# Fresh Dragon Fruit (*Hylocereus* sp.) for Human Consumption

DRAGONFRUIT-IHS.FP

#### **TITLE**

Import Health Standard: Fresh Dragon Fruit (Hylocereus sp.) for Human Consumption

#### COMMENCEMENT

This Import Health Standard comes into force on date of signing.

#### REVOCATION

This Import Health Standard revokes and replaces the following:

• Import Health Standard: Fresh Dragon Fruit for Consumption.

#### **ISSUING AUTHORITY**

This Import Health Standard is issued under section 24A of the Biosecurity Act 1993.

Dated at Wellington,

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## 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. This **IHS** specifies the requirements that must be met when **importing fresh dragon fruit** into New Zealand.

# **Background**

An IHS issued under the New Zealand Biosecurity Act 1993 (the Act) specifies the requirements to be met to effectively manage biosecurity risks associated with importing risk goods, including the risks from incidentally imported new organisms. IHSs include measures that must be applied in the exporting country before the risk goods are exported. IHSs also include requirements that must be met by importers during importation, including while the risk goods are in transit to New Zealand and held in a transitional facility, before biosecurity clearance can be given.

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

#### Who should read this?

This **IHS** should be read by anyone involved in the process of **importing fresh dragon fruit** into New Zealand (or who has an interest in **importing fresh dragon fruit**).

# Why is this important?

It is the responsibility of the **importer** to ensure that **risk goods** (i.e. **fresh dragon fruit**) 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 weed seeds are **intercepted** on the **consignment**.

Importers are liable for all associated expenses.

# **Equivalence**

A **CTO** may consider an application 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 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.* 

# **Document History**

Version Date	Section Changed	Change(s) Description
XX July 2019	All	New document

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#### Other information

Guidance boxes are included within this **IHS** for explanatory purposes. The guidance included in these boxes is for information only and has no legal effect.

Guidance Document: *Import of Fresh Fruit and Vegetables for Human Consumption* provides information to assist with meeting the requirements of an **IHS** for **fresh fruits and vegetables** and should be read in conjunction with this **IHS**. **Biosecurity clearance** of **fresh fruits and vegetables** will be covered by a separate guidance document.

Within this **IHS**, terms printed in bold have the same meaning as that set out and defined by the **FAO**, in **ISPM** 5. *Glossary of phytosanitary terms*, **the Act** or in this **IHS**.



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# Part 1: General Requirements

# 1.1 Application

- (1) This **Import Health Standard (IHS)** applies to **fresh dragon fruit** fruit (*Hylocereus* sp.) **imported** for human consumption (**'fresh dragon fruit'**).
- This **IHS** applies to **imports** of **fresh dragon fruit** from those countries that meet the requirements in 1.4.

#### Guidance

- Hybrids between species can be imported but only when each species is an approved commodity, i.e.
  an IHS exists for each species. The hybrid should meet the requirements specified in the IHS for each
  species in the hybrid.
- Some fresh commodities (commercially manufactured and processed fruits and vegetables of specific commercial brands that have undergone pre export assessment by MPI) can be found on the MPI website in "Processed" Fresh Commodities. These commodities are not considered to be risk goods and do not need to comply with the requirements of this IHS. To apply to have a processed fresh commodity assessed to be listed, contact Plantimports@mpi.govt.nz.
- Frozen, cooked, pickled, pureed or dried **commodities** for human consumption are covered by **Import Health Standard**: *Stored Plant Products for Human Consumption*.
- **Import** requirements for trade samples for evaluation and private consignments are covered by separate standards.

