

**Import Health Standard
Commodity sub-class: Fresh fruit/vegetables**

**Lychee
(*Litchi chinensis*)
from Thailand**

**Issued pursuant to sections 24A and 166A of the
Biosecurity Act 1993
Date Issued: 24 July 2023**

Commencement

This import health standard comes into force on 24 July 2023.

Revocation

This Import Health Standard revokes and replaces *Commodity sub-class: Fresh fruit/vegetables Lychee (Litchi chinensis) from Thailand* 7 March 2023.

The amendment history to this import health standard is set out in Appendix 2.

Issuing Authority

This import health standard is issued under section 24A of the Biosecurity Act 1993 to incorporate amendments made pursuant to sections 24B and 166A of that Act.

Dated at Wellington, 24 July 2023

Lisa Winthrop
Manager, Plant Health
Ministry for Primary Industries

(acting under delegated authority of the Director-General)

Review and amendment

New Zealand import health standards are subject to periodic review and amendment. New Zealand import health standards are updated and republished as necessary with the most recent version published on the Ministry for Primary Industries (MPI) website.

Distribution

Import health standards are distributed by MPI. They are made available for public access on the MPI website: <https://www.mpi.govt.nz/legal/compliance-requirements/ihs-import-health-standards/>

IMPORT HEALTH STANDARD: FRESH FRUIT/VEGETABLES Lychee (*Litchi chinensis*) from Thailand.

Contents

Part A. Background	4
Part B. General phytosanitary import requirements for all fresh fruit and vegetables for consumption	5
Part C. Additional requirements for lychee from Thailand.....	5
Part D. Phytosanitary certification	6
Part E. Specified regulated pest list for lychee from Thailand.....	9
Appendix 1: Verification activities on arrival in New Zealand	11
Appendix 2: Document history	11

Part A. Background

Scope

This document describes the requirements to be met to enable biosecurity clearance to be given for fresh lychee fruit (*Litchi chinensis*) for human consumption imported into New Zealand from Thailand. The commodity description “lychee” for human consumption is defined as commercially produced lychee fruit with calyx and peduncle, but without stems, leaves, roots or any other plant parts.

Definitions

The definitions of relevant phytosanitary terms used in this standard are consistent with the terms stated in the *International Standards for Phytosanitary Measures No.5*, produced by the International Plant Protection Convention (IPPC), unless the context otherwise requires or the definition is stated below.

Import health standard means a document issued pursuant to section 24A (formerly section 22) of the Biosecurity Act 1993 on behalf of the Director General permitting entry to New Zealand of a specific product under certain conditions.

MPI Import and Export Standards means the section within the Ministry for Primary Industries which is responsible for regulatory biosecurity functions.

Maximum allowable prevalence means the level of infestation that is the threshold, above which phytosanitary actions based on inspection would be applied.

Unit means one lychee fruit.

Regulated organisms means those organisms for which phytosanitary actions would be undertaken if they were intercepted/detected.

Outcome

The agreed pre-shipment phytosanitary measures for specific regulated pests have been undertaken and the lychees are free of all regulated pests.

Performance measure

The high risk regulated organisms as in *Part C* require specific risk mitigation measures.

The Maximum Allowable Prevalence for visually detectable regulated organisms on fresh fruit/vegetables is as follows: At a 95% confidence level, not more than 0.5% of the units in the consignment are infested (this equates to an acceptance level of zero units infested by regulated organisms in a sample size of 600 units).

Equivalence

A chief technical officer may consider an application for an equivalent phytosanitary measure to be approved in accordance with section 27(1)(d)(iii) of the Act, different from that provided for in this IHS, to maintain at least the same level of protection assured by the current measure(s). Equivalence will be considered with reference to the International Standard for Phytosanitary Measures (ISPM) 24. *Guidelines for the determination and recognition of equivalence of phytosanitary measures.*

Part B. General phytosanitary import requirements for all fresh fruit and vegetables for consumption

The import health standard 152.02 (IHS152.02: Importation and Clearance of Fresh Fruit and Vegetables into New Zealand) contains the phytosanitary requirements that must be met for all fresh fruit and vegetable commodities that are allowed to be imported into New Zealand. The IHS 152.02 outlines transit requirements, inspections on arrival in New Zealand and actions undertaken upon organism interceptions.

