SUBMISSION ON

Proposed amendments to import requirements for fresh fruit and vegetables from Australia

31 May 2023

To: Horticulture Imports Team, Ministry for Primary Industries
Name of Submitters: Horticulture New Zealand, New Zealand Apples and Pears Inc, New Zealand Avocado, Summerfruit New Zealand, Tomatoes New Zealand, Vegetables New Zealand Inc, Citrus New Zealand and New Zealand Buttercup Squash Council.

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OVERVIEW

Our submission

This submission has been co-authored by Horticulture New Zealand, New Zealand Apples and Pears Inc, New Zealand Avocado, Summerfruit New Zealand, Tomatoes New Zealand, Vegetables New Zealand Inc, Citrus New Zealand and New Zealand Buttercup Squash Council.

The submitting parties thank MPI for the opportunity to submit on the proposed amendments to import requirements for fresh fruit and vegetables from Australia and welcomes any opportunity to continue to work with MPI and to discuss our submission.

Our submission is supported by:

- NZ Feijoa Growers Association
- NZ Persimmon Industry Council
- Pukekohe Vegetable Growers Association

Executive Summary

The details of our submission and decisions we are seeking are set out in our submission below. However, in summary the submitting parties request that:

- technical documents that have been requested and are pertinent to MPI's decision making are made available to the submitting parties before this IHS is finalised.
- MPI describes how it will ensure that treatment failure or product substitution has not occurred when live fruit fly are intercepted in irradiated produce.
- MPI includes a pest free area requirement in the Import Health Standard for capsicums from Australia for *B. kraussi* and *B. frauenfeldi*.
- further analysis and consultation (with all technical information provided to interested parties) is undertaken before MPI makes a decision about whether to accept low dose methyl bromide as a treatment for capsicum.
- further analysis and consultation is undertaken before MPI makes a decision about whether to accept winter window in conjunction with in-field controls as a measure for butternut and squash.
- there is a dedicated piece of work to determine the conditions that are appropriate to manage the threat of ASBVd through fresh fruit imports.
- In future, submission periods are a minimum of four weeks with all supporting information provided at the time consultation commences.

Submission

1. Consultation process

The submitting parties welcome the opportunity to submit on the proposed amendments to import requirements for fresh fruit and vegetables from Australia. However, we do not agree with the rationale provided by MPI for reprioritising the Import Health Standard work programme or providing a shortened time for public consultation. Multiple industries involved in this submission do not believe New Zealand consumers will have an overall reduction in access to fresh fruit and vegetables, and MPI is unable to guarantee reduced prices for consumers following new import options from Australia. A shortened consultation period puts additional pressure on our teams to review the proposal and a thorough review is especially important as the pests involved are very high risk to horticulture. Although advance notice was provided by MPI, the range of content within the amendment was not clear until consultation documents were published.

The short timeframe for response Is further exacerbated by key technical documents being unavailable. These documents were requested from MPI multiple times and some were later provided. One key document, the report on methyl bromide efficacy trials, was withheld on the basis that it was unpublished work provided "in confidence" by Australian authorities. The submitting parties consider it disappointing that key data was withheld from a public consultation, as it limits recourse to Section 24(1) of the Biosecurity Act. Although a summary was provided, it was not sufficient to enable our analysis.

The submitting parties would like the technical document to be provided prior to the IHS being finalised. We also request that, in future, all technical analysis and treatment reports referred to in Risk Management Proposals are made publicly available at the time of consultation.

2. Proposed risk management and amendments to Import Health Standards

2.1. Irradiation treatment for fresh produce

The phytosanitary irradiation treatment of fruit and vegetables with a minimum absorbed dose of 150Gy is accepted as an effective generic treatment for Tephritid fruit flies (ISPM 28: Phytosanitary treatments for regulated pests PT 7: Irradiation treatment for fruit flies of the family Tephritidae (generic)). This dose is higher than the specific rate of 100Gy adopted for *Bactrocera tryoni* and *Ceratitis capitata* and the submitting parties have no concerns with the adoption of this treatment as it is an accepted international standard.

The irradiation dose of 289 Gy for managing yellow peach moth (*C. punctiferalis*) on pear is also proposed. This treatment has already been consulted on and implemented for this pest of table grapes. The submitting parties also have no concerns regarding the extension of this treatment to pears.

Two matters of importance to the submitting parties are the enforcement of mandatory labelling requirements required for imported irradiated produce, and phytosanitary security for the irradiation pathway. We note that the contingency measure for detection of live fruit flies in the irradiation pathway is no action and, while we accept the efficacy of the treatment in preventing adult emergence, we are concerned to ensure the produce has been appropriately treated and phytosanitary security maintained.

The submitting parties request that MPI describes how it will ensure that treatment failure or product substitution has not occurred when live fruit fly are intercepted in irradiated produce.

