

REVIEW OF SUBMISSIONS - IMPORT HEALTH STANDARD: Importation of Dried and Preserved Plant Material

The draft import health standard and discussion notes for Importation of Dried and Preserved Plant Material was notified on the MAF Biosecurity New Zealand website www.biosecurity.govt.nz on 18 February 2010.

Two external submissions were received during the consultation period and three sets of internal comments (within MAF), which have resulted in some minor changes.

Submitters	Date Received
New Zealand National Herbarium Network, Chair, Ewen Cameron	14/03/2010
Landcare Research, Peter Buchanan	01/04/2010
Internal comments from MAF staff	Up to 06/05/2010

Submissions (essential comments)

1. Ewen Cameron, **New Zealand National Herbarium Network**

Under 2.4 Treatments freezing is missing – we think it should be inserted. All packages containing herbaria specimens arriving to our institutions are routinely frozen for seven days at -18 to 20°C to eliminate the risk of any invertebrate pests.

Under 3.6.1 Dried Herbarium Specimens we'd like to see freezing specifically mentioned as an applicable treatment (as you have for example under 3.4.1 Brushwood Fencing which specially mentions a "Treatment", but not under 3.6.1).

MAFBNZ responds: Section 2.4 The intention in the standard is to here list the treatments that may be used prior to importation and on arrival. Freezing is an accepted treatment for insects found on arrival, and the standard has been amended with the note "Freezing as a treatment (for insects only) in lieu of inspection is accepted prior to importation only if listed in a permit to import". Freezing has long been used as a treatment for herbarium material when insects or signs of insects are detected.

Section 3.6.1 We do not consider it necessary to specifically specify a treatment of freezing for all herbarium specimens. As with all plant and fungal products requiring inspection on arrival, a treatment will be required if necessary depending on the nature of the problem e.g. seeds of incompletely identified material not imported under the ERMA approval, may require heat treatment. It is known and understood that herbaria often choose to use freezing to treat for insects as part of their own procedures.

2. Peter Buchanan, Landcare Research

My main comment is to suggest that the scope of this Standard should be clearly stated in the Title and in text. While specified as a Plants Standard, it covers organisms from two Kingdoms (at least) – Plants and Fungi. The Plants Kingdom is much smaller than the Fungal Kingdom. Hence I suggest revision of the title to: "Importation of Dried and Preserved Plant and Fungal Material".

My recommendation relates to the clear discrimination of plants from fungi in both scientific and legal definitions; in fact in scientific terms fungi are more closely related to animals than to plants. Also, the importance of accuracy in biosecurity practice at species and intra-species level implies accuracy at a macro (kingdom) level.

Fungi are mentioned several times in the accompanying IHS Discussion Document, including risks specifically associated with fungi; e.g.:

“Dried fungi, mosses, lichens and seaweeds. As there is a high level of unknown risks a treatment is considered the best action. Viable material in such groups may be difficult to detect.”

Incorporation of fungi in the Standard has ramifications for wording of many sections (and I have not specified relevant sections in my comments), but changes would appear to be straightforward to incorporate. Note that Lichens are fungi too – the Latin name of a lichen is the name of the lichenised fungus; the algal name is often not known or used.

Specific Comments:

p.4; # 1.1: Scope needs to include fungi

p. 5; # 2.3: For fungal material (e.g. powdered extract from *Ganoderma* fungi), precise identification is often a required step in gaining a permit to import. Should this identification step, where required, be specified? Should there be clarification on whose responsibility it is to gain such formal identification, and who the identifier should formally respond to when requested (i.e., to MAF or to the importer)?

p. 9/10; # 3.2.1: While I have not documented the many occasions where fungi should be indicated in addition to plants, the 6th bullet point states that the “dried plant material must be” ... “free of fungal material”. Clearly this cannot apply to “dried fungal material”.

p. 10/11; # 3.3 / 3.3.1: Note that dried wood decay fungi and lichens are sometimes imported for ornamental use, as specified in the table on p. 11. These are not covered in the titles of 3.3 or 3.3.1.

p. 18; #3.6 / 3.7: The NZ Fungal and Plant Disease Herbarium contains dried “herbarium” specimens intended to be covered by this Standard. As they are not plant specimens, the title and content of all sections in 3.6 needs expansion to include them. A minority of fungal herbarium specimens are preserved in ethanol, so need to be covered in 3.7. In the final paragraph of 3.7, I assume that use of “micro-organisms” applies mainly to bacteria. Some microscopic fungi are included in some interpretations under “microorganisms”, but most fungi fall outside the domain of this poorly defined grouping.

p. 21; “Plant products”: I note that the definition is appropriate. Fungi are not plant products.