The import health standard 152.02 can be found at the MPI website ([Fresh Produce IHS 152 02 \(mpi.govt.nz\)](https://www.mpi.govt.nz/fresh-produce/ihs-152-02)).

Part C. Additional requirements for lychee from Thailand

Phytosanitary measures

All lychee fruit for export to New Zealand must be sourced from orchards that produce commercial lychee fruit under standard cultivation, pest-control, harvesting and packing activities. During harvest, infested, infected or damaged fruit must be discarded prior to treatment.

MPI requires a mandatory pre-export treatment of lychee fruit for high risk regulated organisms, including economically significant fruit fly species. MPI currently approves vapour heat treatment or cold disinfestation or irradiation at the following specifications for fruit flies:

Vapour heat treatment (VHT)	Lychees must be treated with vapour heat and the temperature must be raised from ambient to 47 °C or greater and held for a minimum of 20 minutes.
Cold disinfestation	Prior to arrival in New Zealand, the core temperature of the fruit must be held continuously at one of the following temperature/time combinations: Fruit pulp temperature held at: 1 °C or below for 17 days 1.38 °C or below for 20 days
Irradiation	Irradiation with a minimum dose of 150 Gy

MPI requires specific pre-export phytosanitary measures for *Conogethes punctiferalis*. MPI currently approves the use of in-field pest control for Lepidoptera species throughout the production season **or** irradiation at a minimum dose rate of 289 Gy.

MPI requires specific pre-export phytosanitary measures for fruit flies of economic significance. MPI currently approves vapour heat treatment (Appendix 1 of OAP); **or** cold disinfestation (Appendix 2 of OAP); **or** irradiation (Appendix 4 of OAP); these measures are to be carried out in accordance with IHS 152.02 and the official assurance programme.

The application of the irradiation treatment (Appendix 4 of OAP) must be carried out in accordance with ISPM 18. *Guidelines for the use of irradiation as a phytosanitary measure*. MPI approves the below irradiation doses:

- Fruit flies with a minimum dose of 150 Gy
- *Conogethes punctiferalis* with a minimum dose of 289 Gy
- Other IHS regulated arthropod pests¹ with a minimum dose of 400 Gy

Inspection of the consignment

Once the phytosanitary measures have been undertaken for high risk regulated organisms, the Thailand NPPO is required to sample and visually inspect the consignment according to official procedures for all regulated pests including those listed in [Part E](#), to ensure it meets New Zealand's current import requirements. Where Appendix 4 of OAP (irradiation) is the phytosanitary measure to be undertaken, inspection will occur pre treatment. Where a regulated arthropod pest is detected on the commodity and Appendix 4 of OAP (irradiation) is the intended pre-export phytosanitary measure, appropriate irradiation dosages must be applied by Thailand's NPPO. Alternative approved corrective actions may be conducted (e.g. methyl bromide fumigation), or the fruit shall not be exported to New Zealand.

Where Appendix 2 of OAP (cold disinfestation) is the phytosanitary measure to be undertaken, inspection will occur pre or post application of the phytosanitary measure; inspection will occur after phytosanitary measure has been undertaken for Appendix 1 of OAP (vapour heat treatment).

A phytosanitary certificate should not be issued if live regulated organism(s) are detected, unless the consignment is effectively treated. If organisms are found which are not listed in the IHS Thailand's NPPO must establish their regulatory status by consulting the MPI "Official New Zealand Pest Register" (ONZPR), online at <https://onzpr.mpi.govt.nz/>.

If an organism is not listed in ONZPR, Thailand's NPPO must contact MPI to establish the regulatory status of the organism.

Part D. Phytosanitary certification

A completed phytosanitary certificate issued by Thailand's NPPO must accompany all lychee consignments exported to New Zealand. The phytosanitary certificate must be in English and must be an original. Bilingual certificates are acceptable as long as English is one of the languages.

