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## **Submission to Standing Committee on Rural and Regional Affairs and Transport References Committee re Inquiry into the effect on Australian ginger growers of importing fresh ginger from Fiji**

### **Introduction**

Botanical Food Company Pty Ltd (BFC) thanks the Standing Committee for the opportunity to comment on this Inquiry

BFC is an Australian owned company processing herb and spice products. It is based at Palmwoods on Queensland's Sunshine Coast, in one of the major Australian ginger growing areas.

Under its Gourmet Garden (GG) brand ([www.gourmetgarden.com](http://www.gourmetgarden.com)) it specialises in herb & spice paste, particularly into the retail and food service markets.

Sales are worldwide and include export to countries such as Canada, Hong Kong, New Zealand, Norway, Japan, Singapore, South Africa, Spain, UK and USA, with USA being the main export market.

BFC has experienced, and continues to experience, strong growth, year on year, despite the global financial crisis.

Ginger paste accounts for approximately 10% of these sales

All ginger for this product is Queensland grown as the flavour profile of this particular type of ginger (commonly known as Queensland Ginger) is that desired by our customers and is the mainstay of our ginger paste product.

In the initial stages of establishing the company, processing ginger was sourced and trialled from other supply areas e.g. China/Thailand, but Queensland Ginger was chosen due to overwhelming consumer preference. Further trials conducted in 2009 showed that it is still our customer's preference.

Having considered all information re Biosecurity Advice 2012/18 *Final Import Risk Analysis re fresh ginger rhizomes ex Fiji destined for Australian markets* (FIRA), the Biosecurity Advice 2012/17 *Draft Import Risk Analysis re fresh ginger rhizomes ex Fiji destined for Australian markets* (DIRA) and other submissions to the DIRA, BFC would like to make the following comments:

1. The continuing sales of BFC's GG ginger paste is dependent on a continual good quality supply of ginger with the correct flavour profile (i.e. Queensland Ginger)
2. BFC considers the assessment of the risk as covered by the FIRA and the proposal to import ginger from all areas of Fiji as per assessment, poses a threat to the Australian ginger growing industry and the portion of the Australian ginger processing industry that is dependent on 'Queensland Ginger'.
3. In FIRA *Appendix C Amendments to the Final Report* FIRA states that *the text in Chapter 3 has been revised with some additional references added and clarification provided on the purpose of the 2007 report*. BFC believes that the *Field Visit Report – Ginger Production and Processing in Fiji September 23-29, 2007* that was part of Biosecurity advice 2012/17 DIRA and its potential ramifications on the Australian Ginger Industry have still not been fully considered or adequately summarised in the FIRA.

BFC will make comment on two areas of concern

1. The *Field Visit Report – Ginger Production and Processing in Fiji September 23-29, 2007*
2. The likelihood of the importation of soil and other contaminants, both physical and microbial, on fresh ginger rhizomes, from a food processors experience.

BFC will also make comments on several submissions

## 1. The Field Visit Report

This report is not only inadequate in several areas, but it clearly indicates that, given the information in this document, importation of fresh ginger ex Fiji to Australia should not be considered.

Statements are broad, vague, undefined and often contradictory and give considerable cause for concern for example: reasons for ginger rots are currently being worked on, vague statements re potential germination of rhizomes, vague risk comparison between baby ginger and mature ginger, vague statements re some farmers using hot water dipping practices, and the discontinuation of the same, factors other than nematodes affecting ginger during growth etc - as underlined below:

*Fiji MAF is working with the Queensland Department of Primary Industries to identify the causal organisms responsible for the rot. In addition, discussions with the agricultural officers from Fiji MAF indicate that the baby ginger is less fibrous and is apparently not affected by any significant pests and diseases at the time of harvest. Consequently, as the rhizomes are soft and not hardy, they are not likely to germinate. However, this may require further verification. Based on this observation, it appears that baby ginger may not have the same risks compared to the mature ginger.*

*As indicated in Fiji's submission for ginger to Australia, the ginger seed material is subjected to a number of treatments such as dipping in hot water (51°C) for 10 minutes to address any nematodes carried on the seed material. The healthy seeds for planting are selected from material that has been left to dry for a few days. Shrivelled seed materials are discarded.*

*The seed material is packed in onions bags to facilitate heat penetration and effective treatment of all seed material. However, since the cessation of government assistance, which supplied gas for the hot water treatment, and the absence of any diseases affecting the planting material, some farmers have by-passed this process due to costs.*

*The results from farmers who follow the ginger production procedures (such as dipping in hot water) are mixed, and do not conclusively indicate that a single factor (pests and diseases or environmental conditions, or both) is responsible for the loss of the ginger for some farmers. This raises the question of whether factors other than nematodes are affecting the ginger during its growth.*

The Field Visit Report states that baby ginger is less fibrous and is apparently not affected by any significant pests and diseases at the time of harvest and further suggests that baby ginger may not have the same risks compared to the mature ginger. Baby ginger is harvested around 6-6.5 months. The FIRA report states that the mature ginger is harvested in the highlands at 10-12 months, but it does not further define the risk factor of the potential, sometimes undefined, pest and diseases, either compared with baby ginger or as a standalone factor.

