Ministry for Primary Industries
Manatū Ahu Matua

Import Health Standard

Actinidia Plants for Planting

MPI.IHS.ACTINIDIA.PFP

22 May 2025

Issued under the Biosecurity Act 1993

Te Kāwanatanga o Aotearoa
New Zealand Government

TITLE

Import Health Standard: Actinidia Plants for Planting

COMMENCEMENT

This import health standard comes into force on 22 May 2025

REVOCATION

This import health standard revokes and replaces *Import Health Standard: Actinidia Plants for Planting* and all prior amendments to that standard.

The amendment history to this import health standard is set out in the introduction.

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, 22 May 2025

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Contents

Introduction

This introduction is not part of the Import Health Standard (IHS), but is intended to indicate its general effect.

Purpose

An IHS specifies the requirements for importing risk goods into New Zealand from all countries.

Background

An IHS issued under the New Zealand Biosecurity Act (the Act) specifies the requirements to be met to effectively manage biosecurity risks associated with importing goods, including the risks from incidentally imported new organisms. IHSs include measures that must be applied in the exporting country before the goods are exported. IHSs also include requirements that must be met by importers during importation including while the goods are in transit and held in a transitional facility (TF), before biosecurity clearance can be given.

Post-clearance conditions may also be specified in an IHS.

Guidance accompanies an IHS as either a separate document or as guidance boxes throughout the IHS itself. Guidance provides information on how the requirements may be met.

Who should read this?

Anyone who is involved in the process of importing risk goods into New Zealand, or who has an interest in importing risk goods into New Zealand, should read and be familiar with the relevant IHS.

Why is this important?

It is the responsibility of the importer to ensure that risk goods comply with the requirements of the relevant IHS. Risk goods that do not comply with the requirements of an IHS may not be cleared for entry into New Zealand and may be directed for treatment, re-shipment, destruction or further action deemed appropriate by a Chief Technical Officer (CTO). The pathway may be suspended if certain types of viable regulated pests or viable unwanted organisms are intercepted on the consignment.

Importers are liable for all associated expenses.

Equivalence

A CTO may consider an ap**plication for an equivalent phytosanitary measure to be approved, different from that provided for in this IHS, to maintain at least the same level of protection assured by the current measures.**

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*.

Document History

No.	Version Date	Section Changed	Change(s) Description
1	13 July 2018	-	-
2	12 May 2021	Part 2: Table 1, Part 1.2 (a), Part 3.1(2), Appendix 3 and Appendix 4	Corrected the spelling of Tomato necrotic spot associated virus and updated name of regulated pest database.
3	12 July 2023	Part 2: Table 1	Removed the import requirement of herbaceous indexing for the pest *Pelargonium zonate spot virus*.
4	16 October 2023	Appendix 1 and 2	Urgently amended insects and mites treatments to align the treatments with MPI-Approved Biosecurity Treatment Standard.
5	15 April 2024	Part 1.7: Exporting country system, Part 2.1 (1) d), Part 2.3.1, Table 1, Appendix 1, Appendix 2, Appendix 3	Removed section 1.7, removed the requirement that chemical treatments must be applied a maximum of 48 hours prior to shipment, temperature requirements changed and guidance box added, addition of Actinidia yellowing ringspot virus, Actinidia yellowing virus 1, Actinidia virus C and Emaravirus kiwii for inspection and testing (viruses added into regulated pest list), amended testing tissue type for phytoplasma to include both leaf and stem material, and removed *Diaporthe novem* from regulated pest list in Appendix 3.
6	27 August 2024	Table 1.	Minor amendment to table 1 to align the temperature requirements in section 2.3.1.
7	28 November 2024	Table 1 and Appendix 3	Removal of conditions for *Phytopythium helicoides*
8	22 May 2025	Part 2: Table 1, Part 2: section 2.3.2.2	Addition of High Throughput Sequencing (HTS) with restricted analysis as an option for predetermined testing of viruses and viroids and inclusion of HTS in relation to combining samples for mandatory testing.

Other information

Guidance for this Import Health Standard will be provided after this standard is issued.

Part 1: General requirements

1.1 Application

(1) This import health standard applies to species and hybrids of *Actinidia* plants for planting that are listed as permitted in the MPI Plants Biosecurity Index (PBI).

(2) The following types of *Actinidia* plants for planting are eligible for import from all countries under this standard:

a) tissue cultures;
b) dormant cuttings.