¹ These regulated pests include those listed on this IHS that are not known to vector diseases.

Before a phytosanitary certificate is issued, Thailand's NPPO must be satisfied that the following activities have been undertaken.

The lychees in this consignment have:

- (i) been inspected in accordance with appropriate official procedures and found to be free from regulated pests, specified by the New Zealand Ministry for Primary Industries.

AND

- (ii) been treated by irradiation at a minimum absorbed dose of 289 Gy for *Conogethes punctiferalis*.

OR

been managed using in-field controls for *Conogethes punctiferalis*.

AND

- (iii) been treated in accordance with Appendix 1; **or** Appendix 2; **or** Appendix 4 of the official assurance programme between New Zealand Ministry for Primary Industries and the Thailand Department of Agriculture.

Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment phytosanitary measures have been undertaken effectively, Thailand's NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

The lychees in this consignment have:

- (i) been inspected in accordance with appropriate official procedures and found to be free from regulated pests, specified by the New Zealand Ministry for Primary Industries.

NOTE: Compliance with this additional declaration is not necessary for arthropods if the Thailand NPPO certifies export of this consignment under Appendix 4. The consignment may contain live (but infertile or unable to emerge from pupation) regulated arthropod pests.

AND

- (ii) been treated by irradiation at a minimum absorbed dose of 289 Gy for *Conogethes punctiferalis*.

OR

been managed using in-field controls for *Conogethes punctiferalis*.

AND

- (iii) been treated in accordance with Appendix 1; **or** Appendix 2; **or** Appendix 4 of the official assurance programme between New Zealand Ministry for Primary Industries and Thailand Department of Agriculture.

NOTE: Full details of the vapour heat treatment (temperature and duration) or cold disinfestation (temperature and duration) or irradiation (including dosages) must be included in the “Disinfestation and/or Disinfection Treatment” area of the phytosanitary certificate or as an endorsed attachment to the phytosanitary certificate.

Cold disinfestation completed pre-export must have treatment details such as date, temperature, and duration of the cold disinfestation included in the treatment section of the phytosanitary certificate.

For cold disinfestation completed in-transit; printouts of all temperature sensors or direct electronic downloads are to be made available to MPI at the port of arrival in New Zealand for final clearance of the container.