2.2. Changes to the fruit fly pest list

MPI is proposing to remove *Bactrocera frauenfeldi*, *B. kraussi* and *B. musae* from the pest list for fresh capsicum. Based on MPI (2020), technical advice on the host status of capsicum to five species of fruit flies, the RMP concludes that no reliable evidence was found that reported an association between *B. frauenfeldi*, *B. kraussi* or *B. musae* and commercially produced *Capsicum annuum* from Australia.

the submitting parties note that *C. annuum* is listed by CABI CPC as an "other" host of *B. frauenfeldi,* and capsicum is also listed as a host in the Solomon Islands (https://apps.lucidcentral.org/ppp_v9/text/web_full/entities/solomon_islands_fruit_flies_021.htm). Hancock et al. (2000) also record *C. annuum* (chilli) as a host to *B. frauenfeldi*. This record is taken from the papaya fruit fly eradication programme database, so presents a reliable field record of host association within the range of *B. frauenfeldi*. Hancock et al. (2000) also record *C. annuum* (chilli) as a host to *B. kraussi*, from the same database as *B. frauenfeldi*.

The southern limit of *B. kraussi* and *B. frauenfeldi* is stated to be Townsville (MPI 2020) which does not overlap commercial production of *C. annuum*. The lack of records of these species in commercial capsicum production may either be due to capsicums not being a host, or that capsicums are not commercially grown within the range of *B. kraussi* and *B. frauenfeldi*.

As is described in FAO (2018), the process for determining fruit fly host status is necessarily robust so as to ensure crops are not erroneously listed as hosts (or non-hosts) of fruit fly species. These procedures do not appear to have been followed in the assessment of capsicum host status for *B. kraussi*, *B. frauenfeldi*, or *B. musae*. The submitting parties believe that a more appropriate approach would be to require that capsicums are sourced from *B. kraussi* and *B. frauenfeldi* pest free areas rather than removing them from the pest list, as non-host status has not been confirmed by appropriate means.

The submitting parties request that MPI includes a pest free area requirement in the Import Health Standard for capsicums from Australia for B. kraussi and B. frauenfeldi.

2.3. Low dose methyl bromide treatment for capsicum

MPI has evaluated the methyl bromide treatment data provided by Australia and has determined that it meets MPI's requirements for the tested species. This confidential report has not been made available as part of the consultation, so it is not possible for submitters to make any comment on the report or its interpretation by MPI. MPI has

provided a summary of the paper, but this is not sufficient to undertake an assessment of the scientific evidence or of MPI's interpretation of the data. For example the research appears to have been done over a period of 10 years involving up 56 trials. It is unclear where these trials were conducted, over what time period, the sources of fruit and fruit flies, measures of control mortality, the method for estimating egg numbers, or whether there were inconsistencies in results, trials omitted from the data set, or the level of variability in temperatures and methyl bromide concentrations tested.

In addition, MPI has extended the application of the proposed treatment to three fruit fly species, *B. aquilonis*, *B. bryoniae* and *C. capitata*, that were not included in the efficacy testing. The technical justification for this is (Section 38(c) of the RMP) that "MPI accepts that the *Bactrocera* species and *Z. cucumis*, which are very closely related to the other Tephritid fruit flies not studied in the trials (including *B. aquilonis, B. bryoniae and C. capitata*), do not show significant differences in tolerance to methyl bromide (Armstrong & Whitehand, 2005). The trial results provide confidence that the proposed treatment schedule will achieve the appropriate level of protection for all fruit fly species in Table 2."

Armstrong and Whitehand (2005) studied only *C. capitata* and *B. dorsalis* using bare insects, rather than infested fruit, in Hawaii. They did not research infested fruit, and did not study *Z. cucumis*. While the authors found that there were no significant differences in methyl bromide tolerance between instars within species, the authors did not state that there were no significant differences between species. The *C. capitata* and *B. dorsalis* data sets were separately analysed by regression analysis and separately graphed and reported. The overall research data set was not subject to ANOVA, and no between species analysis was made, other than general observations.

Indeed, the authors state that "Mediterranean fruit fly was as or more tolerant to MB than oriental fruit fly in MB tolerance for eggs and first instars". This suggests that the most tolerant life stage of *C. capitata* may be more tolerant to methyl bromide than *Bactrocera dorsalis*, and does not align with MPI's statement that they "do not show significant differences in tolerance to methyl bromide" as no such analysis was undertaken.

Also, the authors specifically state that their "research was not intended to provide an MB quarantine treatment for Mediterranean or oriental fruit flies, or for any specific commodity. Our research used Mediterranean and oriental fruit fly life stages as a model to better understand the interactions of concentration, temperature and time, and the results demonstrate the potential for using increased-temperature fumigation to reduce MB emissions."

HortNZ has questioned MPI's interpretation of Armstrong and Whitehand (2005). The response did not directly address this question, and provided references to other host / treatment publications such as methyl bromide treatment of house flies and fruit flies on citrus, suggesting a very broad extrapolation has been made. A key assumption in MPI's response was "Given that there are no differences in the respiratory system of different Tephritid fruit flies, we consider the proposed low dose methyl bromide fumigation at of 77 g·h/m3 to be effective against the additional fruit fly species on the capsicum pest list (*B. aquilonis*, *B. bryoniae* and *C. capitata*). This is a very broad statement upon which to extrapolate a treatment across genera.

