





# FIJI'S RESPONSE TO THE DRAFT REPORT ON THE REVIEW OF IMPORT CONDITIONS FOR FRESH GINGER FROM FIJI

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# **Overview**

The Biosecurity Authority of Fiji (BAF) as the National Plant Protection Organization (NPPO) and the Fiji Ministry of Agriculture (MOA) present their joint submission to the Australian Department of Agriculture's Biosecurity Advice 2015/15 *Draft report for the review of import conditions for fresh ginger from Fiji*.

In this submission, Fiji acknowledges the proposed revised biosecurity measures on the importation of ginger from Fiji cited in the Biosecurity Advice 2015/15, responds to these proposed revised measures and includes an update on the activities underway in Fiji for the current and future seasons.

Since this pathway opened, Fiji has exported 4.6 tons of fresh ginger to Australia.

During this time there have been two internal audits of the pathway and training sessions for ginger farmers, exporters, and BAF & MOA staff on the requirements of the pathway and their roles and responsibilities for its implementation and/or oversight. Also, training on undertaking fumigation treatments has been conducted and service providers assessed and accredited under the Australian Fumigation Accreditation Scheme (AFAS).

A significant increase in investment, planning and coordination has occurred amongst the public and private stakeholders for this export pathway. At the time of this response, three exporters have been registered for exporting fresh ginger to Australia. Strong interest remains to supply the market with MOA continuing to increase awareness amongst existing and potential growers on the opportunities and requirements.

## Introduction

Whilst the volume of fresh ginger produced and currently exported from Fiji is relatively small by global standards, its importance to the Fijian economy and the well-being of its people cannot be over emphasized. Fiji's ginger production is currently around 3000mt per annum; most of it is exported in processed form with a value of F\$6.5-7.5million.

BAF and MOA hereby present their joint submission to the Australian Department of Agriculture's Biosecurity Advice 2015/15 *Draft report for the review of import conditions for fresh ginger from Fiji*. It is gratefully acknowledged that the biosecurity risks identified in the original risk analysis and during the first season of trade have been reviewed and the appropriateness of the phytosanitary measures revised.

This joint submission has been prepared based on inputs from relevant technical and operational staff across both agencies, and consultations with commercial stakeholders in Fiji. Both agencies welcome the opportunity to engage in this important review and are available to respond to further technical queries arising during or following the review as required.

# Review of the quarantine status of Fiji's Radopholus similis

The proposed changes in the quarantine status of *Radopholus similis* are endorsed. As noted (page 26), Fiji can re-confirm that there are no live *Radopholus similis* cultures sourced from ginger in Fiji and no specimens have been collected since the updates provided to DA in March 2015. Field sampling and identification of nematode specimens will continue as part of the on-going work of MOA (Extension & Research).

# Proposed conditions for the importation of ginger from Fiji

The proposed changes to the import requirements for ginger from Fiji are noted and endorsed. For the upcoming 2015 season, the government and commercial stakeholders in Fiji will continue preparations based on the existing import requirements.

An increase in the volumes of fresh ginger exported is expected and it is requested that DA make information available on the compliance of these consignments as efficiently as possible so that infield and post-harvest practices can continue to be strengthened.

#### Yam scale

BAF & MOA acknowledge the rationale for requiring additional management measures for yam scale based on the interceptions on the consignments to date. DA are requested to clarify if the proposed methyl bromide fumigation treatment is to be applied on a sliding scale dependent on temperature.

#### Other import requirements

It is noted (page 27) that "other import requirements such as grower and packhouse registration, and freedom from soil, roots and other contaminants will remain in place". Fiji will continue efforts to improve the operational aspects of these import requirements and engage (BAF / DA) on any relevant specifics in due course.

# Work in progress

For DA's awareness, an overview is provided on the activities underway and planned as part of improving the compliance and viability of the export pathway for ginger to Australia.

#### Training and awareness

BAF is conducting training for the Quality Controllers at each registered exporters' packhouse and assisting with the development of Quality Assurance schemes for the exporters. MOA is continuing to provide training and raising awareness for existing and potential farmers. Awareness material (e.g. poster on yam scale) is being developed by BAF, MOA and industry.

#### Yam scale

There is a lack of knowledge on the effective in-field management of yam scale and effort will go into collecting data and information from across the pathway on this pest including prevalence, options for reducing the incidence and awareness material (e.g. posters) for government and industry stakeholders.

Fiji is seeking to identify a suitable specialist with knowledge of yam scale. This specialist is sought to provide guidance on the biology and management of this pest and practical training to stakeholders across the pathway on its management. The aim being to improve the in-field and post-harvest handling and management to such an extent that could allow for reconsideration by DA of the requirements for mandatory methyl bromide fumigation in the future.

