## Import Health Standard Commodity Sub-class: Fresh Fruit/Vegetables Durian, (*Durio zibethinus*) from Thailand

Issued pursuant to Section 22 of the Biosecurity Act 1993 Date Issued: 28 April 2008

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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 MAF Biosecurity New Zealand.

This standard was endorsed by the Deputy Chief Technical Officer, Border Standards, MAF Biosecurity New Zealand, on 28 April 2008.

Clive Gower-Collins Manager Import Standards Group (acting under delegated authority)

#### **Review and amendment**

MAF Biosecurity New Zealand import health standards are subject to periodic review and amendment.

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 Biosecurity New Zealand web site.

#### Distribution

Import health standards relating to plants and plant products are distributed by the MAF Biosecurity New Zealand. They are made available for public access on the New Zealand MAF Biosecurity New Zealand web site: http://www.biosecurity.govt.nz/imports/plants/index.htm

## INTRODUCTION

## SCOPE

This import health standard describes the requirements that must be met prior to shipment, in-transit and on arrival to enable biosecurity clearance to be given for fresh durian (*Durio zibethinus*) imported into New Zealand from Thailand. *Durio acuminatissima*, *Durio acuminatissima*, and *Durio foetida* are considered synonyms of *Durio zibethinus*.

This standard is replicated at the following Internet address:

http://www.biosecurity.govt.nz/imports/plants/index.htm

Generic requirements for the importation of all fresh fruit and vegetables into New Zealand are described in *MAF Biosecurity Standard 152.02: Importation and Clearance of Fresh Fruit and Vegetables into New Zealand*.

### 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**

Refer to the International Standards for Phytosanitary Measures (ISPM) No. 5 *Glossary of Phytosanitary Terms* for generic terms. Specific terms relevant to this import health standard are described below.

Bilateral quarantine	An inter-agency technical arrangement between the
arrangement	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.
Broken skin	Any pre-harvest crack, puncture, pulled stem or other break of the skin that penetrates through to the flesh
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
Consignment	Amendments, April 2001]. 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].
Establishment	Perpetuation, for the foreseeable future, of a pest within an area after entry [FAO, 1990; revised FAO, 1995; IPPC, 1997; formerly established]
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 " 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".
International Plant Protection Convention	International Plant Protection Convention, as deposited with FAO in Rome in 1951 and as subsequently amended [FAO, 1990].

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].
IPPC	Abbreviation for the International Plant Protection Convention.
MAFBNZ	Ministry of Agriculture and Forestry Biosecurity New Zealand. Acronym for the Ministry of Agriculture and Forestry Biosecurity New Zealand which is the New Zealand national plant protection organisation.
NPPO	Abbreviation for National Plant Protection Organisation.
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).
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; ISPMNo. 15, 2002; ISPM No. 18, 2003].
Viable	Capable of maintaining life, or able to live in a particular environment and able to procreate.

# 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 (now the 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 – DURIAN (Durio zibethinus) FROM THAILAND.

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

The official contact point in New Zealand for overseas NPPOs is the MAF Biosecurity New Zealand. All communication pertaining to this import health standard should be addressed to:

Manager, Import Standards Group MAF Biosecurity New Zealand PO Box 2526 Wellington NEW ZEALAND

Fax: 64-4-894 0662 E-mail: PlantImports@maf.govt.nz http://www.biosecurity.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 MAF Biosecurity New Zealand, 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 MAF Biosecurity New Zealand of any change of address.

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

## **3** Explanation of pest categories

MAF Biosecurity New Zealand categorises pests associated with plants and plant products into regulated and non-regulated pests. Measures to prevent the introduction of regulated pests to 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 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
- Issuance of a phytosanitary certificate which attests to the phytosanitary status of a consignment
- Treatment on arrival in New Zealand

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

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

Consignments contaminated with soil, or other potential carriers of regulated pests (eg. leaf litter) will not be permitted entry if the level of contamination is above the acceptable tolerance (see section 7.4 in the MAFBNZ standard Importation and clearance of fresh fruit and vegetables into New Zealand http://www.biosecurity.govt.nz/files/imports/plants/standards/152-02.pdf.

A completed phytosanitary certificate issued by the exporting country's NPPO must accompany all consignments of fresh fruit and vegetables exported to New Zealand.

MAF Biosecurity New Zealand will inspect all consignments of fresh fruit/vegetables and their associated packaging to verify that New Zealand's phytosanitary requirements have been met. All consignments shall be practically free of soil and other extraneous matter.

Where it has been determined through pest risk assessment that high impact pests are associated with a particular commodity more specific phytosanitary measures must be met. In most circumstances these phytosanitary measures will need to be met prior to arrival of the commodity in New Zealand.