MAFBNZ responds: (p.4; # 1.1) Within this standard the intention of the word “plant” was used generally to capture material mostly plant and excluding “animal”, “wood” and “inanimate” material. It is now accepted that this is scientifically incorrect and the scope of the standard has been amended in line with the suggestion. It is also noted that the same addition should be made to the scope of the Stored Plant Products for Human Consumption. The suggestion of change to the title has not been adopted though, because it is in the interest of brevity that the title will not be comprehensive and will not reflect the full content, which is best located in the scope. Again, this is the case with the stored products standard.

*(p. 5; # 2.3) For powdered *Ganoderma* extract intended for human consumption, the standard used for importation is the Stored Products standard, section 9.10, which specifies the non-viability check step involved. In this dried and preserved standard, fungal material will require either a treatment or permit (e.g. further processing or laboratory/research work). If an identification step were to be involved, the importation should be under a permit.*

(p. 9/10; # 3.2.1) The intention here is that any fungi imported for further processing, other than consumption (soup mixes or in tea bags), should be imported under a permit and be processed in an approved facility. This provision is an alternative to non-viability testing, or requesting the development of a more specific standard, or if the intention is propagation of viable material, importing under the standard for the Importation of Microorganisms.

(p. 10/11; # 3.3 / 3.3.1) Dried fungi and lichens are now covered in the titles of 3.3 or 3.3.1.

(p. 18; #3.6 / 3.7) The title and content of sections in 3.6 and section 3.7 now specifically includes fungi. In the final paragraph of 3.7, "microorganisms", includes fungi for this purpose.

Summary of further Internal comments from MAF staff (matters not previously finalized)

1. Regarding Lavender, Straw and Cat Nip

Comments have been provided to give some insight into what dried plant material the detector dog programme is detecting at the International Mail Centre and to assist in providing factual information for the decision process.

Statistics have been gathered over a three month period showing the numbers of seizures and examined /released Lavender, Straw and Cat Nip.

The months covered in the survey are November 09, December 09 and January 10, Included is the country of origin.

- The total combined numbers of finds for the period was 459.
- 37 examined and released. 12.4% of finds
- 422 seizures, 87% of finds

- Reasons for Seizures:
 - Unidentified seeds (contamination)
 - Grass etc, (contamination)
 - Fungal lesions on unknown plant material (contamination)
 - Unable to inspect (inside pillows/ cat toys)

Lavender	Seizures 313	examined/released 29
Cat Nip	Seizures 18	examined/released 0
Straw	Seizures 91	examined/released 9

Of the significant number of Lavender bags inspected, it was commonly found it was not the Lavender itself the problem but the contamination in with the Lavender (unidentified seeds, grass, etc.).

Response: These seizures highlight the effectiveness of the detector dog programme. MAFBNZ has concerns about unidentified seed contaminants and plant material that shows signs of fungal lesions. However, the level of risk of relatively low numbers of these privately imported specific items in pouches intended for use in a manner in which the pouch is unopened is considered extremely low. Continuing to take any actions can not be well justified in terms of cost and time for this level of risk. Commercial consignments though, enter the country in much larger numbers and it should be possible for suppliers to meet the need for a treatment prior to importation. The proposed provision for private consignments of Lavender pouches filled with dried Lavender leaves/flower heads, cat nip toys filled with dried leaves of Nepeta cataria, and Therapeutic pillows, duvets or mattress liners filled with dried aromatic herbs (dried leaves/flowers) to be exempt certification or inspection requirements will remain.

