

# **SUBMISSION ON**

# Changes to phytosanitary measures to manage yellow peach moth

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**To:** The Ministry for Primary Industries (MPI)

**Name of Submitter:** Horticulture New Zealand

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# OVERVIEW

## Submission structure

- 1 Part 1: HortNZ's Role
- 2 Part 2: Submission

## Our submission

Horticulture New Zealand (HortNZ) thanks the Ministry for Primary Industries (MPI) for the opportunity to submit on proposed changes to phytosanitary measures to manage the yellow peach moth on fresh lychee, longan, and pear, and welcomes any opportunity to continue to work with MPI and to discuss our submission.

The details of HortNZ's submission and decisions we are seeking are set out in our submission below. Our submission is supported by:

- Citrus New Zealand
- New Zealand Apples & Pears Incorporated
- New Zealand Avocados Incorporated
- New Zealand Feijoa Growers Association
- Persimmon Industry Council
- Seed and Grain Readiness & Response
- Vegetables New Zealand Incorporated

# HortNZ's Role

## Background to HortNZ

HortNZ represents the interests of approximately 5,500 commercial fruit and vegetable growers in New Zealand who grow around 100 different fruit, and vegetables. The horticultural sector provides over 40,000 jobs.

There is approximately, 80,000 hectares of land in New Zealand producing fruit and vegetables for domestic consumers and supplying our global trading partners with high quality food.

It is not just the direct economic benefits associated with horticultural production that are important. Horticulture production provides a platform for long term prosperity for communities, supports the growth of knowledge-intensive agri-tech and suppliers along the supply chain; and plays a key role in helping to achieve New Zealand's climate change objectives.

The horticulture sector plays an important role in food security for New Zealanders. Over 80% of vegetables grown are for the domestic market and many varieties of fruits are grown to serve the domestic market.

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.



# Submission

## 1. Yellow peach moth (*Conogethes punctiferalis*)

*Conogethes punctiferalis* (yellow peach moth) is of concern for the New Zealand horticulture sector as it is a highly polyphagous pest of over 40 crops of economic significance such as apple, pear, maize, peaches, avocado, plum and citrus (CABI, 2021; Chen et al. 2018; Kumar et al. 2021; MPI, 2023b; Stanley et al. 2009). It is considered a serious insect pest of papaya in Australia, durian in Thailand and fruits and maize in China, and more than 20 crops including longan and lychee in Korea (Stanley et al. 2009).

Affected host fruit can suffer from premature fruit drop, discolouration, boring, and become unmarketable (CABI, 2023; MPI, 2023b). Determining the extent of damage caused by *C. punctiferalis* on crops is difficult as this species produces a highly concentrated sugary excretion which attracts secondary pests and diseases that further damage the host (MPI, 2023b; CABI, 2023; Singh et al. 2018).

*Conogethes punctiferalis* has a wide geographical distribution from India to tropical Southeast Asia, Papua New Guinea, Australia (Chen et al. 2018), Iraq (Purdue University, 2015) and Hawaii (Nishida, 2002; Kumar et al. 2021) with reported interceptions on imported produce in the United States, England, Wales, and the Netherlands (MPI, 2023b; Stanley et al. 2009; Purdue University, 2015). MPI acknowledges that live *C. punctiferalis* larvae have been intercepted on lychee which highlights the threat this species poses to New Zealand (LIMS, 2022; MPI, 2023b).

Adult moths lay eggs on the surface of host fruit with eggs hatching 5-8 days after oviposition (CABI, 2023). Larvae feed on the fruit surface, internal pulp, and seeds (MPI, 2023b; TNAU, 2015). The risks associated with *C. punctiferalis* infestations can go unnoticed even during post-harvest processing of fruit. Eggs and early instar larvae are not always detected due to their small size and being hidden inside fruit (MPI, 2023b).

While *C. punctiferalis* has a broad tropical distribution, regions of New Zealand are climatically suitable for its establishment as larvae are capable of overwintering (MPI, 2023b; Du et al. 2018).

*Conogethes punctiferalis* poses a significant biosecurity risk for New Zealand - if it were to arrive and establish, it would likely cause considerable losses to the horticultural sector. It is critical that all relevant fresh produce pathways have the required phytosanitary measures to mitigate the biosecurity risks posed by this species.

## 2. Comments on the proposed amendments

HortNZ are broadly supportive of the proposed changes to the phytosanitary measures to manage *C. punctiferalis* on fresh lychee, longan and pear from Australia, Republic of Korea, Taiwan, and Thailand.

