definition

4. HortNZ requests that clear definitions are provided for the commodity descriptions in the IHS

2.3.1. THE LACK OF DEFINITIONS OVER-EXTEND THE COMMODITY SCOPE

The lack of specificity in the current wording in the draft IHS effectively means that any woven mat made from any plant material from any country would be allowed into New Zealand with no phytosanitary certification or inspections as long as it was *Pacific-style*.

1. The terms 'dried' and 'preserved' are not defined in respect to plant material. What constitutes as dried plant material in comparison to freshly cut or potentially viable plant material or plant material potentially harbouring pests and disease (e.g. smuts or rust fungi)?
2. What constitutes as 'clean' in respect to the commodity itself and not to the packaging? This is proposed as the sole requirement for importation and risk mitigation, but no definition is provided.
3. How is the commodity description 'Pacific-style' defined in respect to other hand-woven mats made of plant material from non-Pacific countries? The proposed extension to the commodity scope, to be made from any plant species rather than from a specific plant species (*Pandanus* spp.) removes certainty of a limited pest risk profile as per current IHS.

2.4. Pathway assurance and verification

5. HortNZ suggests that more informed decisions about the level of risk posed by this pathway could be made if the expertise scattered across MPI was brought together to collect and analyse information about this pathway.

2.4.1. TAKING A MULTI-DIRECTORATE APPROACH TO ASSESSING AND MANAGING RISKS ON THIS PATHWAY

To verify whether this pathway is low-risk, HortNZ suggests that MPI designs an on-arrival inspection programme that periodically checks the pathway possibly at different times of the year. Ideally this would be designed by a working party from multiple directorates within MPI pooling their knowledge and expertise e.g. Risk Assessment, Imports, Border Clearance, Intelligence, and Post-Border Surveillance.

In conjunction with this, MPI's Intelligence teams could analyse the pathway itself so that riskier times of year or types of traveller or other risk factors could be identified.

HortNZ realises this is outside of the boundaries of an Import Health Standard, but we suggest that developing IHSs in isolation of the rest of the biosecurity system is a suboptimal approach that may be inadvertently opening New Zealand up to higher levels of biosecurity risk. This is of concern.

2.4.2. NO VERIFICATION SYSTEM TO ENSURE THE COMMODITY IS CLEAN

If all verification systems such as pre-export and/or on-arrival inspections, were to be removed as proposed here, how will MPI ensure that the imported products are:

- a. The commodity declared in the import documentation, i.e. a Pacific-style woven mat?
- b. 'Clean' and free of contaminants, whether soil, propagules (e.g. flowers, seeds, other viable plant material), microorganisms (bacterial, fungi) or pests (e.g. regulated, unwanted or new organisms hitch hiking or nesting on the product)?
- c. Meet the minimum requirements set out in the IHS?

3. Conclusion

HortNZ is challenging the proposed changes to the importation requirements of these mats on scientific grounds.

HortNZ has strong concerns that widely extending the scope of the commodity and simultaneously removing the requirement for any pre-export or on-arrival inspections may raise the biosecurity risk to New Zealand posed by these mats to an inappropriate level. This would increase the risks and costs faced by New Zealand's fruit and vegetables growers and could cause potential market access issues for New Zealand fresh produce.

Further, dropping these biosecurity measures without a conducting a robust risk assessment that looks at specific pest risk profiles in the countries of origin and without any verification system in place to assure that the products are free of pests, is greatly concerning.

HortNZ strongly requests that MPI conducts a thorough, cross-directorate assessment of the risks posed by this pathway and the appropriate way to manage those risks BEFORE removing all biosecurity measures on this pathway.