2. Regarding the treatments:

It is suggested that those treatments that are the same as domestic ones (i.e. available for treatments on arrival) are just referred to the Approved treatment schedule in ABTRT <http://www.biosecurity.govt.nz/files/regs/stds/bnz-std-abtrt.pdf>. This way if there are any changes then it is only in one place the change is needed. If importers have access to the import standard then they have access to ABTRT. Only the Ethylene oxide treatment and drying, bleaching and freeze drying details would not be listed in ABTRT as these are not available on arrival in NZ. Section 2.4.8: The MB fumigation rate below 10C is not desirable and the rate is the same as FPT5 and VCE1 which is equivalent to ISPM 15. It is desirable to standardize as many schedules as possible.

Section 3.3.1: The formatting has been found hard to follow.

Section 3.4.1 group 2: The MB rate is not correct for fungi so the 70C for 4 hrs rate is not appropriate. The equivalent heat is the ISPM 15 rate of 56C for 30mins.

In the table, it is not clear specifically which heat treatment applies.

Response: Section 2.4 has been amended to now refer to ABTRT for details of treatments that may be carried out either prior to importation or on arrival.

Sections 2.4.8 and 3.4 : The MB fumigation rate below 10C has been replaced with reference to ABTRT in section 2.4 and in section 3.4 with reference to FPT5 in ABTRT.

Section 3.3.1 Apart from a table division for Grasses, Sedges, Rushes-species listed as Basic in PBI, no changes have been made. However, it is anticipated that changes will be made after the standard has been issued for a period and it is more evident how best to improve this area.

Section 3.4.1: The equivalent heat treatment has been amended to refer to FPT5 in ABTRT.

Section tables and heat options: The heat options have been amended to refer to SPT4 in ABTRT.

3. Regarding Traditional Chinese Medicines (TCM), and Dried Plant Material for Further Processing.

These comments briefly address an issue with Traditional Chinese Medicine (TCM), specifically the ones that are commonly known as raw TCM (just dried, unprocessed plant products, animal products and minerals).

The issue relating to clearance of TCM is that quite regularly animal products declared as plant product are intercepted, and MAF has developed an internal list of materials/importers where a 100% inspection is required. A few examples of some of the animal products having the appearance of plant products are: dried leech declared as *Prunella vulgaris*; flying squirrel faeces declared as soy beans; bird faeces declared as white cloves; shredded buffalo horns.

No specific IHS exists for TCM herbs (dried/unprocessed seeds, fruits, bark, roots, rhizomes, whole herbs, flowers, tubers, arils etc). In practice such material must be fully inspected on arrival in order to be handled under the correct IHS, and treated if required.

With the current draft, importers may think that raw TCM plant products might be imported under section 3,2 Dried Plant Material for Further Processing, and the clause in the discussion notes "Generally these are not intended for human consumption, but may include finished products in the form of capsules/tablets for consumption" is confusing because it is not clear if this clause refers to the product at the finish of processing after importation or already finished products on arrival. It is necessary to make it clear that this section does not refer to plant material for human consumption in general.

Response: There is a certain overlap between material for human consumption and other purposes. Most herbal material is "further processed" in a home environment by being used for tea or cooking prior to human consumption and is therefore not suitable for any post entry control measures. But it can be inspected and given a treatment where necessary (provided this is not irradiation). It is intended that this material be inspected on arrival and then given biosecurity clearance under the stored products standard. The dried and preserved standard has been amended with the note: "Private consignments of plant or fungal material intended for human

consumption by cooking/boiling should be imported under the MAF Standard for Importation of Stored Products for Human Consumption <http://www.biosecurity.govt.nz/files/ih/bnz-npp-human.pdf>"

Mention of the 100% inspection required for many TCM raw products will be made in the next amendment of the Stored Products of Plant Origin for Human Consumption standard.

4. Regarding tapa mats and cloths.

Recently gathered data from inspections of these items has shown that many have been contaminated with insects, including ants, ticks and trips. Seed also have been noted.

Response: There is sufficient evidence to require an inspection with all consignments of tapa mats and cloths.