# 1.2 Incorporation by reference

- (1) The following documents are incorporated by reference under section 142M of the Act:
  - a) **ISPM 4.** Requirements for the establishment of pest free areas. Rome, IPPC, FAO.
  - b) **ISPM 5.** Glossary of phytosanitary terms. Rome, IPPC, FAO.
  - c) **ISPM 7.** Phytosanitary certification system. Rome, IPPC, FAO.
  - d) **ISPM 12.** Phytosanitary certificates. Rome, IPPC, FAO.
  - e) **ISPM 23.** Guidelines for inspection. Rome, IPPC, FAO.
  - f) **ISPM 28.** Phytosanitary treatments for regulated pests. Rome, IPPC, FAO.
  - g) ISPM 31. Methodologies for sampling of consignments. Rome, IPPC, FAO.
  - h) **ISPM 42.** Requirements for the use of temperature treatments as phytosanitary measures. Rome, IPPC, FAO.
  - MPI Biosecurity Organisms Register for Imported Commodities (BORIC). Wellington, MPI.
  - j) MPI Schedule of Regulated (Quarantine) Weed Seeds. Wellington, 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 has legal effect as part of those documents.

#### 1.3 Definitions

(1) Definitions are listed in Schedule 1.

# 1.4 General requirements for fresh dragon fruit

(1) **Importers** may only **import fresh dragon fruit** from a country where:

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- a) the NPPO has provided evidence to the satisfaction of a CTO that the exporting country has a phytosanitary certification system that complies with ISPM 7. Phytosanitary certification system. The phytosanitary certification system (including programmes and standards) must demonstrate the process used to provide export assurance.
- b) an **Export Plan** that details the activities and processes established to achieve any *MPI-Specified Measures* identified in Part 2 *Specific Requirements* has been approved by a **CTO**.
- (2) In order to obtain **biosecurity clearance** all **consignments** of **fresh dragon fruit imported** into New Zealand must:
  - a) meet the specific requirements in Part 2 Specific Requirements;
  - b) be considered free from viable regulated pests, soil and other contamination;
  - at the time of export, be commercially produced in accordance with the principles of **Good Agricultural Practice (GAP)** and meet the requirements relating to export quality in 1.4 (3);
  - d) be **packaged** in clean and either new or refurbished material;
  - e) be exported in a secure manner to prevent **contamination**; and
  - f) be accompanied by documentation that meets the requirements of Part 3 *Inspection, Verification and Documentation Requirements*.
- (3) All **consignments** of **fresh dragon fruit** must be:
  - a) intact, sound and clean;
  - b) free from:
    - i) rot, signs of shrivelling and dehydration;
    - ii) any visible foreign matter;
    - iii) damage caused by pests affecting the flesh; and
    - iv) abnormal moisture;
  - c) able to withstand transportation and handling.
- (4) Fresh dragon fruit must not include flowers, leaves, roots or any other plant parts.
- (5) Fresh dragon fruit must only be used for human consumption.

#### Guidance

- Countries that meet the requirements in 1.4 (1) and are approved to trade **fresh dragon fruit** are listed in an online pest database.
- A list of **pests** associated with **fresh dragon fruit** can be found in the <u>online pest database</u>.
- The full list of regulated and non-regulated pests for New Zealand can be found in <u>BORIC</u> and the <u>Schedule of regulated (quarantine) weed seeds</u>. These databases can be found on the MPI website.
- In 1.4 (2) "considered **free from viable regulated pests**" is used as described in Section 5 of **ISPM 12**. *Phytosanitary certificates*.
- The phytosanitary **inspection** by the **NPPO** in Part 3 *Inspection, Verification and Documentation Requirements* may be used to determine whether the requirements in 1.4 (3) are met.

# 1.5 Transitional arrangements

- (1) If a Bilateral Quarantine Arrangement (BQA), Official Assurance Programme (OAP) or other approved government to government arrangement exists on [date of issue]:
  - a) An **Export Plan** is not required; and
  - b) The **phytosanitary certificate** must include the **additional declarations** specified in 3.4 Table 2 that are relevant to the exporting country (instead of the **additional declaration** required by 3.3).
- (2) Clause 1.5 (1) expires on the date that an **Export Plan** for the relevant country is approved by a **CTO** or 3 years after [date of issue] (whichever is the earlier).

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#### Guidance

 MPI is replacing all current BQAs, OAPs and other approved government to government arrangements with Export Plans. An Export Plan is not required during the transitional period identified in 1.5 (2) because BQAs, OAPs and other approved government to government arrangements are considered equivalent to an Export Plan during the transitional period.