1.2 Incorporation by reference

(1) The following documents are incorporated by reference under section 142M of the Act:

a) Official New Zealand Pest Register (ONZPR). Wellington, MPI;
b) MPI Plants Biosecurity Index (PBI);
c) Standard for Offshore Facilities Holding and Testing Plants for Planting;
d) 155.04.03: Identification of organisms;
e) ISPM 4: Requirements for the establishment of pest free areas. Rome, IPPC, FAO;
f) ISPM 5: *Glossary of phytosanitary terms*. Rome, IPPC, FAO;
g) ISPM 7: *Phytosanitary certification system*. Rome, IPPC, FAO;
h) ISPM 8: *Determination of pest status in an area*. Rome, IPPC, FAO;
i) ISPM 10: *Requirements for the establishment of pest free places of production and pest free production sites*. Rome, IPPC, FAO;
j) ISPM 12: *Phytosanitary certificates.* Rome, IPPC, FAO;
k) ISPM 23: *Guidelines for Inspection*. Rome, IPPC, FAO;
l) ISPM 24: *Guidelines for the determination and recognition of equivalence of phytosanitary measures*. Rome, IPPC, FAO;
m) ISPM 27: *Diagnostic protocols for regulated pests.* Rome, IPPC, FAO;
n) ISPM 36: *Integrated measures for plants for planting.* Rome, IPPC, FAO.
o) Approved Biosecurity Treatments for Risk Goods (MPI-ABTRT), MPI.

(2) Under section 142O(3) of the Act, it is declared that section 142O(1) does not apply, that is, a notice under section 142O(2) of the Act is not required to be published before material that amends or replaces any material incorporated by reference that has legal effect as part of those documents.

1.3 Definitions

(1) Definitions are listed in Appendix 4.

1.4 Movement and clearance

(1) In order for *Actinidia* plants for planting to obtain authorisation for movement to a transitional facility, *Actinidia* plants for planting must:

a) meet the requirements of Part : and 3:; and
b) meet the requirements of Parts 2.1 or 2.2

(2) In order for *Actinidia* plants for planting to obtain a biosecurity clearance, they must also meet the requirements of Parts 2.3 and 2.4.

a) There are no further requirements that apply to a tissue culture that is directly traceable to a plant that has been deflasked into a greenhouse and that has met the requirements of Parts 2.3 and 2.4.

1.5 Labelling and packaging

(1) All consignments of *Actinidia* plants for planting must be:

a) clearly labelled with the full botanical name (genus and species) of all plants; and
b) shipped in packaging that:

(i) is clean and free from soil, regulated pests and other regulated articles;
(ii) prevents the plant material from becoming contaminated with regulated pests or other regulated articles.

1.6 Import permit

(1) An import permit is required for all consignments of *Actinidia* plants for planting.

(2) The import permit will identify the following:

a) the regulated pests for which screening is required in New Zealand;
b) the minimum quarantine period, based on those regulated pests for which screening is required;
c) the level of post entry quarantine greenhouse and/or tissue culture laboratory in which consignments must be held, based on those regulated pests for which screening is required.

1.7 Options for import

(1) All *Actinidia* plants for planting must be produced using one of the following options:

a) produced under an *Export Plan* as described in Part 1.7.1; or
b) produced at an MPI approved Offshore Facility as described in Part 1.7.2; or
c) produced in any way other than listed above as described in Part 1.7.3.

1.7.1 *Actinidia* plants for planting produced under an *Export Plan*

(1) Importers may only import *Actinidia* plants for planting produced under an *Export Plan* from a country where an *Export Plan* has been approved by a CTO. The *Export Plan* will detail the activities and processes established to achieve the measures identified in clause 1.7.1(2).

(2) *Actinidia* plants for planting must meet one of the following measures to manage the risk in relation to each regulated pest (Appendix 3) listed in the *Export Plan*:

a) Country freedom: The *Actinidia* plants for planting are sourced from a country for which country freedom has been established in relation to a particular pest in accordance with measures described in ISPM 8: *Determination of pest status in an area* and ISPM 4: *Requirements for the establishment of pest free areas*;
b) Pest free area: The *Actinidia* plants for planting are sourced from a pest free area established in accordance with ISPM 4: *Requirements for the establishment of pest free areas*;
c) Pest free place of production: The *Actinidia* plants for planting are sourced from a pest free place of production established in accordance with ISPM 10: *Requirements for the establishment of pest free places of production and pest free production sites*;

d) Integrated measures for plants for planting: The *Actinidia* plants for planting are sourced from a production site that uses integrated measures for plants for planting in accordance with ISPM 36: *Integrated measures for plants for planting*.

(3) If a phytosanitary measure is not applied in relation to any regulated pest listed in Appendix 3, this measure must be applied on arrival in New Zealand as described in Part 2.3.

1.7.2 *Actinidia* plants for planting produced at an MPI approved offshore facility

(1) The *Actinidia* plants for planting to be produced at an MPI approved offshore facility must be produced at a facility that meets the requirements of the Standard for Offshore Facilities Holding and Testing Plants for Planting.

(2) All *Actinidia* plants for planting produced at an offshore facility must meet all of the phytosanitary measures described in Part 2.3 in relation to each regulated pest listed in Appendix 3.