Figures 8 & 9 and Figures 3.4 and 3.5 in the FIRA report, and the methodology shown (given BFC's processing experience), seem totally inadequate for the removal of contaminants.

**2. The likelihood of the importation of soil and other contaminants, both physical and microbial, on fresh ginger rhizomes from a food processors experience.**

As a processor BFC receives ginger rhizomes broken by hand into manageable sizes (as per AGIA submission photograph) and triple washed on farm by extensive mechanised wash systems. Visual contaminants are also removed during this on farm process.

Given BFC's considerable experience in this field, BFC totally supports the findings of the *AGIA submission Appendix 1 June 2012: Due to the morphology of the ginger rhizome it is not possible to remove all traces of soil from ginger destined for the fresh market in a commercial operation.*

In fact BFC experience has proven 100% removal of soil and other potential contaminants can only be removed from fresh ginger by slicing, sorting and sanitising.

To explain:

In the BFC processing facility ginger rhizomes (with morphology such as those sold into the fresh markets) re potential contamination of processing room are classified as highest risk

Because of this high risk category, the rhizomes, after receipt at the factory, undergo several further processes to ensure that they are properly cleaned and prepared for final processing.

Small stones and pieces of wood are well-documented contaminants, as are microbial contaminants, and here BFC notes that this FIRA does not include a pathogen risk assessment re human health.

Australian growers supplying to market are audited and supply to Freshcare Standards.

Typical requirements for ginger are (WQA standard)

<b>GINGER</b>	
<i>Bacillus cereus</i>	< 1,000 cfu/g
<i>Escherichia coli</i>	<10 cfu/g
<i>Salmonella</i>	Not Detected per 25g
Coagulase positive Staphylococci	< 100 cfu/g
Moulds	< 1,000 cfu/g

Ginger rhizomes (again due to their morphology and ability to hide/hold contaminants) are classified in the high risk category as carriers of the following microbiological pathogens: E.coli, bacillus cereus, yeast & moulds and all batches produced on site for BFC are tested for these (each batch of 800kg therefore several hundred tonnes are tested/annum) Salmonella spp. and Listeria

spp. are other known contaminants which also form part of a test matrix.. Aflotoxins are also considered.

The practice of shipping at 10°C is noted (Biosecurity Fiji June 2012). This may slow down pathogen development in transit, but once in the marketplace, if in an uncontrolled temperature environments, microbiological pathogens present will soon multiply and become a potential public health risk. Traceability of individual supply source then becomes critical (see 'Comments on submissions' - 4.)

BFC has found that washing practices for mature rhizomes such as shown/ described in the *Field Visit Report* and FIRA and visual inspection of rhizomes does not reveal/remove all contaminants and the only way to remove all soil, contaminants and soil borne bacteria from ginger rhizomes is by slicing, further washing and removing portions containing soil contaminants etc, followed by a sanitising wash step.

BFC considers that the potential for the introduction of soil (carrying pests, diseases and pathogens), stones and wood into the Australian market place via imported ginger rhizomes ex Fiji has been seriously underestimated in this FIRA report.

#### **Comments on submissions**

1. BFC also notes that some submissions make comparison between exports of fresh ginger ex Fiji (1500 tonnes) to exports of ginger ex Australia on a ratio of 1/10. Given that the total ginger production within Australia is only in the region of 8000 tonnes and 50% of Australian production goes into the Australian fresh market BFC feels that these referenced amounts are misleading
2. Submissions ex Fiji give no real indication ex Fiji as to the proposed import amounts without which it is impossible to properly define the proposed impact/risk. ( FIRA suggests 300-400 tonnes from the Pacific Islands)
3. Some submissions also make several references in their text to the approved importation into of Australia of Taro – *Review of Import Conditions for Fresh Taro Corms* (Biosecurity Australia 2011). BFC believes the use of this review is not necessarily appropriate supporting evidence given the differing morphologies of taro and ginger.
4. It is also noted the several submissions from potential importers discount the potential contamination/spread of disease/pathogens post entry into Australia. The FIRA also gives little credence to the movement of ginger ex markets around Australia and proposes no obstacles in place to prevent this movement, including the possibility of an exclusion zone. Here it is to be noted that major supermarkets frequently purchase ex markets and are often prime movers of product interstate.

## Conclusion

In conclusion BFC believes that taking into account all submissions, particularly those from the Australian State Departments of Agriculture and the Australian Ginger Industry group, that FIRA has underestimated the risk of the introduction of undesirable contaminants into the Australian growing regions via rhizomes whose morphology dictates that they will always have a degree of soil and contaminants attached.

Any such introduction could pose considerable threat to the continuing viability of the Australian growing industry, which would in turn adversely affect BFC's profitability.

Furthermore FIRA clearly states in 3.2.1 that Fijian growers are not part of any industry accredited schemes. Concerning microbial pathogens and the risk to public health, this automatically puts their product in a higher risk category than their Australian counterparts who currently supply these fresh markets.

BFC also queries the rationale behind the desire to import fresh ginger, destined for state markets, with the associated risks, for such a supposed small volume, given that the import of processed ginger products and fresh ginger into AQIS approved premises for processing is already allowed.

BFC therefore urges the Standing Committee to consider BFC's recommendation that fresh ginger rhizomes, destined for markets within Australia, should not be allowed.

Regards

Jane Parker

Herb Consultant