## 6 Specific conditions for durian (Commodity Sub-Class: Fresh Fruit/Vegetables) from Thailand

#### 6.1 PRE-SHIPMENT REQUIREMENTS

#### 6.1.1 Inspection of the consignment

MAF Biosecurity New Zealand requires that the Thailand NPPO sample and visually inspect the consignment according to official procedures for all the regulated pests specified by MAF Biosecurity New Zealand 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 Thailand NPPO must establish their regulatory status. This information is available in MAFBNZ's "Biosecurity Organisms Register for Imported Commodities" http://www.biosecurity.govt.nz/pests-diseases/registerslists/boric/

If a pest is not listed in this register, the Thailand NPPO must contact MAFBNZ (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 durian from Thailand.

#### 6.1.3 Measures for high impact pests

MAF Biosecurity New Zealand requires additional mandatory pre-export measures for high impact pests. One high impact pest is associated with Durian in Thailand: Yellow peach moth (*Conogethes punctiferalis*).

MAF Biosecurity New Zealand requires that pest control activities that are effective against *Conogethes punctiferalis* are conducted prior to the commodity arriving to New Zealand. Refer to Appendix 2 for details for these agreed phytosanitary measures and pest control activities.

NOTE: "appropriate pest control activities" is a broad term that is inclusive of a range of phytosanitary measures. Examples of these measures are pest free areas, physical exclusion (such as bagging of fruit), chemical treatments etc.

MAF Biosecurity New Zealand accepts that durian fruit may be an occasional host of endemic fruit flies when physical damage of the fruit has taken place to such an extent as to

allow the fruit flies to oviposit directly into the flesh of the fruit. Therefore, fruit for export to New Zealand must be commercially produced and without damage to the skin. Refer to Appendix 2 for details.

#### 6.1.4 Documentation

Bilateral quarantine arrangement/Workplan: Required for fruit flies.

Durian may only be imported into New Zealand from Thailand under the terms of the Bilateral Quarantine Arrangement between MAF Biosecurity New Zealand and the Thailand 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 Thailand NPPO must accompany all durian consignments exported to New Zealand.

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

The durian have:

 been visually inspected in accordance with appropriate official procedures and found to be free from any regulated pests and to conform with the current phytosanitary requirements of MAF Biosecurity New Zealand

AND

(ii) undergone appropriate pest control activities that are effective against:

Conogethes punctiferalis

Note: pest control activities are to comply with relevant health and safety requirements and food standards.

### 6.1.6 Additional declarations to the phytosanitary certificate

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

certificate:

(i) This is to certify that the durian in this consignment have undergone appropriate pest control activities that are effective against *Conogethes punctiferalis*.

#### 6.2 TRANSIT REQUIREMENTS

The durian must be packed and held to ensure that infestation/reinfestation does not occur following phytosanitary certification. 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

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

MAF Biosecurity New Zealand requires, with 95% confidence, that not more than 0.5% of the units in a consignment are infested with visually detectable, viable, regulated pests. To achieve this, MAF Biosecurity New Zealand 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 MAF Biosecurity New Zealand-approved facility for further treatment if required.

#### 6.5 TESTING FOR REGULATED PESTS

MAF Biosecurity New Zealand may, on the specific request of the Chief Technical Officer, test the consignment for regulated pests.

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

If viable, 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 MAF Biosecurity New Zealand.

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 categorisation (i.e. regulated or non-regulated) and appropriate measures developed and taken 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 MEASURES

MAF Biosecurity New Zealand reserves the right to audit all processes that are undertaken offshore, including phytosanitary measures for high impact pests.

### 6.9 FEEDBACK ON NON-COMPLIANCE

The Thailand NPPO will be informed by MAF Biosecurity New Zealand's Chief Technical Officer 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, MAF Biosecurity New Zealand 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 1Pest List Commodity Sub-class: Fresh Fruit/VegetablesDurio zibethinus from Thailand