(3) If a phytosanitary measure is not applied in relation to any regulated pest listed in Appendix 3, this measure must be applied on arrival in New Zealand.

1.7.3 *Actinidia* plants for planting produced in any other way

(1) For *Actinidia* plants for planting that are not produced under an *Export Plan* or at an approved offshore facility, all phytosanitary measures described in Parts 2.3 and 2.4 must be applied for each regulated pest listed in Appendix 3 on arrival in New Zealand.

Part 2: Specific requirements

(1) All dormant cuttings must meet all requirements described in Part 2.1.

(2) All tissue cultures must meet all requirements described in Part 2.2.

(3) All *Actinidia* plants for planting must be screened for each regulated pest listed in Appendix 3, as described in Part 2.3, unless:

a) phytosanitary measures in relation to a regulated pest have been applied in accordance with an agreed *Export Plan* or at an MPI approved offshore facility. In this case the import permit will identify the regulated pests for which phytosanitary measures must be applied on arrival in New Zealand.

(4) All *Actinidia* plants for planting that require phytosanitary measures to be applied on arrival in New Zealand must be held in a post entry quarantine facility approved to the MPI Facility Standard: Post Entry Quarantine for Plants as described in Part 2.4(4).

2.1 Dormant cuttings

(1) All dormant cuttings must be:

a) imported to generate tissue cultures which will undergo screening for regulated pests as described in Part 2.3;
b) free from soil and other regulated articles;
c) accompanied by a phytosanitary certificate as described in Part :;
d) treated for insects and mites prior to export using one of the treatment options listed in Appendix 1 and Appendix 2 respectively. Cuttings must be held and packaged in a manner which prevents recontamination.
e) imported into a Level 3 tissue culture laboratory approved to the MPI Facility Standard: Post Entry Quarantine for Plants;
f) dipped in 1% sodium hypochlorite for a minimum period of 2 minutes on arrival at the tissue culture facility;
g) destroyed in the quarantine waste after tissue culture plants have been generated.

(2) If dormant cuttings are sprouted to generate explant material, this must be done according to one of the following options:

a) cuttings must be held in a Level 3B post entry quarantine facility;
b) cuttings must be held in a sealed vessel in a growth chamber within a Level 3 tissue culture facility. The sealed vessel may only be opened in a biological safety cabinet.

(3) Each tissue culture that is generated from a dormant cutting will be considered as an individual tissue culture plantlet.

(4) Stage 1 tissue cultures must not be deflasked directly into the greenhouse. All plants must enter the stage 2 (multiplication) phase prior to hardening off and deflasking.

(5) If tissue cultures are sub-cultured before they are transferred to the greenhouse, the process must be done as described in clause 2.2(3).

2.2 Tissue cultures

(1) All tissue cultures must be:

a) derived from aerial plant parts;
b) grown in a pest proof and transparent vessel, with a maximum of one plant per vessel;
c) grown in a medium free from fungicides, antibiotics and charcoal;

d) grown in the vessel in which they will be exported for at least 14 days prior to shipment;
e) free from visible fungal or bacterial contamination;
f) in the stage 2 (multiplication) or stage 3 (rooting) phase;
g) accompanied by a phytosanitary certificate as described in Part :.

(2) Tissue cultures may be imported directly into a Level 3 tissue culture laboratory approved to the MPI Facility Standard: Post Entry Quarantine for Plants for sub-culturing before they are transferred to the greenhouse.

(3) If tissue cultures are sub-cultured before they are transferred to a greenhouse, the following requirements must be met:

a) at least one sub-culture from each imported stage 2 or stage 3 tissue culture plant must be developed to the stage where it can be screened for regulated pests after it is deflasked into the greenhouse (see Parts 2.3 and 2.4):

(i) this sub-culture should be taken during the first round of multiplication;
(ii) if only one plant is obtained during the first round of multiplication, further rounds of multiplication may be undertaken. In this case, a sub-culture for transfer to the greenhouse must be taken from the first round of multiplication where more than one plant is obtained.

b) surplus sub-cultures that are produced during the round of multiplication used to generate the plant which is transferred to the greenhouse may be retained at the Level 3 tissue culture laboratory throughout the quarantine period as follows:

(i) these plants may be sub-cultured and multiplied during the post entry quarantine period;
(ii) these plants may also be eligible for biosecurity clearance provided that traceability is maintained as described below.

c) clear records of traceability must be retained throughout the quarantine period;
d) only sub-cultures that can be directly traced back to both the original imported tissue culture plant, and the plant that has been transferred to the greenhouse, will be eligible for clearance.

2.3 Screening for regulated pests

(1) To ensure freedom from regulated pests all *Actinidia* plants for planting must be screened for each regulated pest listed in Appendix 3, on arrival in New Zealand as described in this Part unless:

a) phytosanitary measures for a particular pest have been applied as described under an agreed *Export Plan* or, at an MPI approved offshore facility. In this case, the import permit will identify the requirements of Part 2.3 that must be applied in New Zealand.