Part E. Specified regulated pest list for lychee from Thailand

Scientific name	Organism type	Common name	Actions on interception
<i>Meliola eupaniae-majoris</i>	fun	sooty mould	2
<i>Peronophythora litchii</i>	fun	downy blossom blight	2
<i>Phytophthora palmivora</i>	fun	black rot	2
<i>Achaea janata</i>	ins	castor oil looper	2 or 4
<i>Aleurocanthus woglumi</i>	ins	citrus blackfly	2 or 4
<i>Aonidiella orientalis</i>	ins	oriental red scale	2 or 4
<i>Bactrocera dorsalis</i>	ins	oriental fruit fly	3 or 4
<i>Ceroplastes pseudoceriferus</i>	ins	horned wax scale	2 or 4
<i>Ceroplastes rubens</i>	ins	pink wax scale	2 or 4
<i>Chrysomphalus aonidum</i>	ins	Florida red scale	2 or 4
<i>Chrysomphalus dictyospermi</i>	ins	Spanish red scale	2 or 4
<i>Coccus viridis</i>	ins	soft green scale	2 or 4
<i>Conogethes punctiferalis</i>	ins	yellow peach moth	2a or 4
<i>Conopomorpha cramerella</i>	ins	cocoa pod borer	2 or 4
<i>Conopomorpha litchiella</i>	ins	litchi leafminer	2 or 4
<i>Conopomorpha sinensis</i>	ins	litchi fruit borer	2 or 4
<i>Cryptophlebia ombrodelta</i>	ins	macadamia nut borer	2 or 4
<i>Deudorix epijarbas</i>	ins	Cornelian butterfly	2 or 4
<i>Dudua aprobola</i>	ins	brown tortrix	2 or 4
<i>Eublemma brachygonia</i>	ins	flower caterpillar	2 or 4
<i>Eublemma versicolor</i>	ins	flower caterpillar	2 or 4
<i>Eudocima fullonia</i>	ins	fruit-piercing moth	2 or 4
<i>Eudocima salamina</i>	ins	fruit-piercing moth	2 or 4
<i>Ferrisia virgata</i>	ins	guava mealybug	2 or 4
<i>Henosepilachna vigintioctopunctata</i>	ins	hadda beetle	2 or 4
<i>Icerya seychellarum</i>	ins	Okada cottony-cushion scale	2 or 4
<i>Leptoglossus gonagra</i>	ins	coreid bug	2 or 4
<i>Megalurothrips distalis</i>	ins	cereal thrips	2 or 4
<i>Nipaecoccus viridis</i>	ins	spherical mealybug	2 or 4
<i>Oecophylla smaragdina</i>	ins	red tree ant	2 or 4
<i>Orgyia postica</i>	ins	cocoa tussock moth	2 or 4
<i>Paracoccus interceptus</i>	ins	mealybug	2 or 4
<i>Parasa lepida</i>	ins	nettle caterpillar	2 or 4
<i>Pinnaspis strachani</i>	ins	Hibiscus snow scale	2 or 4
<i>Planococcus litchi</i>	ins	litchi mealybug	2 or 4
<i>Pseudococcus comstocki</i>	ins	Comstock mealybug	2 or 4
<i>Pseudococcus jackbeardsleyi</i>	ins	Jack Beardsley mealybug	2 or 4
<i>Pulvinaria psidii</i>	ins	green shield scale	2 or 4
<i>Selenothrips rubrocinctus</i>	ins	cocoa thrips	2 or 4
<i>Tessaratomya javanica</i>	ins	litchi stink bug	2 or 4
<i>Tessaratomya papillosa</i>	ins	litchi stink bug	2 or 4
<i>Thrips hawaiiensis</i>	ins	Hawaiian flower thrips	2 or 4
<i>Tirathaba rufivena</i>	ins	fruit borer	2 or 4

<i>Xyleborus fornicatus</i>	<i>ins</i>	tea shothole borer	2 or 4
<i>Xylotrupes gideon</i>	<i>ins</i>	elephant beetle	2 or 4
<i>Zeugodacus cucurbitae</i>	<i>ins</i>	melon fly	3 or 4

Actions on interception

- 2 Treat, resort, reship or destroy.
- 2a Treat, reship or destroy. Suspend pathway.
- 3 Reship or destroy. Suspend pathway.
- 4 Action dependent on pest interception and irradiation dosage certified as the pre-export measure.

Note: The suspension of the pathway could be at the production area, packhouse, state or country level, depending on the significance of the pest interception.

Appendix 1: Verification activities on arrival in New Zealand

MPI will inspect documentation on arrival in New Zealand. In addition, MPI may inspect a sample from each lot on arrival in New Zealand to verify requirements of the IHS have been met.

Actions undertaken upon interception of irradiated regulated pests

As the required response of regulated arthropod pests that have undergone the irradiation treatment is prevention of adult emergence or adult sterility (not mortality) a possibility exists that live (but infertile or unable to emerge from pupation) regulated arthropods may be present in a consignment.

In accordance with ISPM 18, when mortality is not the required response, the detection of live stages of regulated pests in import inspection should not be considered to represent treatment failure resulting in non-compliance unless evidence exists to indicate that the integrity of the treatment system was inadequate.

MPI reserves the right for an analysis to be conducted on the detected regulated pest to verify treatment efficacy.

Appendix 2: Document history

This document history lists amendments since 2023.

Version Date	Section Changed	Change Description
8 May 2014	All	Standard issued
7 March 2023	Phytosanitary measures	Amended cold treatment temperature/duration
24 July 2023	Phytosanitary measures	Amended measures for <i>Conogethes punctiferalis</i>