Scientific name	Organism type	Common name	Quarantine status	Measures to prevent introduction	Actions on interception
Cochliobolus eragrostidis (anamorph	type	Common name	318183	Introduction	Interception
Curvularia eragrostidis)	fun	leaf spot	Regulated	1a & 1b	1 &/or 2
Meliola durionis	fun	sooty mould	Regulated	1a & 1b	1 &/or 2
Phytophthora palmivora	fun	black rot	Regulated	1a & 1b	1 &/or 2
Aspidiotus destructor	ins	coconut scale	Regulated	1a & 1b	1 &/or 2
Conogethes punctiferalis	ins	yellow peach moth	Regulated #	2a or 2b	2a
Cryptophlebia ombrodelta	ins	macadamia nut borer	Regulated	1a & 1b	1 &/or 2
Eublemma versicolor	ins	noctuid moth	Regulated	1a & 1b	1 &/or 2
Hemicentrus attenuatus	ins	horned treehopper	Regulated	1a & 1b	1 &/or 2
Mudaria luteileprosa	ins	durian seed borer	Regulated	1a & 1b	1 &/or 2
Mudaria magniplaga	ins	mudaria fruit borer	Regulated	1a & 1b	1 &/or 2
Nodostoma spp	ins	leaf beetles	Regulated	1a & 1b	1 &/or 2
Oecophylla smaragdina	ins	red tree ant	Regulated	1a & 1b	1 &/or 2
Orgyia postica	ins	cocoa tussock moth	Regulated	1a & 1b	1 &/or 2
Planococcus citri	ins	citrus mealybug	Regulated	1a & 1b	1 &/or 2
Planococcus lilacinus	ins	citrus mealybug	Regulated	1a & 1b	1 &/or 2
Planococcus minor	ins	passionvine mealybug	Regulated	1a & 1b	1 &/or 2
Remelana jangala ravata	ins	fruit eating moth	Regulated	1a & 1b	1 &/or 2
Thrips hawaiiensis	ins	Hawaiian flower thrips	Regulated	1a & 1b	1 &/or 2
Tirathaba ruptilinea	ins	fruit boring caterpillar	Regulated	1a & 1b	1 &/or 2
Eutetranychus africanus	mit	African red spider mite	Regulated	1a & 1b	1 &/or 2
Achatina fulica Glomerella cingulata (anamorph	mol	giant African snail	Regulated	1a & 1b	1 &/or 2
Colletotrichum gloeosporioides)	fun	anthracnose	Regulated		NA

#### # Denotes a high impact pest for which additional pre-arrival measures are necessary

Measures to prevent entry & establishment		No measures as pest non regulated
	1a	Visual inspection of produce and associated packaging
	1b	Consignment must be free from extraneous material – pests are associated with other plant parts (e.g. leaves, stems, flowers) and/or soil
	2a	Undergone appropriate pest control activities
	2b	Pest free area (based on official detection survey)

- 3 Agreed offshore fruit fly treatment and bilateral quarantine agreement required
- 4 Approved generic treatment

Actions on interception

- NA No actions as pest is non regulated
  - 0 No action due to low risk pathway
- 1 Removal of extraneous material pests are associated with other plant parts (e.g. leaves, stems, flowers) and/or soil
- 2 Treat, reship or destroy
- 2a Treat, reship or destroy. Suspend pathway
- 3 Reship or destroy. Suspend pathway

# Appendix 2Pre-arrival phytosanitary measures for high impact pests<br/>associated with durian in Thailand

Durians have been reported to be an occasional host of fruit fly if the skin has cracks and punctures, and accordingly, appropriate phytosanitary measures must be implemented to mitigate the risk of these species being introduced into New Zealand in association with this commodity.

MAF Biosecurity New Zealand and the Thailand NPPO have agreed to the use of conditional [non-]host status of durian to fruit flies.

#### 1. Orchard and Packhouse Registration

The Department of Agriculture, Thailand will register all orchards and packhouses from which it is intended to produce or pack fruit of Durian for export to New Zealand. Records of registrations will be held and maintained by the Department of Agriculture and will be available for inspection by MAF Biosecurity New Zealand.

#### 2. Integrated pest management and monitoring program (IPM)

Durian fruit must be tree harvested at the mature stage. The fruit must be commercially produced, and without broken skin (cracks, punctures, bruising etc) or pest infestations to the skin of the fruit. Broken skin includes any pre-harvest crack, puncture, pulled stem or other break that penetrates through to the flesh. All fruit will be visually examined in the packhouse for signs of damage to the skin or pest infestations. Any fruit showing signs of damage/broken skin or pest infestations will be rejected for export. Fruit must only be exported from orchards that have a comprehensive IPM program for durian that encompasses monitoring, chemical, biological and cultural control measures. The pests and diseases monitored for must included yellow peach moth (*Conogethes punctiferalis*). If the above pest is detected in the orchards registered for export, fruit from that orchard will not be permitted entry into New Zealand.

#### 3. Packing and Packaging

Durian fruit for export to New Zealand will be clearly identified and kept segregated from other fruit. Any fruit identified with obvious signs of deformity or infestation/infection, during grading and packing, are to be culled for export. Fruit harvested for New Zealand is to be kept segregated in individual cold rooms. All cartons of Durian shall be traceable to place of production.

#### 4. Product security

The security of all product exported to New Zealand will be maintained in accordance with agreed procedures.