2.3.1 Environmental conditions

(1) Specific environmental conditions must be applied in the first and the second growing seasons, as follows:

a) a continuous three-month period of spring-like conditions with a daytime temperature of 19.5 °C (±3 °C) and a night-time temperature of 16.5 °C (±3 °C);
b) a continuous four-month period of summer-like conditions, with a daytime temperature of 22.5 °C (±3 °C) and a night-time temperature of 19.5 °C (±3 °C) (apart from when additional conditions described in clause 2.3.1(3) are applied);
c) a continuous two month period of autumn-like conditions, with a daytime temperature of 16.5 °C (±3 °C). Lower temperatures may be applied at night.

(2) Plants must be held dormant at around 4 °C for at least two months between the first and second growing season.

(3) The following additional environmental conditions must be incorporated into the four month period of summer-like conditions in the first growing season:

a) a continuous 28 day period at a minimum relative humidity of 75% (±5%), which includes two 48 hour periods of continuous misting. There must be a minimum period of at least two weeks between each misting period;
b) A continuous 28-day period with a daytime temperature of 27.5 °C (±3 °C) and a night-time temperature above 23 °C (±3 °C). Relative humidity must be at least 75% (±5%) during this time..

(4) The operating manual for the post entry quarantine facility must describe the environmental conditions that will be applied during each growing season, and how these will be monitored, maintained and recorded.

Guidance for PEQ operators

- You can use control system settings to either gradually or instantly shift between "daytime" and "night-time" environmental conditions.
- The required temperatures in clause 2.3.1 apply to measurements averaged over periods relevant to biological impacts (e.g., 1-hour averages for humidity, 24-hour averages for temperature).
- It is expected that deviations beyond the average temperature and humidity limits will be infrequent (i.e., < 1% of averaged periods).

2.3.2 Testing

(1) All testing must be done at a facility approved to the 155.04.03: Identification of organisms.

2.3.2.1 Diagnostic testing

(1) If a pest is found, or signs or symptoms of a pest are observed during inspections by the facility operator or by the MPI Inspector, samples must be sent for diagnostic testing as described in Part 3.7 of the MPI Facility Standard: Post Entry Quarantine for Plants.

2.3.2.2 Pre-determined testing

(1) Pre-determined testing is required for all regulated pests listed in Table 1.

(2) All samples for pre-determined testing must be collected during the first growing season according to the schedule shown in Table 1.

(3) The unit for pre-determined testing is an individual greenhouse plant. Each plant must be labelled individually and tested separately, with the following exception:

a) for polymerase chain reaction (PCR) and high throughput sequencing (HTS) testing, samples taken from up to five plants of the same species can be combined to form a single composite sample for pre-determined testing.

2.3.3 Inspection

(1) All plants must be inspected for signs and symptoms of regulated pests by the facility operator as described in Part 3.6.1 of the MPI Facility Standard: Post Entry Quarantine for Plants.

(2) All plants must be inspected for signs and symptoms of regulated pests by the MPI Inspector according to the schedule shown in Table 1. A total of ten inspections must be done by the MPI Inspector.

(3) The operator of the post entry quarantine facility must ensure that the MPI Inspector is notified:

a) when plants are deflasked into a greenhouse;
b) when deflasked plants start active growth;

c) before the environmental conditions described in clause 2.3.1(3) are applied;
d) when plants start active growth at the start of the second growing season.

2.4 Post entry quarantine greenhouse

(1) For all *Actinidia* plants for planting, all requirements must be applied as described in this Part, unless:

a) phytosanitary measures for a particular pest have been applied as described under an agreed *Export Plan* or at an MPI approved offshore facility. In this case, the import permit will identify the requirements of Part 2.4 that must be applied in New Zealand;

(2) Individual tissue culture plants must be deflasked into a post entry quarantine greenhouse approved to the MPI Facility Standard: Post Entry Quarantine for Plants. The level of greenhouse will be specified on the import permit.

(3) The total quarantine period will:

a) begin after tissue cultures have been deflasked and started active growth;
b) be a minimum of 20 months;
c) include two distinct growing seasons, each of at least nine months long, with a two month dormancy period in between the first and second growing seasons.

