

**Import Health Standard**  
**Commodity Sub-class: Fresh Fruit/Vegetables**  
**Breadfruit, *Artocarpus altilis***  
**from Samoa**

**ISSUED**

**Issued pursuant to Section 22 of the Biosecurity Act 1993**  
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### ***Endorsement***

Import health standards for plants and plant products imported into New Zealand are a requirement under the Biosecurity Act 1993 and are prepared by the Plants section of the Ministry of Agriculture and Forestry Biosecurity Authority.

This standard was endorsed by the Chief Technical Officer, Plants Biosecurity, MAF Biosecurity Authority on 30 July 2004.

Richard Ivess  
Chief Technical Officer, Plants Biosecurity  
(acting under delegated authority)

### ***Review and amendment***

NZ MAF import health standards are subject to periodic review and amendment. The next planned review for this standard is 2006.

New Zealand import health standards covering the importation of plants and plant products are updated and republished as necessary with the most recent version published on the MAF web site.

### ***Distribution***

Import health standards relating to plants and plant products are distributed by the Plants section of the Ministry of Agriculture and Forestry Biosecurity Authority. They are made available for public access on the New Zealand Ministry of Agriculture and Forestry web site: <http://www.maf.govt.nz/biosecurity/imports/plants/>

## INTRODUCTION

### SCOPE

This import health standard describes the requirements to be met to enable biosecurity clearance to be given for fresh breadfruit (*Artocarpus altilis*) imported into New Zealand from Samoa.

### REFERENCES

Biosecurity Act 1993

*Requirements for the establishment of pest free areas* 1996. ISPM Publication No. 4, FAO, Rome.

*Glossary of phytosanitary terms* 2002. ISPM Publication No. 5, FAO, Rome.

*Risk analysis for quarantine pests including analysis of environmental risks* 2003. ISPM Publication No. 11 (Rev. 1), FAO, Rome.

*New Revised Text of the International Plant Protection Convention*, November 1997. FAO, Rome.

*MAF Plants Biosecurity Pest Risk Assessment Standard* (26 September 2001).

*MAF Plants Biosecurity Standard 152.02: Importation and Clearance of Fresh Fruit and Vegetables into New Zealand* (July 2002).

### DEFINITIONS ABBREVIATIONS AND ACRONYMS

Bilateral quarantine arrangement	An inter-agency technical arrangement between the New Zealand Ministry of Agriculture and Forestry and the counterpart National Plant Protection Organisation which documents New Zealand's requirements for the control of fruit fly species of economic significance (i.e. those fruit fly species categorised as pests) that are associated with fruit fly host material imported into New Zealand.
Biosecurity clearance	A clearance under section 26 of the New Zealand Biosecurity Act 1993 for the entry of goods into New Zealand.
Certificate	An official document, which attests to the phytosanitary status of any consignment affected by phytosanitary regulations [FAO, 1990].
Commodity	A type of plant, plant product, or other article being moved for trade or other purpose [FAO, 1990; ICPM Amendments, April 2001].

Consignment	A quantity of plants, plant products and/or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more commodities or lots) [FAO, 1990; ICPM Amendments, April 2001].
Contaminating pest	A pest that is carried by a commodity and, in the case of plants and plant products, does not infest those plants or plant products [CEPM, 1996; revised CEPM, 1999] (Note: Has also been known as a Hitch-hiker pest).
High impact pest	High impact pests are regulated pests that if introduced into New Zealand would have a major effect on the production (including access to overseas markets) of plants and plant products and/or the environment.
Import health standard	A document issued under section 22 of the Biosecurity Act 1993 that specifies “... <i>the requirements to be met for the effective management of risks associated with the importation of risk goods before those goods can be imported, moved from a biosecurity control area or a transitional facility, or given a biosecurity clearance</i> ”.
Infestation of a consignment	Presence in a commodity of a living pest of the plant or plant product concerned. Infestation includes infection [CEPM, 1997; revised CEPM 1999].
Inspection	Official visual examination of plants, plant products or other regulated articles to determine if pests are present and/or to confirm compliance with phytosanitary regulations [FAO, 1990; revised FAO, 1995; formerly Inspect].
International Plant Protection Convention	International Plant Protection Convention, as deposited with FAO in Rome in 1951 and as subsequently amended [FAO, 1990].
IPPC	Abbreviation for the International Plant Protection Convention.