The submitting parties question the technical basis for the extension of methyl bromide treatment from the tested species to untested *B. aquilonis, B. bryoniae* and *C. capitata*.

The submitting parties do not support inclusion of low dose methyl bromide treatment for capsicum based on the information provided to date. We request further analysis is undertaken followed by further consultation (with all pertinent information provided to interested parties) before MPI makes a decision about whether to accept low dose methyl bromide as a treatment for capsicum.

2.4. Market access for butternut (*Cucurbita moschata*) and squash (*Cucurbita maxima*)

MPI is proposing to add "winter window in conjunction with in-field controls" as an additional option to manage *Zeugodacus cucumis* (cucumber fruit fly) on pumpkin, butternut and squash from Australia. This is already authorised for zucchini and scallopini from Australia, and this provides some of the rationale for extending the winter window to other cucurbits.

However winter squash (pumpkin, butternut and buttercup squash) are typically harder skinned and are able to be stored for much longer than summer squash (zucchini and scallopini). The Risk Management Proposal does not appear to have taken into account the potential for winter squash to be imported before 1 September and then stored by importers, distributers, or consumers for weeks or months. During the cooler months larval or pupal development may be delayed.

Unlike polyphagous multivoltine fruit flies, fruit fly species that have a narrow host range will often maintain that host specificity when introduced into a new environment, waiting for suitable hosts to become available. These flies do not require hosts for their own sustenance, only for oviposition. So there is potential for flies to survive until oviposition hosts become available.

MPI has suggested that there is an absence of suitable hosts until December. Zucchini are available from October, and cucumbers and some zucchini are grown as covered crops, extending the period of availability of hosts. The submitting parties request that MPI review host availability and fruit fly survival in relation to the proposed winter window phytosanitary measure.

We also note that *Z. cucumis* is not generally attracted by male lures (although occasionally attracted to Cue-lure) so may not be detected in New Zealand's trapping network until after it has become established and widespread. This also raises the question of monitoring for *Z. Cucumis* as part of field control measures in Australia. MPI state these are very effective, but in the absence of appropriate lures can MPI please advise how the effectiveness of field control measures is confirmed?

The submitting parties do not support inclusion of winter window in conjunction with in-field controls as a measure for butternut and squash as the analysis has been based on incorrect assumptions. We request further analysis taking into account the points raised above before MPI makes a decision about whether to accept winter window in conjunction with in-field controls as a measure for butternut and squash.

2.5. Additional declaration for avocado sunblotch viroid

MPI has added a new additional declaration requiring that avocados have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid. MPI has sought to exclude this change from consultation on the basis that it does not "alter the requirements in the standard or the intent of the

requirements", thereby being considered a minor amendment under section 24B(2) of the Biosecurity Act.

We disagree with that assessment as the new additional declaration differs from the previous phytosanitary requirement under the Avocado IHS. Under the current IHS, the Australian NPPO is required to ensure that the avocados have "been sourced from growers and blocks registered with an official tree certification scheme to ensure freedom from: avocado sun blotch viroid". This is not the same as "been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid".

This discrepancy may lead to misunderstanding of NZ's phytosanitary requirements and result in reliance on visual inspection of orchards alone. This is concerning, as infection can be asymptomatic and visual inspection of orchards may not detect infections. We believe the additional declaration should accurately reflect the phytosanitary requirements, that fruit is sourced from growers and blocks registered with an official tree certification scheme and free from avocado sun blotch viroid.

We also note that Australian export requirements specify that avocados "have been sourced from an area free from Avocado sun blotch viroid (ASBVD), as verified by an official detection survey". This also differs from the proposed requirements.

The submitting parties do not believe that the new declaration about ASBVD is adequate to manage the risk. We request that there is a dedicated piece of work to determine the conditions that are appropriate to manage the threat of ASBVd through fresh fruit imports before any trade commences on this pathway.

3. References

Armstrong, John W., and Linda C. Whitehand. 2005. 'Effects of Methyl Bromide Concentration, Fumigation Time, and Fumigation Temperature on Mediterranean and Oriental Fruit Fly (Diptera: Tephritidae) Egg and Larval Survival', *Journal of Economic Entomology*, 98: 1116-25.

FAO. 2018. ISPM 37. Determination of host status of fruit to fruit flies (Tephritidae).

Hancock, David Lawrence, Edward L. Hamacek, Annice C. Lloyd, and Marlene M. Elson-Harris. 2000. "The distribution and host plants of fruit flies (Diptera: Tephritidae) in Australia." In. New Zealand and Australia Avocado Grower's Conference '05.

MPI. 2020. Technical advice on: Host status of five Bactrocera species (Diptera: Tephritidae) on the Australian Capsicum annuum IHS pest list.