Table 1: Schedule of inspections by the MPI Inspector and pre-determined testing requirements

Season		Timing of inspection by MPI Inspector	Pre-determined testing requirements			
			Timing of sample collection	**Tissue type**	**Organism**	**Test**
First growing season	**'Spring-like' conditions for three months** as described in clause 2.3.1(1)a)	**Inspection 1** Within the first 14 to 28 days of plants being deflasked and starting active growth in the greenhouse. **Inspection 2** Within the last 14 days of the spring-like growth period.	**Sample set 1** Within the last 28 days of the spring-like growth period.	**Leaf material samples** Collected from at least two positions on each stem, including: • A young fully expanded leaf at the top of the stem • An older leaf from a midway position Leaf petioles and mid veins to be used for testing.	• Actinidia chlorotic ringspot-associated virus	PCR or HTS
					• Actinidia yellowing ringspot virus (AYRSpV)	PCR or HTS
					• Actinidia yellowing virus 1 (AcYV1)	PCR or HTS
					• Actinidia virus C (AcVC)	PCR or HTS
					• Apple stem grooving virus [*Actinidia*-infecting strain	PCR or HTS
					• Emaravirus kiwii (E.kiwii)	PCR or HTS
					• Citrus leaf blotch virus [Actinidia-infecting strain]	PCR or HTS
					• Pelargonium zonate spot virus	PCR or HTS
					• Tomato necrotic spot associated virus	PCR or HTS

Season		Timing of inspection by MPI Inspector	Pre-determined testing requirements			
			Timing of sample collection	**Tissue type**	**Organism**	**Test**
					• Pseudomonas syringae pv. actinidiae	PCR
	'Summer-like' conditions for four months as described in clause 2.3.1(1)b)	**Inspection 3** Within the final 14 days of growth at 22.5 °C (±3 °C) at 75% (±5%) relative humidity, and after at least one 48 hour misting period, see clause 2.3.1(3)a). **Inspection 4** Within the final 7 days of growth at 27.5 °C (±3 °C), or within 7 days following the completion of this period, see clause 2.3.1(3)b).	**Sample set 2** After at least 28 days growth at 22.5 °C (±3 °C).	**Stem samples** Collected from at least two positions on each stem, including: • One shoot at the base of the stem • One shoot in the middle section of the stem If possible, the minimum length of stem taken from each shoot should be 10 cm.	• *Verticillium nonalfalfae*	PCR or culture based identification method
			Sample set 3 Within 14 days of completing growth at 27.5 °C (±3 °C).	**Leaf material samples** Collected from at least 2 positions on each stem, including: • A young fully expanded leaf at the top of the stem • An older leaf from a midway position Leaf petioles and mid veins to be used for testing.	• All phytoplasmas ("Leaf material samples" or "Stem samples" may be used)	PCR
					• *Pectobacterium carotovorum* subsp. *actinidiae*	PCR or culture based identification method

Season		Timing of inspection by MPI Inspector	Pre-determined testing requirements			
			Timing of sample collection	Tissue type	Organism	Test
				Stem samples Collected from at least 2 positions on each stem, including: • One shoot at the base of the stem • One shoot in the middle section of the stem If possible, the minimum length of stem taken from each shoot should be 10 cm.	• *Ceratocystis fimbriata*	PCR using primers that target the Latin American Clade (LAC)
					• All phytoplasmas ("Stem samples" or "Leaf material samples" may be used)	PCR
					• *Phytophthora drechsleri* • *Phytophthora palmivora*	PCR or culture based identification method PCR or culture based identification method
	'Autumn-like' conditions for two months as described in clause 2.3.1(1)c).	**Inspection 5** Within the last 28 days of the period of autumn-like conditions.				
Two month dormancy as described in clause 2.3.1(2)						
Second growing season	**'Spring-like' conditions** as described in clause 2.3.1(1)a).	**Inspection 6** Within the first 14 to 28 days of plants coming out of dormancy. **Inspection 7** Within the last 14 days of the spring growth period.				

Season		Timing of inspection by MPI Inspector	Pre-determined testing requirements			
			Timing of sample collection	Tissue type	Organism	Test
	'Summer-like' conditions as described in clause 2.3.1(1)b)	**Inspection 8** Within the first 14 to 28 days of the summer growth period. **Inspection 9** Within the last 28 days of the summer growth period.	Pre-determined testing to be repeated for *C. fimbriata*, *P. carotovorum* subsp. *actinidiae* and *V. nonalfalfae* within the last 28 days of the summer growth period. The same test methods and sampling regimes used in the first growing season must be used.			
	'Autumn-like' conditions as described in clause 2.3.1(1)c)	**Inspection 10** Within the last 28 days of the autumn growth period,				

Part 3: Phytosanitary inspection and certification

3.1 Phytosanitary inspection

(1) The NPPO of the exporting country must:

a) visually inspect each sample unit according to official procedures in accordance with ISPM 23: *Guidelines for Inspection* for all visually detectable pests that are regulated by New Zealand;
b) reconcile that the number of units presented for inspection is consistent with documentation;
c) verify that traceability labelling is complete; and
d) verify that phytosanitary security is maintained for the consignment.

(2) If pests are found which are not listed in Appendix 3, or in the Official New Zealand Pest Register (ONZPR), the NPPO must contact MPI to establish their regulatory status before issuing the phytosanitary certificate.

