

Export of Indian Sorghum to New Zealand – Phytosanitary Requirement

Fumigation:

3.2.3 Fumigation Treatment

All loose, bulk stock feed consignments and all meal products (except for those bagged products listed below) must be fumigated prior to or during shipment to ensure that subsequent infestation from holds, containers or other chance pest presence does not occur. Fumigation must be with phosphine or methyl bromide at the following prescribed rates. The fumigation certificate must state the fumigant used and the rate used. Fumigation given prior to shipment must be carried out no more than 21 days prior to shipment.

Phosphine: (prior to shipment or in transit) Fumigation can be carried out prior to shipment or may be carried out with phosphine generating products e.g. tablets, pellets, sachets or blankets introduced with the product into the sealed container or ship's hold to be effective during the journey (the ship's master must be notified).

The table below gives the rates to be used when using phosphine generating products. Three days must be added if the fumigant is surface applied in trays. One day less may be subtracted for cylinderised phosphine gas application completed prior to shipment.

The fumigation certificate must state the method of application and clearly state whether the consignment was exposed to the fumigant before the voyage with the fumigant removed, or whether the application was with tablets, pellets, sachets or blankets introduced with the product into the sealed container or ship's hold to remain there for the journey.

Application is based on the internal volume of the enclosure.

Temperature (°C)	Time (days) 1g active ingredient/ m ³	Time (days) 2g active ingredient/ m ³
15-20	13	12
20-25	10	9
25 -29	6	5
30+	5	4

Methyl bromide: (prior to shipment) One of the following rates at atmospheric pressure must be used:

Temperature (°C)	Dosage	Time (hours)
10-15	48 g/m ³	24
16-20	40 g/m ³	24
21+	32 g/m ³	24

Note 1:

Meal products in bags only, from all countries, may be given an increased inspection on arrival in lieu of fumigation, see Section 4.2.

3.3 PACKAGING

All stock feeds are to be consigned by the method(s) approved in the entry conditions, in a manner that will prevent contamination with animal matter, regulated plant pests, and any other contaminants.

OPTION 2: (IMPORTATION OF VIABLE GRAINS)

(i) Entry Conditions:

Sorghum bicolor grains may only enter New Zealand for processing at MAF approved transitional facilities by organisations operating MAF-approved grain importation systems (GISs). The following documents and conditions apply:-

Import Permit

Phytosanitary Certificate

(ii) Phytosanitary requirements for importation of *Sorghum bicolor* grains for processing from all countries:

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required

by MAF have been undertaken.

The *Sorghum bicolor* grains in the consignment:-

- were inspected in accordance with appropriate official procedures, and examined for regulated weed seeds as specified by MAF in the "Schedule of regulated weed seeds (refer to Section 1.5.2).

Note: Any regulated weed seeds that are detected refer to appendix B of the MAF operational standard *Grain for processing, import system requirements* PIT-GFP-ISR

AND

- were inspected in accordance with appropriate official procedures and found to be free of regulated pests (see Appendix 1) or if appropriate, has undergone pest control activities that are effective against these pests in accordance with MAF's approved options as outlined in Appendix 2.

AND

- sourced from a "Pest free area" or "Pest free place of production", free from *Gloeocercospora sorghi*, *Peronosclerospora graminicola*, *Peronosclerospora philippinensis*, *Peronosclerospora sorghi* (as outlined in Appendix 2).

OR

- were representatively sampled using ISTA or AOSA guidelines and tested for regulated fungal pests at a NPPO approved diagnostic laboratory.

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(iii) Additional declarations to the phytosanitary certificate

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

"The *Sorghum bicolor* grains in this consignment:

- sourced from a "Pest free area" or "Pest free place of production", free from *Gloeocercospora sorghi*, *Peronosclerospora graminicola*, *Peronosclerospora philippinensis*, *Peronosclerospora sorghi*.

OR

- were representatively sampled using ISTA or AOSA guidelines and tested for regulated fungal pests at a NPPO approved diagnostic laboratory.

(iv) Additional Certification Requirements:

1. Importers must supply verifiable copies of the import permit to MAF Biosecurity New Zealand at least 5 days before the arrival of the consignment (failure to do so may result in delays to the clearance of consignments).
2. The requirements for seed analysis certification are listed in appendix B of the MAF operational standard *Grain for processing, import system requirements* PIT-GFP-ISR.

(v) Post – entry transport, storage and processing restrictions:

Sorghum bicolor grains may only be imported into New Zealand by MAF approved importing organisations. Approved importing organisations must operate a MAF approved grain import system (GIS) or have applied to have a GIS approved by MAF. Importing organisations that operate GISs may apply to MAF for approval to store or process *Sorghum bicolor* grains at ATFs anywhere in New Zealand. For details of the operational standard refer to MAF Biosecurity New Zealand (Plants) Operational Standard PIT-GFP-ISR, Grain for Processing, Import System Requirements.