International Standard for Phytosanitary Measures	An international standard adopted by the Conference of FAO, the Interim Commission on Phytosanitary Measures or the Commission on Phytosanitary Measures established under the IPPC [CEPM, 1996; revised CEPM, 1999].
ISPM	Abbreviation for International Standard on Phytosanitary Measures.
Lot	The number of units of a single commodity identifiable by its homogeneity of composition, origin, etc., forming part of a consignment. [FAO, 1990].
MAF	Ministry of Agriculture and Forestry. Acronym for the Ministry of Agriculture and Forestry which is the New Zealand national plant protection organisation.
National Plant Protection Organisation	Official service established by Government to discharge the functions specified by the IPPC. [FAO, 1990; formerly Plant Protection Organization (National)]
NPPO	Abbreviation for National Plant Protection Organisation.
Official	Established, authorized or performed by a National Plant Protection Organization [FAO, 1990].
Pest	Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products [FAO, 1990; revised FAO, 1995; IPPC, 1997] Note: For the purpose of this standard “pest” includes an organism sometimes associated with the pathway, which poses a risk to human or animal or plant life or health (SPS Article 2).
Pest free area	An area in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained [FAO, 1995].

Pest free production site	A defined portion of a place of production in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained for a defined period and that is managed as a separate unit in the same way as a pest free place of production [ISPM Pub. No. 10, 1999]
Phytosanitary certificate	A certificate patterned after the model certificates of the IPPC [FAO 1990].
Phytosanitary certification	Use of phytosanitary procedures leading to the issue of a phytosanitary certificate [FAO, 1990].
Phytosanitary measure	Any legislation, regulation or official procedure having the purpose to prevent the introduction and/or spread of pests, or to limit the economic impact of regulated non-quarantine pests [FAO, 1995; revised IPPC, 1997; ISC, 2001]
Quarantine pest	A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and (is) being officially controlled [FAO, 1990; revised FAO, 1995; IPPC 1997].
Regulated pest	A quarantine pest or a regulated non-quarantine pest [IPPC, 1997] A pest of potential economic importance to New Zealand and not yet present there, or present but either not widely distributed and being officially controlled, or a regulated non-quarantine pest, or having the potential to vector another regulated pest into New Zealand.
Treatment	Officially authorized procedure for the killing or removal of pests or rendering pests infertile or for devitalization [FAO, 1990, revised FAO, 1995; ISPM No. 15, 2002; ISPM No. 18, 2003].
Viable	Capable of maintaining life, or able to live in a particular environment and able to procreate.

## **OUTLINE OF REQUIREMENTS**

This import health standard outlines the requirements that must be met prior to shipment, in-transit and on arrival in New Zealand for fresh breadfruit imported from Samoa.

This standard is replicated at the following Internet address:

<http://www.maf.govt.nz/biosecurity/imports/plants/>

## **NEW ZEALAND LEGISLATIVE REQUIREMENTS AND INTERNATIONAL OBLIGATIONS**

All New Zealand import health standards are based upon risk analyses, which may assess either a commodity or a pest/pathway combination. New Zealand's legislative requirements and international obligations are taken into account when conducting risk analyses and applying the findings in the development of import health standards. The principal document for all New Zealand import health standards relating to plants and plant products is the Biosecurity Act (1993), whilst the international obligations derive principally from the guidelines on risk analysis developed under the auspices of the Interim Commission on Phytosanitary Measures operating within the framework of the International Plant Protection Convention, and the World Trade Organisation Agreement on the Application of Sanitary and Phytosanitary Measures.



## **IMPORT HEALTH STANDARD: FRESH FRUIT/VEGETABLES – BREADFRUIT (*Artocarpus altilis*) FROM SAMOA.**

### **1 Official contact point (New Zealand National Plant Protection Organisation)**

The official contact point in New Zealand for overseas NPPOs is the Ministry of Agriculture and Forestry. All communication pertaining to this import health standard should be addressed to:

Director, Plants Biosecurity  
Ministry of Agriculture and Forestry  
PO Box 2526  
Wellington  
NEW ZEALAND

Fax: 64-4-498 9888  
E-mail: [PlantImports@maf.govt.nz](mailto:PlantImports@maf.govt.nz)  
<http://www.maf.govt.nz>

### **2 General conditions for the importation of all plants and plant products**

Plants and plant products are not permitted entry into New Zealand unless an import health standard has been issued in accordance with Section 22 of the Biosecurity Act 1993. Should plants or plant products, for which no import health standard exists, be intercepted by New Zealand MAF, the importer will be offered the option of reshipment or destruction of the consignment (at their expense).

The NPPO of the exporting country is requested to inform New Zealand MAF of any change of address.