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# Part 2: Specific Requirements

#### 2.1 Basic Measures

(1) Fresh dragon fruit must be sourced from a production site that uses standard commercial cultivation methods that comply with the principles of Good Agricultural Practice (GAP) including pest control, harvesting, sorting, cleaning, inspection and packaging.

# 2.2 MPI-Specified Measures

- (1) The following **pest**(s) require *MPI-Specified Measures*:
  - a) Bactrocera correcta
  - b) Bactrocera cucurbitae
  - c) Bactrocera dorsalis
- (2) At least one of the following *MPI-Specified Measures* must be applied in relation to **fresh dragon fruit** to manage each of the **pest**(s) listed in 2.3 (1):
  - a) <u>Country Freedom</u>: a **CTO** is satisfied that a country has country freedom status in accordance with **ISPM 4**. Requirements for the establishment of pest free areas in relation to the **pest**.
  - b) Phytosanitary Treatments: the fresh dragon fruit is treated:
    - i) in accordance with the **treatment** for the **pest** specified in the relevant annex of **ISPM 28**. Phytosanitary treatments for regulated pests or if an annex is not available, a MPI-Specified Measure as set out in Table 1 below;
    - ii) prior to export to New Zealand, or **in transit** to New Zealand if approved by a **CTO** and recorded in the **Export Plan**; and
    - iii) at a facility that is registered or approved by the **NPPO** in the exporting country or by a **CTO**.
- (3) Table 1 contains the approved *MPI-Specified Measure* for **pest**(s) listed in 2.3 (1) which is not currently specified in a relevant annex of **ISPM 28.** *Phytosanitary treatments for regulated pests*.

Table 1: Approved MPI-Specified Measure.

Pest	Type of Measure	Treatment
Bactrocera correcta Bactrocera cucurbitae Bactrocera dorsalis	Vapour Heat Treatment	<ul> <li>exposure in a vapour heat chamber:</li> <li>at a minimum of 95% relative humidity</li> <li>with air temperature increasing over a minimum of 3.5 hours from room temperature to 47°C or above</li> <li>with air temperature held at 47°C or above for a minimum of 1.5 hours</li> <li>with all fruit within the chamber maintaining a core temperature of 46.5°C or above for a minimum of 40 minutes.</li> <li>Once the treatment is complete, the fruit may be cooled (e.g. by hydro cooling).</li> </ul>

(4) Detailed activities and processes that relate to the measure(s) must be outlined in the **Export Plan** and approved by a **CTO**.

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#### Guidance

- New Zealand is free from all economically important fruit fly species which are recognised as
  quarantine pests. Economically important fruit fly species will be added to the pest list for fresh
  dragon fruit as and when they are identified.
- **ISPM 42.** Requirements for the use of temperature treatments as phytosanitary measures sets the requirements for the application of various temperatures as a **treatment**. Temperature **treatment** facilities are usually approved by the exporting country's **NPPO** and are subject to audit by MPI.
- During the transitional period identified in 1.5 (2), the requirements for an **Export Plan** can be met by BQAs, OAPs, or other approved government to government arrangements.



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# Part 3: Inspection, Verification and Documentation Requirements

# 3.1 Phytosanitary inspection

- (1) A sample unit for the purpose of this **IHS** is an individual **fresh dragon fruit** fruit.
- (2) The **NPPO** of the exporting country must:
  - a) sample each homogeneous grower **lot** of **fresh dragon fruit**. The minimum sample size for **inspection** must be based on a 95% confidence level that not more than 0.5% of the units in the **lot** are **infested** as set out in **ISPM 31**. *Methodologies for sampling of consignments* Appendix 2;
  - b) visually **inspect** each sample unit according to **official phytosanitary procedures** in accordance with **ISPM 23**. *Guidelines for inspection*;
  - c) verify that the *Basic Measures*, *Targeted Measures* and *MPI-Specified Measures* have been applied as outlined in Part 2 *Specific Requirements*:
  - reconcile that the number of packages presented for **inspection** is consistent with documentation;
  - e) verify that traceability labelling is complete; and
  - f) verify that **phytosanitary security** is maintained for the **consignment**.
- (3) The **NPPO** must contact MPI to establish the regulatory status of any **pests** not listed in **BORIC** and found during an **inspection**.