### **AUSTRALIA - LYCHEE AND, THAILAND - LYCHEE AND LONGAN**

We understand that in 2019, MPI determined that the existing 250 Gy irradiation treatment was no longer technically justifiable and updated the stand-alone irradiation treatment from 250 Gy to 289 Gy in the import health standards for table grapes, capsicum, and papaya (DAFF, 2019; MPI, 2023b).

MPI propose to add an irradiation treatment of 289 Gy for lychee from Australia to manage the risk of *C. punctiferalis*. Evidence from scientific literature supports a maximum absorbed dose of 289 Gy in preventing the development of *Lepidoptera* life stages (eggs and larvae) that are likely to be on exported commodities (Hallman & Hellmich, 2009; MPI, 2023b).

HortNZ support the proposed addition as it is backed by scientific evidence and is consistent with existing irradiation treatment regimens for other commodities e.g., capsicum that are currently imported (MPI, 2023b).

We note that the existing 250 Gy treatment is being “changed” to 289 Gy for lychee and longan from Thailand however, for lychee from Australia, there is no mention of a change but rather an additional option for irradiation treatment. We request confirmation that the existing 250 Gy irradiation treatment for lychee exported from Australia will also be changed to the higher dose.

### **AUSTRALIA AND THE REPUBLIC OF KOREA - PEAR**

We note the proposed additional targeted pest measure requiring Australia and the Republic of Korea to undertake appropriate pest control activities that are efficacious against *C. punctiferalis* prior to export of pear. It is difficult to comment on the appropriateness of activities that we are not privy to. We would appreciate further information about what activities have been (or will likely be) agreed. It is important that MPI is confident that these activities will adequately mitigate the biosecurity risk posed by *C. punctiferalis*.

We support the alternative option of requiring Australia to state that any consignment of pear exported to New Zealand has been sourced from an area free from *C. punctiferalis*, provided the requirements of ISPM 4 (*Requirements for the establishment of pest free areas*) are met. Sourcing pear from areas free of *C. punctiferalis* should reduce the probability of consignments containing *C. punctiferalis* individuals.

### **TAIWAN - LYCHEE**

Again, it is difficult to comment on the appropriateness of unspecified pest control activities. We request clarity from MPI on what additional targeted pest measures will be required to manage *C. punctiferalis* on lychee consignments from Taiwan.

We require that the activities that are agreed between NPPOs are efficacious against *C. punctiferalis* and adequately manage the biosecurity risk.

## **PRE-EXPORT TESTING OF LYCHEE FROM AUSTRALIA**

We request clarity from MPI with regards to pre-export testing of lychee consignments from Australia.

The import health standard for lychee from Australia states in section 6.1.2 that “testing of the consignment prior to export to New Zealand for regulated pests which are not visually detectable is not required for fresh lychees from Australia.” (MPI, 2023a).

However, in section 6.1.5, it is a requirement of all phytosanitary certifications that any consignments of lychee from Australia have been visually inspected and found free from any regulated plant pathogens (MPI, 2023a).

We note that lychee pathogens can have asymptomatic host expression and therefore visual inspection alone is inadequate to determine whether any lychee consignment is pathogen free.

MPI requires a mandatory pre-export treatment for high-impact pests such as fruit fly species and has approved irradiation as a treatment for all arthropod pests listed on the Australian lychee pest list (MPI, 2023b).

We request that MPI clarifies whether irradiation treatments are effective in eliminating asymptomatic plant pathogens from lychee consignments. If not, we believe MPI should consider requiring testing.

## **PHYTOSANITARY MEASURES OF THE IMPORT HEALTH STANDARDS**

MPI acknowledges that existing basic measures manage the risk associated with *C. punctiferalis* pupae and adult life stages, however these measures alone do not manage the risk of *C. punctiferalis* eggs and larvae (MPI, 2023b).

We recommend that MPI undertakes a review of all applicable import health standards to ensure that they are consistent and have adequate phytosanitary measures in place to mitigate the potential impacts of all life stages of *C. punctiferalis*.

## **3. Conclusion**

HortNZ are broadly supportive of the proposed changes to the phytosanitary measures to manage *C. punctiferalis* on fresh lychee, longan and pear from Australia, the Republic of Korea, Taiwan, and Thailand.

We urge MPI to ensure effective management of the risks posed by *C. punctiferalis* on these pathways as soon as possible and welcome the opportunity to discuss any of the points raised in the submission.

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