The NPPO of the exporting country is required to inform New Zealand MAF of any newly recorded pests which may infest/infect any commodity approved for export to New Zealand.

Pursuant to the Hazardous Substances and New Organisms Act 1996, proposals for the deliberate introduction of new organisms (including genetically modified organisms) as defined by the Act should be referred to the Environment Risk Management Authority, PO Box 131, Wellington or e-mail: [info@ermanz.govt.nz](mailto:info@ermanz.govt.nz)

[Note: In order to meet the Environmental Risk Management Authority's requirements the scientific name (i.e. genus and species) of the commodity must be included in the phytosanitary certificate.]

### **3 Explanation of pest categories**

New Zealand MAF categorises pests associated with plants and plant products into regulated and non-regulated pests. Measures to prevent the establishment of regulated pests in New Zealand are developed in accordance with the appropriate FAO ISPMs and other relevant international standards.

Regulated pests are those pests for which actions would be undertaken if they were intercepted/detected. As well as quarantine pests, these include new organisms as defined by the Hazardous Substances and New Organisms Act 1996, pests that may pose a risk to human or animal health or to the environment, vectors of associated quarantine pests, and virulent strains (not present in New Zealand) of non-regulated pests and contaminants. Non-regulated pests are those pests for which actions would not be undertaken if they were intercepted/detected.

Pests (including weeds) associated with each commodity will appear on a separate pest list which will be attached to each import health standard as an Appendix.

### **4 Application of measures**

A number of different measures may be applied to pests based on the outcome of pest risk analyses. Required measures may include:

- Surveillance for pest freedom
- Testing prior to export for regulated pests which cannot be readily detected by inspection (e.g. viruses on propagating material)
- Specific pre-shipment pest control activities to be undertaken by the supply country's contracting party
- The application of a pre-shipment treatment
- Inspection of the export consignment
- Treatment on arrival in New Zealand

## **5 General conditions for fresh fruit/vegetables**

Commodity Sub-Class: Fresh Fruit/Vegetables relates to fresh fruit and vegetables for consumption.

Only clean, inert/synthetic material may be used for the protection, packaging and shipping materials of fresh fruit/vegetables.

All host material (fruit/vegetables) of fruit fly species (Diptera: Tephritidae) of economic significance shall only be imported under the terms of a bilateral quarantine arrangement (e.g. agreement, work plan) between the New Zealand MAF Biosecurity Authority's Director, Plants Biosecurity and the head of the supply country's NPPO.

Consignments shall be free from extraneous plant material (e.g., leaves, stems, flowers), trash and soil etc.

## **6 Specific conditions for breadfruit (Commodity Sub-Class: Fresh Fruit/Vegetables) from Samoa.**

### **6.1 PRE-SHIPMENT REQUIREMENTS**

#### **6.1.1 Inspection of the consignment**

New Zealand MAF requires that the Samoa NPPO sample and visually inspect the consignment according to official procedures for all the regulated pests specified by New Zealand MAF and ensure that it conforms with New Zealand's current import requirements. A phytosanitary certificate should not be issued if live regulated pest(s) are detected, unless the consignment is treated in order to eliminate these. If pests are found which are not listed in the import health standard, the Samoa NPPO must establish their regulatory status. This information is available in MAF's "Biosecurity Organisms Register for Imported Commodities" <http://www.maf.govt.nz/biosecurity/pests-diseases/registers-lists/boric/>

If a pest is not listed in this register, the Samoa NPPO must contact MAF (see Section 1) to establish the regulatory status of the pest.

#### **6.1.2 Testing of the consignment**

Testing of the consignment prior to export to New Zealand for regulated pests which are not visually detectable (viz. fungi and bacteria) is not generally required for fresh breadfruit from Samoa.

### 6.1.3 Treatment

New Zealand MAF requires a mandatory pre-export treatment (or equivalent) for high impact pests, e.g., economically important fruit fly species. New Zealand MAF currently approves heat treatment in Samoa as an offshore treatment for those high impact fruit flies associated with breadfruit in Samoa.

### 6.1.4 Documentation

**Bilateral quarantine arrangement/Workplan:** Required for fruit flies.

Breadfruit may only be imported into New Zealand from Samoa under the terms of the Bilateral Quarantine Arrangement between New Zealand MAF and the Samoa NPPO.

**Phytosanitary certificate:** Required.

**Import permit/Authorisation to import:** Exempt under Gazette Notice: No. AG12, 13 July 1995.

### 6.1.5 Phytosanitary certification

A completed phytosanitary certificate issued by the Samoa NPPO must accompany all breadfruit consignments exported to New Zealand.