# 3.2 Phytosanitary certification

- (1) Each **consignment** must meet the requirements set out in Part 3 *Inspection, Verification and Documentation Requirements* and be accompanied by a **phytosanitary certificate** issued by the **NPPO** in accordance with **ISPM 12.** *Phytosanitary certificates*.
- (2) The phytosanitary certificate must include the following where applicable:
  - Sufficient detail to enable identification of the **consignment** and its component parts. Information must include country/place of origin.
  - b) The scientific name of **fresh dragon fruit** (*Hylocereus* sp.).
  - c) Full details of any phytosanitary **treatments** applied to **fresh dragon fruit** in the "Disinfestation and/or Disinfection Treatment" section of the **phytosanitary certificate** or as an **NPPO**-endorsed attachment to the **phytosanitary certificate**.
    - i) All details of the **treatment** applied must be recorded, e.g. minimum **irradiation** dose, duration and temperature, chemical (active ingredient) and concentration.
  - d) The following certifying statement, or a variation that is compliant with **ISPM 12.** *Phytosanitary certificates* and has been approved by a **CTO**:
    - 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) When the **consignment** is **treated in transit**:
  - a) the **phytosanitary certificate** must state "Treated in transit" in the "Disinfestation and / or Disinfection Treatment" section of the **phytosanitary certificate**; and
  - b) the **importer** must provide evidence of the **in transit treatment** record (including temperature and duration).

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(4) If a consignment of fresh dragon fruit is stored in another country in transit to New Zealand or opened, split up or has its packaging changed prior to when it arrives in New Zealand, a phytosanitary certificate for re-export is required from the transiting country, in accordance with ISPM 12. Phytosanitary certificates, and must accompany each consignment.

#### Guidance

• If viable regulated pests are detected, a phytosanitary certificate should not be issued unless appropriate phytosanitary measures have been applied.

#### 3.3 Additional declarations

- (1) Unless Country Freedom (2.2 (2)(a) or 2.3 (2)(a)) applies to all **pests** listed in 2.2 (1) and 2.3 (1), the **phytosanitary certificate** must also include the applicable **additional declarations** when *Targeted* or *MPI-Specified Measures* are required:
  - a) "This consignment was produced and prepared for export in accordance with the agreed Export Plan."

#### AND

- b) "This consignment [insert name of approved measure] for [name of pest]."
- (2) The **additional declaration** 3.3 (1) b) must be repeated for each **pest** listed in 2.2 (1) and its approved measure as outlined in the **Export Plan**.

#### Guidance

 An example of the additional declaration 3.3 (1) (b) is as follows: This consignment was irradiated for Bactrocera cucumis.

# 3.4 Transitional arrangements - Additional declarations

(1) Table 2 specifies the **additional declarations**, relevant to the exporting country, which must be used instead of the **additional declarations** required by 3.3 during the transitional period identified in 1.5 (2).

Table 2: Additional declarations relevant to the exporting country.

Country	Additional declaration
Vietnam	The dragon fruit in this consignment have been produced in accordance with terms of, and treated as per Appendix 3 of the official assurance programme between the New Zealand Ministry for Primary Industries (MPI) and the Ministry of Agriculture and Rural Development (MARD) of Vietnam.

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## **Schedule 1: Definitions**

Definitions have the same meaning as defined by **FAO**, **ISPM 5**. *Glossary of phytosanitary terms* or **the Act** unless set out below. Derived forms of terms set out in the aforementioned sources, e.g. *inspect* from *inspection*, are considered to have the same meaning as the defined term.

#### Additional declaration

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

#### **Arrives in New Zealand**

Definition as per the Act.

#### Biosecurity clearance/cleared

Definition as per the Act.