#### Nematology capacity and activities

In support of the on-going field sampling and research work by MOA a specialist training program for the MOA nematologist has been organized with Landcare Research (New Zealand). The program includes the MOA nematologist working in the Landcare Research laboratories and a visit to Fiji by a specialist to provide practical training to relevant stakeholders.

#### Manuals

In preparation for the 2016 export season, BAF will update the Standard Operating Procedures (SOP) and the Work Plan on *Exporting ginger from Fiji to Australia* to reflect the proposed revised quarantine status of *R. similis* and import conditions and forward the drafts to DA for consideration before finalization.

The updates to the SOP will mainly focus on: 5. Responsibility, 7. Procedures, 7.1 Growers and 7.2 Pack houses. The updates to the Work Plan will mainly focus on: Introduction, 1.4 Quarantine pests and the Work instructions for the inspection of fresh ginger for export to Australia.

#### Fumigation treatment

There are currently four treatment providers approved by BAF under AFAS. BAF is continuing its oversight of the compliance and efficacy of treatments as well as capacity building of technical officers and identification of future treatment providers and trainers.

# Way forward

BAF and MOA welcome the opportunity to respond to any further specific questions that DA may have on the how the ginger export pathway has been implemented during this first season of trade and preparations for future exports. In the interim, the government and commercial stakeholders in Fiji will continue preparations for the 2015 export season based on the existing import requirements.

Consultations between BAF, MOA and private sector representatives have identified a range of areas to further improve the compliance and viability of ginger export pathway and these are outlined below for information. Future revision of the SOPs and Work Instructions will include consideration of these issues.

- Distinguishing baby and mature ginger. As a basic rule of thumb, baby ginger is five to six
  months old and mature ginger is eight to nine months old. There are distinct differences in
  the characteristics and markets for these two categories and overtime it may be useful to
  reflect this in the export protocols.
- Post-harvest curing. Ginger currently for export to Australia is cured for a minimum of five
  days. Operational improvements are being investigated with the private sector to improve
  the drying and curing process. Guidance and, if relevant, mandatory requirements will be
  developed overtime based on these investigations. This is also expected to differentiate
  between mature and baby ginger.

- *Improved management of yam scale*. As noted above, improvements are needed on the effective management of this pest on ginger from planting through to export.
- Introduction of industry standard for fresh ginger. The private sector in Fiji is developing recommended standards for the production and export of fresh ginger starting with a 'Standard for mature ginger export from Fiji to Australia'. The criteria and associated awareness material is currently being drafted for further consultation within Fiji prior to finalisation and adoption. Implementation of this standard would be entirely commercial rather than regulation by BAF. The current draft is provided for information (Appendix 1).
- Alternatives to methyl bromide as a fumigant. BAF & MOA are continuing to explore the
  possibilities of using alternative fumigants and other treatments to methyl bromide. This is
  part of a broader interest to increase the options available for mandatory or optional /
  remedial treatments for a range of import and export pathways.

# Appendix 1 *DRAFT* Industry Standard for Mature Ginger for Export from Fiji to Australia

#### **DEFINITION OF PRODUCE**

This Standard applies to the rhizome of commercial varieties of ginger grown from *Zingiber officinale* Roscoe, of the Zingiberaceae family, to be supplied fresh to the consumer, after preparation and packaging.

This Standard covers ginger which is harvested 8 or more months after planting.

Ginger for industrial processing is excluded.

#### 1.0 PROVISIONS CONCERNING QUALITY

#### 1.1 Minimum requirements

Mature ginger exported from Fiji to Australia must be:

- whole:
- sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- clean, practically free of any visible foreign matter;
- practically free of damage caused by pests affecting the general appearance of the produce;
- free of abnormal external moisture, and properly dried if washed, excluding condensation following removal from cold storage;
- free of any foreign smell and/or taste;
- firm:
- 1.2 The development and condition of the ginger must be such as to enable it:
  - to withstand transport and handling; and
  - to arrive in satisfactory condition at the place of destination.

#### 2.0 CLASSIFICATION

Ginger is classified in two classes defined below:

#### 2.1 Premium

Ginger in this class must be of superior quality. It must be characteristic of the variety and/or commercial type. The rhizome must be cleaned and free of roots, and defects, with the exception of very slight superficial defects not exceeding 5%, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package. Superficial defects include:

- slight markings caused by pests;
- healed suberized cracks, provided they are completely dry.