(3) For plants in tissue culture, the NPPO must verify that all plants comply with all requirements set out in clause (1) of Part 2.2.

(4) For dormant cuttings, the NPPO must verify that:

a) the insect and mite treatments have been applied as described in Part 2.1.

(5) For *Actinidia* plants for planting produced under an *Export Plan*, the NPPO must verify that the *Actinidia* plants for planting are:

a) free from regulated pests described in the *Export Plan*; and
b) held in a manner to ensure that infestation/reinfestation does not occur following inspection and certification.

(6) For *Actinidia* plants for planting produced at an MPI approved offshore facility, the NPPO must verify that the *Actinidia* plants for planting are:

a) free from regulated pests described in the agreement between MPI and the approved offshore facility; and
b) held in a manner to ensure that infestation/reinfestation does not occur following inspection and certification.

3.2 Phytosanitary certificate

(1) All consignments of *Actinidia* plants for planting must be accompanied by a phytosanitary certificate issued by the NPPO of the exporting country in accordance with ISPM 12: *Phytosanitary certificates*; and must include:

a) all relevant additional declaration(s) as described in Part 3.2.1;
b) the botanical name of all *Actinidia* plants for planting in the consignment;
c) full treatment details in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate (applies to dormant cuttings only, as described in Part 2.1);
d) the following declaration:

(i) "This is to certify that the plants, plant products or other regulated articles described herein have been inspected and/or tested according to appropriate official procedures and are considered to be free from the quarantine pests specified by the importing contracting party and to conform with the current phytosanitary requirements of the importing contracting party, including those for regulated non-quarantine pests."

3.2.1 Additional declarations

(1) The NPPO must include the following additional declarations on the phytosanitary certificate:

a) for all *Actinidia* plants for planting produced under an agreed *Export Plan*:

   (i) "This consignment was produced and prepared for export in accordance with the agreed *Export Plan*."

b) for all *Actinidia* plants for planting produced at an MPI approved offshore facility:

   (i) "This consignment was produced and prepared for export in accordance with the agreement between MPI and [list name of approved offshore facility]."

Appendix 1: Approved insecticide treatments – *Actinidia* dormant cuttings

(1) One of the treatment options listed below must be applied as described in Part 2.1.

<table>
<tr><th>Treatment</th><th>Specification</th></tr>
<tr><td>Methyl bromide (MeBr)
(Option 1)</td><td>Apply one of the treatment options from the table below:
<table>
<tr><th>CT</th><th>Initial dose</th><th>Minimum end point dose</th><th>Temperature (°C)</th><th>Time</th><th>Comments</th></tr>
<tr><td>74</td><td>48 g/m^3</td><td>28.8 g/m^3</td><td>10–15</td><td>2 hrs</td><td rowspan="4">The treatment must achieve the CT product, minimum concentration, temperature, and time listed. Used packaging is to be dipped or fumigated as per FVT9* or destroyed.</td></tr>
<tr><td>62</td><td>40 g/m^3</td><td>24 g/m^3</td><td>16–20</td><td>2 hrs</td></tr>
<tr><td>50</td><td>32 g/m^3</td><td>19.2 g/m^3</td><td>21–27</td><td>2 hrs</td></tr>
<tr><td>37.2</td><td>28 g/m^3</td><td>14.4 g/m^3</td><td>28–32</td><td>2 hrs</td></tr>
</table>
*See the ABTRT for more details

Guidance:
• While a number of combinations of time and initial concentration may be used to achieve the minimum requirements (CT and minimum final concentration (g/m^3)) of the treatment, care must be taken to avoid phytotoxicity. Phytotoxic effects of the treatment may increase when a higher initial concentration at lower temperature and reduced duration is used.
• It is the importers responsibility to choose which ‘duration of treatment (time (h))’ option will be undertaken.
• The importer undertakes treatments at their own risk (see legal disclaimer in Approved Biosecurity Treatments (ABTRT))

The concentration-time product (CT) utilized for methyl bromide treatment in this standard is the sum of the fumigant concentration readings (g/m^3) over time (h). This is in accordance with ISPM 43*: Requirements for the use of fumigation as a phytosanitary measure*.</td></tr>
<tr><td>Hot water treatment followed by chemical treatment
(Option 2)</td><td>All treatments must be applied in the following order:
1) Immersion in water at a minimum continuous temperature of 24 °C for a minimum period of 2 hours;
2) Immersion in water at a minimum continuous temperature of 45 °C for a minimum period of 3 hours;
3) Dipping (with agitation) for a minimum of two minutes in chlorpyrifos dip (2.4 g active ingredient per litre, or label rates) containing a non-ionic surfactant. If bubbles are present on the plant surface after the initial two-minute period, the immersion period must be extended to a minimum of five minutes.</td></tr>
</table>

Chemical treatment (Option 3)