OPTION 3: (IMPORTATION OF VIABLE GRAINS FOR DEVITALISATION)

A (i) Entry conditions – Heat treatment:

Sorghum bicolor grains may enter New Zealand for heat treatment on arrival. The following document and conditions apply: -
Phytosanitary Certificate

(ii) Heat treatment on arrival:

On arrival in New Zealand the *Sorghum bicolor* grains must be heat treated at 85°C (core temperature) and 40% relative humidity for a minimum of 15 continuous hours or at a temperature/time regime verified to be effective in devitalising seed. Treatments must be carried out in a MAF approved transitional facility and treatment operator or under MAF supervision. Inspection is not required after treatment.

OR

B (i) Entry conditions – Irradiation treatment: (Animal or Bird Feed only – not for Human Consumption)

Sorghum bicolor grains for animal or bird feed may enter New Zealand for irradiation treatment on arrival. The following document and conditions apply:-

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(ii) Irradiation treatment on arrival:

On arrival in New Zealand the *Sorghum bicolor* grains must be directed for irradiation treatment at a dose of 25 kGy under the supervision of a MAFBNZ inspector, at the following MAF approved transitional facility:

Schering Plough Pty Ltd
33 Whakatiki Street
Upper Hutt

Importers must also ensure that Schering Plough Pty Ltd have the ability to treat the consignment prior to arrival. Inspection is not required after treatment.

Post-Treatment Requirements

Note 1: A 1 in 10 audit for seed viability will be conducted. The consignment is not to be held during the audit process. If the audit demonstrates that viability is present when the phytosanitary certificate indicates otherwise all following consignments must be held and undergo viability tests until 5 consecutive conforming consignments are achieved. Audits for seed viability will not be required for consignments that are accompanied by a seed analysis certificate issued by an ISTA or AOSA accredited laboratory that

specifies that the seeds have been analysed and are not viable.

Note 2: Transportation of seeds from the border to transitional facilities for treatment must be conducted using leak proof containers or vehicles.

Note 3: All consignments of 20 kgs or less are exempt from these viability testing requirements.

3. VALIDATION OF PHYTOSANITARY MEASURES, TEST RESULTS AND AUDIT OF TREATMENTS

For all imported *Sorghum bicolor* grains for consumption, feed or processing, MAF reserves the right to validate all phytosanitary measures, testing methods or treatment methods used to meet MAF's import requirements. Consignments must be held in such a manner as to avoid contamination or re-infestation with regulated pests after treatment or inspection. Audit inspection and/or sampling for regulated pests may be conducted on arrival in New Zealand at MAF-registered laboratories or facilities and at the expense of the importing organisation.

4. GRAIN NOT MEETING MAF'S PHYTOSANITARY REQUIREMENTS

Sorghum bicolor grains imported for consumption, feed or processing that do not meet the phytosanitary requirements described above (e.g. additional declarations not provided for all regulated pests) will not be provided with biosecurity clearance. The importer will be given the option to treat (if possible, e.g. by application of an appropriate pesticide treatment), reship, or destroy the consignment. Any required treatments (including fumigation, processing or heat treatment) must be carried out on board the vessel prior to discharge or if possible, in a MAF approved transitional facility. All activities must be conducted under the supervision of MAF. MAF Standard BNZ-GCFP-PHR: Importation of Grains/Seeds for Consumption, Feed or Processing 23 June 2011 Page 138

Appendix 1: Pest List for *Sorghum bicolor* (sorghum) Grains for Consumption, Feed or Processing REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Bostrichidae

Dinoderus distinctus

bostrichid beetle

Prostephanus truncatus

larger grain borer

Dermestidae

Trogoderma glabrum

khapra beetle

Trogoderma granarium

khapra beetle

Trogoderma grassmani

trogoderma beetle

Trogoderma simplex

dermestid beetle

Trogoderma sternale

dermestid beetle

Trogoderma variabile

warehouse beetle

Languriidae

Pharaxonotha kirschii

Mexican grain beetle

Tenebrionidae

Alphitobius laevigatus

black fungus beetle

Latheticus oryzae

longheaded flour beetle

Palorus subdepressus

depressed flour beetle

Diptera

Cecidomyiidae

Contarinia sorghicola

sorghum midge

Hymenoptera

Formicidae

Solenopsis invicta

red imported fire ant

Lepidoptera

Pyralidae	
<i>Corcyra cephalonica</i>	rice moth
Fungus	
Ascomycota	
Dothideales	
Pleosporaceae	
<i>Cochliobolus nodulosus</i> (anamorph <i>Bipolaris nodulosa</i>)	leaf blight
<i>Cochliobolus tuberculatus</i> (anamorph <i>Curvularia tuberculata</i>)	leaf spot
Hypocreales	
Clavicipitaceae	
<i>Claviceps africana</i>	ergot
<i>Claviceps sorghi</i> (anamorph <i>Sphacelia sorghi</i>)	ergot
<i>Claviceps sorghicola</i>	Ergot
Basidiomycota: Ustomycetes	
Ustilaginales	
Ustilaginaceae	
<i>Sporisorium cruentum</i>	loose smut
<i>Sporisorium sorghi</i>	kernel smut
<i>Tolyposporium ehrenbergii</i>	long smut
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	