#### 2.2 Class "I"

Ginger in this class must be of good quality. It must be characteristic of the variety and/or commercial type. The ginger rhizomes must be firm, without evidence of shriveling or dehydration and without evidence of sprouting. The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- slight skin defects due to rubbing provided, markings due to pests, they are healed and dry and the total surface area affected not exceeding 15%.

Superficial defects include:

- slight markings caused by pests;
- healed suberized cracks, provided they are completely dry.

#### 2.3 Exclusions

The following does not qualify for inclusion for export:

- skin defects due to rubbing, provided they are healed and dry and the total surface area affected exceeding 15%;
- early signs of sprouting (not more than 10% by weight by unit of presentation);
- slight traces of soil;
- bruises.

#### 3.0 PROVISIONS CONCERNING SIZING

Size is determined by the weight of the individual ginger rhizomes.

#### Size Code Weight (grams):

- Premium 300+
- Class I 100-300
- Exclusions < 100

#### 4.0 PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed in each package for produce not satisfying the requirements of the class indicated.

#### **4.1 Quality Tolerances**

#### 4.1.1 Premium

Five percent by number or weight of ginger not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

#### 4.1.2 Class "I"

Ten percent by number or weight of ginger not satisfying the requirements of the class, but meeting those of Exclusions or, exceptionally, coming within the tolerances of that class.

#### 4.2 Size Tolerances

For Premium 5%; and for Class I 10%; by number or by weight of ginger not satisfying the requirements as regards sizing.

#### **5.0 PROVISIONS CONCERNING PRESENTATION**

#### 5.1 Uniformity

The contents of each package must be uniform and contain only ginger of the same commercial type, quality and size according to Grade. The visible part of the contents of the package must be representative of the entire contents.

The weight of the heaviest hand (rhizome) may not be more than twice the weight of the lightest hand (rhizome) in the same package.

#### **6.0 PACKAGING**

Ginger must be packed in such a way as to protect the produce properly. The materials used inside the package must be new, clean, and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications is allowed, provided the printing or labeling has been done with non-toxic ink or glue.

It is recommended that ginger shall be packed in each container in compliance with the Recommended International Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables (CAC/RCP 44-1995).

# **6.1 Description of Containers**

The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the ginger. Packages must be free of all foreign matter and smell.

#### 7.0 MARKING OR LABELLING

Packaging must first and foremost be marked and labelled in accordance with BAF / DA pathway requirements. Additionally:

#### 7.1 Nature of Produce

Each package shall be labeled as to the name of the produce and may be labeled as to name of the variety and/or commercial type.

#### 7.2 Identification

Name and address of exporter, packer and/or dispatcher.

#### 7.3 Origin of Produce

Country of origin and, optionally, district where grown or national, regional or local place name.

#### 7.4 Commercial Identification

- Class:
- Size (size code or minimum and maximum weight in grams) (optional);
- Number of units (optional);
- Net weight (optional).

#### 7.5 Official Inspection Mark (optional)

#### 8.0 CONTAMINANTS

It is recommended that the produce covered by this Standard shall comply with the maximum levels of the Codex General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193-1995) and the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

#### 9.0 HYGIENE

- **9.1** It is recommended that the produce covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice General Principles of Food Hygiene (CAC/RCP 1-1969), Code of Hygienic Practice for Fresh Fruits and Vegetables (CAC/RCP 53-2003), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.
- **9.2** It is recommended that the produce should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

#### **General Criteria**

Colour	Mature Season - golden brown to light brown, ginger flesh
Appearance	Mature Season - golden brown to light brown, clean and free of soil, roots, green shoots, debris, pests
Sensory	Mature Season - firm, not overly fibrous
Maturity	Mature Season - thick golden skin
Odour	Mature Season - pungent
Taste	Mature season - initial bite smooth and aromatic, after several seconds hot and spicy
Shape	Fingerlike rhizomes with knobbly tubers, necks included
Size	Premium 300g+; Class I 100-300g

# **Consignment Criteria**

Defect Tolerance	Minor Defects: Premium 5%, Class I 15%; Major Defects:
	Premium & Class I 2% (rot and mould <0.5%)
Chemical & Contaminant	Exporters to undertake annual MRL, Heavy Metal and water
Residues	testing

## **Defect Criteria**

Minor Defects (do not effect	Healed growth, pest and harvest damage <2.5cmsq, superficial
shelf life of product, defect	skin marking
tolerance 10%)	
Major Defects (defect	Rot and mould (<0.5%), green shoots, insects, very fibrous flesh,
tolerance 2%)	growth / pest / harvest damage >2.5cmsq,

Annexes Photos to be inserted to illustrate the criteria