Apply two active ingredients via spraying or dipping, one organophosphate and one from another different chemical group listed below:

Treatment/ Chemical	Active ingredient (a.i.)	Application Rate (g a.i./L)	Time	Comments
Organophosphate	Acephate	0.75	2–5 mins	Dip/spray at room temperature. Refer to pesticide label to check the need for surfactants, the suitability for specific species See **Note** below.
	Chlorpyrifos	0.8		
	Dimethoate	0.5 to 1.9		
	Malathion	1.5		
	Pirimiphos-methyl	0.475		
Carbamate	Carbaryl	1.2		
Diamide	Cyantraniliprole	0.15		
Diacylhydrazine	Tebufenozide	0.06		
Neonicotinoid	Imidacloprid	0.16		
	Thiacloprid	0.16		
Synthetic pyrethroid	Deltamethrin	0.025	15 mins	
	Esfenvalerate	0.03		
	Fenvalerate	0.03		
	Lambda-cyhalothrin	0.05		
Spinosyns	Spinosad	0.048	2–5 mins	

Note: The above contact and systemic insecticidal dips may be used instead of fumigation, but only if the used packaging material is separately fumigated (FVT8) or destroyed. Plants are to be immersed completely or all surfaces sprayed to runoff. For dipping, the treatment time is normally 2 mins (except those requiring 15 mins) but must be increased to 5 mins if bubbles remain present on the plant surface. The chemicals, if compatible, may be combined as a single treatment. Dip solutions must be used no more than twice or as per manufacturer's recommendations.

Appendix 2: Approved miticide treatments – *Actinidia* dormant cuttings

(1) One of the treatment options listed below must be applied as described in Part 2.1.

<table>
<tr><th>Treatment</th><th>Specification</th></tr>
<tr><td>Methyl bromide (Option 1)</td><td>Apply one of the treatment options from the table below:
<table>
<tr><th>CT</th><th>Initial dose</th><th>Minimum end point dose</th><th>Temperature (°C)</th><th>Time</th><th>Comments</th></tr>
<tr><td>120</td><td>68 g/m³</td><td>51 g/m³</td><td>10–15</td><td rowspan="4">2 hrs</td><td rowspan="12">The treatment must achieve the CT product, minimum concentration, temperature, and time listed. Used packaging is to be dipped or fumigated as per FVT9* or destroyed</td></tr>
<tr><td>100</td><td>57 g/m³</td><td>43 g/m³</td><td>16–20</td></tr>
<tr><td>85</td><td>48 g/m³</td><td>36 g/m³</td><td>21–27</td></tr>
<tr><td>70</td><td>40 g/m³</td><td>30 g/m³</td><td>28–32</td></tr>
<tr><td>120</td><td>56 g/m³</td><td>41 g/m³</td><td>10–15</td><td rowspan="4">2.5 hrs</td></tr>
<tr><td>100</td><td>48 g/m³</td><td>35 g/m³</td><td>16–20</td></tr>
<tr><td>85</td><td>40 g/m³</td><td>29 g/m³</td><td>21–27</td></tr>
<tr><td>70</td><td>32 g/m³</td><td>23 g/m³</td><td>28–32</td></tr>
<tr><td>120</td><td>48 g/m³</td><td>34 g/m³</td><td>10–15</td><td rowspan="4">3 hrs</td></tr>
<tr><td>100</td><td>40 g/m³</td><td>28 g/m³</td><td>16–20</td></tr>
<tr><td>85</td><td>34 g/m³</td><td>24 g/m³</td><td>21–27</td></tr>
<tr><td>70</td><td>28 g/m³</td><td>20 g/m³</td><td>28–32</td></tr>
</table>
*See the ABTRT for more details
Note: This treatment can be applied to manage both insects and mites. When this treatment is used to manage mites, Methyl bromide treatment for insects mentioned above is not required.

Guidance:

While a number of combinations of time and initial concentration may be used to achieve the minimum requirements (CT and minimum final concentration (g/m³)) of the treatment, care must be taken to avoid phytotoxicity. Phytotoxic effects of the treatment may increase when a higher initial concentration at lower temperature and reduced duration is used.
It is the importers responsibility to choose which ‘duration of treatment (time (h))’ option will be undertaken.
The importer undertakes treatments at their own risk (see legal disclaimer in Approved Biosecurity Treatments (ABTRT))

The concentration-time product (CT) utilized for methyl bromide treatment in this standard is the sum of the fumigant concentration (g/m³) over time (h). This is in accordance with ISPM 43*: Requirements for the use of fumigation as a phytosanitary measure*.</td></tr>
</table>