#### **Biosecurity Organism Register for Imported Commodities (BORIC)**

MPI database which identifies the **quarantine** status for an **organism** as either **regulated** or non-**regulated** for New Zealand. **BORIC** is available at:

https://www.mpi.govt.nz/news-and-resources/resources/registers-and-lists/biosecurity-organisms-register-for-imported-commodities/

#### Commodity

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

#### Contamination

Definition as per ISPM 5. Glossary of phytosanitary terms

#### Consignment

Definition as per ISPM 5. Glossary of phytosanitary terms

#### Control

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

#### **Chief Technical Officer (CTO)**

Definition as per the Act.

#### **Economically important fruit flies**

Those regulated fruit flies which, on **entry** into New Zealand, would cause a major disruption to market access for a wide range of New Zealand **commodities** and/or have significant economic impacts on their production and/or have significant economic impacts on the environment.

#### Entry (of a consignment)

Definition as per ISPM 5. Glossary of phytosanitary terms

#### Entry (of a pest)

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

#### Equivalence/equivalent

Definition as per ISPM 5. Glossary of phytosanitary terms

#### **Export Plan**

An **Export Plan** is a document negotiated between MPI and the **NPPO** of the exporting country that details how the exporting country will meet the **import** requirements (*Targeted Measures* and/or *MPI-Specified Measures*) for New Zealand.

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#### **FAO**

Food and Agriculture Organization of the United Nations.

#### Free from

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

#### Fresh

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

#### Fruits and vegetables

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

#### **Good Agricultural Practice (GAP)**

Definition as per **FAO**, 2003. *Development of a Framework for Good Agricultural Practices*. Retrieved from FAO: http://www.fao.org/3/y8704e/y8704e.htm

#### Heat treatment

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

#### Import/imported

Definition as per the Act.

#### Import health standard (IHS)

Definition as per the Act.

#### Importation

Definition as per the Act.

#### **Importer**

Definition as per the Act.

#### In transit

Refers to **risk goods** (**consignments**) in the process of being shipped to New Zealand, for example **risk goods** in sea containers on board a vessel. These **risk goods** or **consignments** may have **treatments** applied (for example, cold **treatment**) while the **risk goods** are en route to New Zealand.

#### Incidentally imported new organism

Definition as per the Act.

#### Infestation/infested

Definition as per ISPM 5. Glossary of phytosanitary terms

#### Inspection/inspect

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

#### Interception (of a pest)

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

#### **International Standard for Phytosanitary Measures (ISPM)**

Definition as per **ISPM 5**. *Glossary of phytosanitary terms*. The list of **ISPMs** are available from: https://www.ippc.int/en/core-activities/standards-setting/ispms/.

#### Irradiation

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

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#### Lot

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

#### **National Plant Protection Organisation (NPPO)**

Definition as per ISPM 5. Glossary of phytosanitary terms

#### Official/officially

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

#### Organism

Definition as per the Act

#### Packaging/packaged

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

#### **Pathway**

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

#### **Pest**

Definition as per ISPM 5. Glossary of phytosanitary terms

#### Pest free area

Definition as per ISPM 5. Glossary of phytosanitary terms

#### Phytosanitary certification/phytosanitary certificate

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

#### Phytosanitary measure

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

#### Phytosanitary procedure

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

#### Phytosanitary security

Definition as per ISPM 5. Glossary of phytosanitary terms

#### **Plants**

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

#### **Production site**

Definition as per ISPM 5. Glossary of phytosanitary terms

#### Quarantine

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

#### **Quarantine pests**

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

#### Re-export (consignment)

Definition as per ISPM 5. Glossary of phytosanitary terms

#### Regulated pest

A pest that is identified as a regulated pest in **BORIC** or the **Schedule** of regulated (quarantine) weed seeds.

#### Risk goods

Definition as per the Act.



#### Seed

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

#### **Transitional facility**

Definition as per the Act.

#### Treatment/treated

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

#### Viable regulated pest

Any **regulated pest** that is capable of reproduction and development, including insects, **plants**, **seeds** and other **organisms**.



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