Before a phytosanitary certificate is issued, the Samoa NPPO must be satisfied that the following activities required by New Zealand MAF have been undertaken.

The breadfruit have:

- (i) been visually inspected in accordance with appropriate official procedures and found to be free from any regulated pests

AND

- (ii) undergone an agreed treatment that is effective against associated fruit fly species of economic significance in accordance with Appendix 3 of the Bilateral Quarantine Arrangement between New Zealand MAF and the Samoa NPPO.

### 6.1.6 Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the Samoa NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The breadfruits in this consignment have:

- been inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by NZ MAF;

**NOTE:** This additional declaration is not required if the phytosanitary certificate issued by the Samoa NPPO is in accordance with the model phytosanitary certificate annexed to the revised (1997) text of the FAO IPPC.

AND

- been treated in accordance with Appendix 3 of the Bilateral Quarantine Arrangement between NZ MAF and MAFFM.

## 6.2 TRANSIT REQUIREMENTS

The breadfruit must be packed and shipped in a manner to prevent possible post-inspection/treatment infestation and/or contamination by regulated pests. Where a consignment is split or has its packaging changed while in another country (or countries) *en route* to New Zealand, a "Re-export Certificate" is required. Where a consignment is held under bond as a result of the need to change conveyances and is kept in the original shipping container, a "Re-export Certificate" is not required.

## 6.3 INSPECTION ON ARRIVAL IN NEW ZEALAND

New Zealand MAF will check the accompanying documentation on arrival to confirm that it is correct and reconciles with the actual consignment.

New Zealand MAF requires, with 95% confidence, that not more than 0.5% of the units in a consignment are infested with visually detectable, regulated pests. To achieve this, New Zealand MAF will sample and inspect 600 units with an acceptance level of zero infested units (or equivalent), from the (homogeneous) lot.

#### **6.4 BIOSECURITY/QUARANTINE DIRECTIVE**

The consignment may be directed to a New Zealand MAF approved facility for further treatment if required.

#### **6.5 TESTING FOR REGULATED PESTS**

New Zealand MAF may, on the specific request of the Director, Plants Biosecurity, test the consignment for regulated pests.

#### **6.6 ACTIONS UNDERTAKEN ON THE INTERCEPTION/DETECTION OF PESTS/CONTAMINANTS**

If regulated pests, extraneous plant material or trash are intercepted/detected with the commodity, or associated packaging, the following actions will be undertaken as appropriate (depending on the pest identified):

- Re-sorting (specific conditions apply) of the consignment
- Reshipment of the consignment
- Destruction of the consignment
- Treatment for those pests for which specific pre-export pest control activities are required
- The suspension of trade on the detection of pests for which a pest free area has been implemented
- The suspension of trade (economically important fruit fly species), until the cause of the non-compliance is investigated, identified and rectified to the satisfaction of New Zealand MAF.

If an organism is intercepted/detected that is not on the pest list (appended to this document), the consignment will be held (or equivalent) until an assessment is undertaken to determine the organism's regulatory status and appropriate measures developed if required.

Consignments that are contaminated with extraneous plant material and/or trash in the 600 unit sample will result in the consignment being held until an assessment has been made in comparison with the risk of importing the part(s) of the plant species concerned.

## **6.7 BIOSECURITY CLEARANCE**

If regulated pests are not detected, or are successfully treated following interception/detection biosecurity clearance will be given.

## **6.8 AUDIT OF OFFSHORE TREATMENT FACILITIES**

NZ MAF reserves the right to audit all processes that are undertaken offshore for high impact pests. Audits will be conducted on a regular basis.

## **6.9 FEEDBACK ON NON-COMPLIANCE**

The Samoa NPPO will be informed by New Zealand MAF's Director, Plants Biosecurity of the interception (and treatment) of any regulated pests, "unlisted" pests, or non-compliance with measures specified in this import health standard.

## **7 Contingencies Following Biosecurity Clearance**

Should a regulated pest be detected subsequent to biosecurity clearance, New Zealand MAF may implement a management programme (official control programme) in accordance with Part V of the Biosecurity Act 1993 and Part 5 of the Biosecurity Amendment Act 1997.