<table>
<tr>
<td>Chemical treatment (Option 2)</td>
<td>Apply one of the following treatments (containing one or two active ingredients) via spraying or dipping
<table>
<tr><th>Treatment/ Chemical</th><th>Active ingredient (a.i.)</th><th>Application Rate (g a.i./L)</th><th>Time</th><th>Comments</th></tr>
<tr><td colspan="2">Acequinocyl</td><td>0.15</td><td rowspan="8">2–5 mins</td><td rowspan="8">Dip/spray at room temperature. Refer to pesticide label to check the need for surfactants, the suitability for specific species

See Note below</td></tr>
<tr><td colspan="2">Chlorfenapyr</td><td>0.087</td></tr>
<tr><td colspan="2">Abamectin + pyridaben</td><td>0.012 + 0.34</td></tr>
<tr><td colspan="2">Abamectin + spiromesifen</td><td>0.012 + 0.152</td></tr>
<tr><td colspan="2">Emamectin benzoate + pyridaben</td><td>0.002 + 0.34</td></tr>
<tr><td colspan="2">Emamectin benzoate + spiromesifen</td><td>0.002 + 0.152</td></tr>
<tr><td colspan="2">Fenazaquin + pyridaben</td><td>0.5 + 0.34</td></tr>
<tr><td colspan="2">Fenazaquin + spiromesifen</td><td>0.5 + 0.152</td></tr>
</table>
Note: Chemical treatment may be used instead of fumigation but only if the packaging material is separately fumigated or destroyed. Treatments may be in the form of spray, or preferably immerse the item in a dip(s) with agitation, according to the following conditions:

• Dipping – the treatment time is normally 2 mins but must be increased to 5 mins if bubbles remain present on the plant surface. Dip solutions must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations using either the recommended label rate or the rates shown in the table above; or

• Spraying – all surfaces of the plant must be sprayed to the point of runoff (including the under surfaces of leaves). Packing material (arriving with the plant) must be treated the same as the product or destroyed.</td>
</tr>
</table>

Appendix 3: Regulated pest list – *Actinidia* plants for planting

Fungi
Ceratocystis fimbriata
Colletotrichum taiwanense
Colletotrichum simmondsii
Corynespora cassiicola
Diaporthe tulliensis
Erysiphe actinidiae var*. actinidiae*
Erysiphe actinidiae var*. argutae*
Phyllosticta actinidiae
Pseudocercospora actinidiae
Pseudocercospora hangzhouensis
Pucciniastrum actinidiae
Verticillium nonalfalfae

Oomycetes
Phytophthora drechsleri
Phytophthora palmivora

Bacteria
Acidovorax valerianellae
Pectobacterium carotovorum subsp*. actinidiae*
Pseudomonas syringae pv*. actinidiae*

Viruses
Actinidia chlorotic ringspot-associated virus
Actinidia yellowing ringspot virus (AYRSpV)
Actinidia yellowing virus 1 (AcYV1)
Actinidia virus C (AcVC)
Apple stem grooving virus [Actinidia-infecting strain]
Citrus leaf blotch virus [Actinidia-infecting strain]
Emaravirus kiwii (E. kiwii)
Pelargonium zonate spot virus
Tomato necrotic spot associated virus

Phytoplasmas
16Sr1 (aster yellows) group
16SrXII (stolbur) group
16SrX (apple proliferation) group

Appendix 4: Definitions

Definitions have the same meaning as defined by the Act or ISPM 5: *Glossary of phytosanitary terms*, unless set out below:

Cutting
A plants for planting commodity sub-class for propagation material from the stem only (no roots).

Dormant
Temporarily inactive/suspended growth (cuttings of deciduous species should have no leaves; bulbs should have no leaves or roots).

Import permit
Official document issued by the Ministry for Primary Industries that authorises import of a commodity in accordance with specified phytosanitary requirements.
{Note: Permits for imports into New Zealand are issued by the Ministry for Primary Industries}.

Pest
Definition as per ISPM 5: *Glossary of phytosanitary terms*.

Regulated pest
Definition as per status definitions in ONZPR.

MPI Plants Biosecurity Index (PBI)
A database of plant species that have been approved for import into New Zealand.

Official New Zealand Pest Register (ONZPR)
The site for official information about pests and disease-causing organisms in New Zealand, authorised by MPI.

Pre-determined testing
Specific testing for pests and diseases as stated in the import health standard.

Stage 1 (initiation) tissue culture
An explant, taken directly from an *in vivo* mother plant, that is undergoing *in vitro* propagation for the purpose of generating stage 2 and stage 3 tissue cultures.

Stage 2 (multiplication) tissue culture
Plants in tissue culture that are being multiplied to rapidly increase the quantity of plants.

Stage 3 (rooting) tissue culture
Plants in tissue culture that are being prepared for deflasking, including rooting and hardening-off of plants.

Tissue culture
Plants *in vitro* that have been prepared as tissue culture from one parent by asexual reproduction (clonal techniques) under sterile conditions.

Viable
Capable of germination or other means of maintaining life.