## Appendix 1      Pest List Commodity Sub-class: Fresh Fruit/Vegetables breadfruit, *Artocarpus altilis* from Samoa

Scientific name	Organism type	Common name	Quarantine status	Measures to prevent entry	Actions on interception
<i>Phellinus noxius</i>	fun	brown root rot	Regulated	1a & 1b	1 &/or 2
<i>Phytophthora palmivora</i>	fun	black rot	Regulated	1a & 1b	1 &/or 2
<i>Pseudocercospora artocarpi</i>	fun		Regulated	1a & 1b	1 &/or 2
<i>Uredo artocarpi</i>	fun	rust	Regulated	1a & 1b	1 &/or 2
<i>Aleurodicus dispersus</i>	ins	spiralling whitefly	Regulated	1a & 1b	1 &/or 2
<i>Aspidiotus destructor</i>	ins	coconut scale	Regulated	1a & 1b	1 &/or 2
<i>Bactrocera xanthodes</i>	ins	fruit fly	Regulated	3	3
<i>Ceresium unicolor</i>	ins	longhorn beetle	Regulated	1a & 1b	1 &/or 2
<i>Ceroplastes rubens</i>	ins	red wax scale	Regulated	1a & 1b	1 &/or 2
<i>Chrysomphalus aonidium</i>	ins	Florida red scale	Regulated	1a & 1b	1 &/or 2
<i>Coccus viridis</i>	ins	green scale	Regulated	1a & 1b	1 &/or 2
<i>Eudocima fullonia</i>	ins	fruit-piercing moth	Regulated	1a & 1b	1 &/or 2
<i>Hylesinus subcostatus</i>	ins	wood boring beetle	Regulated	1a & 1b	1 &/or 2
<i>Icerya seychellarum</i>	ins	Seychelles scale	Regulated	1a & 1b	1 &/or 2
<i>Lamenia caliginea</i>	ins	derbid bug	Regulated	1a & 1b	1 &/or 2
<i>Leptocorisa acuta</i>	ins	rice bug	Regulated	1a & 1b	1 &/or 2
<i>Milviscutulus mangiferae</i>	ins	soft scale	Regulated	1a & 1b	1 &/or 2
<i>Nipaecoccus nipae</i>	ins	coconut mealybug	Regulated	1a & 1b	1 &/or 2
<i>Pinnaspis strachani</i>	ins	snow scale	Regulated	1a & 1b	1 &/or 2
<i>Planococcus citri</i>	ins	citrus mealybug	Regulated	1a & 1b	1 &/or 2
<i>Planococcus minor</i>	ins	passionvine mealybug	Regulated	1a & 1b	1 &/or 2
<i>Xylothrips religiosus</i>	ins	bostrichid beetle	Regulated	1a & 1b	1 &/or 2
<i>Achatina fulica</i>	mollusc	giant African snail	Regulated	1a & 1b	1 &/or 2
<i>Cephaleuros virescens</i>	alga	algal leaf spot	Non regulated	.	.
<i>Erythricium salmonicolor</i> (anamorph <i>Necator decretus</i> )	fun	pink disease	Non regulated	.	.
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i> )	fun	anthracnose	Non regulated	.	.
<i>Rhizopus stolonifer</i>	fun	rhizopus soft rot	Non regulated	.	.
<i>Aonidiella aurantii</i>	ins	California red scale	Non regulated	.	.
<i>Coccus hesperidum</i>	ins	brown soft scale	Non regulated	.	.
<i>Hemiberlesia cyanophylli</i>	ins	cyanophyllum scale	Non regulated	.	.
<i>Parasaissetia nigra</i>	ins	nigra scale	Non regulated	.	.
<i>Pheidole megacephala</i>	ins	bigheaded ant	Non regulated	.	.
<i>Saissetia coffeae</i>	ins	hemispherical scale	Non regulated	.	.



Note: It is accepted by New Zealand MAF that the mandatory heat treatment will also contribute to the management of regulated insects other than the target fruit fly species.

Measures to prevent entry & establishment	<ul style="list-style-type: none"> <li>. No measures as pest non regulated</li> <li>1a Visual inspection of produce and associated packaging</li> <li>1b Consignment must be free from extraneous plant material - pests are associated with other plant parts (e.g., leaves, stems, flowers)</li> <li>2a Undergone appropriate pest control activities</li> <li>2b Pest free area (based on official detection survey)</li> <li>3 Agreed offshore fruit fly treatment and bilateral quarantine agreement required</li> <li>4 Approved generic treatment</li> </ul>
Actions on interception	<ul style="list-style-type: none"> <li>NA No actions as pest is non regulated</li> <li>0 No action due to low risk pathway</li> <li>1 Removal of trash - pests are associated with other plant parts (e.g., leaves, stems, flowers)</li> <li>2 Treat, reship or destroy</li> <li>2a Treat, reship or destroy. Suspend pathway</li> <li>3 Reship or destroy. Suspend pathway</li> </ul>