Import Health Standard Commodity Sub-class: Fresh Fruit/Vegetables Grape, Vitis vinifera from Australia

ISSUED

Issued pursuant to Section 22 of the Biosecurity Act 1993 Date Issued: 20 December 2000

1 NEW ZEALAND NATIONAL PLANT PROTECTION ORGANISATION

The New Zealand national plant protection organisation is the Ministry of Agriculture and Forestry and as such, all communication should be addressed to:

Director, Plants Biosecurity Ministry of Agriculture and Forestry PO Box 2526 Wellington NEW ZEALAND

Fax: 64-4-498 9888

E-mail: plantihs@maf.govt.nz http://www.maf.govt.nz

2 GENERAL CONDITIONS FOR ALL PLANT PRODUCTS

All plants and plant products are **PROHIBITED** entry into New Zealand, unless an import health standard has been issued in accordance with Section 22 of the Biosecurity Act 1993. Should prohibited plants or plant products be intercepted by the New Zealand Ministry of Agriculture and Forestry, the importer will be offered the option of reshipment or destruction of the consignment.

The national plant protection organisation of the exporting country is requested to inform the New Zealand Ministry of Agriculture and Forestry of any change in its address.

The national plant protection organisation of the exporting country is required to inform the New Zealand Ministry of Agriculture and Forestry of any newly recorded organisms which may infest/infect any commodity approved for export to New Zealand.

Pursuant to the Hazardous Substances and New Organisms Act 1996, proposals for the deliberate introduction of new organisms (including genetically modified organisms) as defined by the Act

should be referred to:

Manager, Operations Environment Risk Management Authority PO Box 131 Wellington NEW ZEALAND

Also note:

In order to meet the Environmental Risk Management Authority's requirements the scientific name (i.e. genus and species) of the commodity must be included in the phytosanitary certificate.

3 EXPLANATION OF PEST CATEGORIES

The New Zealand Ministry of Agriculture and Forestry has categorised organisms associated with plants and plant products into regulated and non-regulated organisms as described below. Organisms (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. Weeds may be in the form of seeds or other plant parts.

3.1 REGULATED ORGANISMS

Regulated organisms are those organisms for which phytosanitary actions would be undertaken if they were intercepted/detected. These will include new organisms as defined by the Hazardous Substances and New Organisms Act 1996. Regulated organisms are sub-divided into the following groups:

3.1.1 Quarantine: Risk group 1 pests

Risk group 1 pests are those regulated pests (FAO Glossary of Phytosanitary Terms, 1996) which on introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

3.1.2 Quarantine: Risk group 2 pests

Risk group 2 pests are those regulated pests which on introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.

3.1.3 Quarantine: Risk group 3 pests

Risk group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which on entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or have significant economic impacts on their production and/or the environment (some importing countries prohibit the entry of the host commodity). An official surveillance system is required for such pests in New Zealand.

3.1.4 Regulated non-quarantine pests

A regulated non-quarantine pest (denoted by "reg." on the pest list) is a pest whose presence in a consignment of plants for planting, affects the intended use of those plants with an economically unacceptable impact and is therefore regulated within the territory of the importing contracting party (Revised IPPC definition, Rome 1997). These pests would be under official control by the use of a Government operated or audited certification scheme.

3.1.5 Regulated non plant pests

Regulated non plant pests are those organisms which, although not pests of plants or plant products, may be associated with plants or plant products in international trade, and may have an affect on human or animal health (eg. black widow spider) and thus fall under the jurisdiction of other New Zealand government departments. The categorisation of these organisms and their associated import restrictions will be applied in accordance with the requirements of the relevant departments.

3.1.6 Vectors of associated quarantine pests

In the context of this import health standard, vectors are those organisms which are able to transmit regulated pests into New Zealand. To prevent the transmission of vectored quarantine organisms to susceptible commodities in New Zealand, it is necessary to prevent the entry of their vectors. Vectors (denoted by "vect." on the pest list) will be categorised as risk group 1 even if they are present in New Zealand, unless they are risk group 2 pests in their own right. If the vectored organism is not present in the exporting country then the associated vector(s), if present in New Zealand, will be categorised as a non-regulated non-quarantine pest(s).

3.1.7 Vectored organisms

Vectored organisms (denoted by "VO" on the pest list) are those regulated pests that are able to enter New Zealand via a vector associated with the imported commodity.

3.1.8 Strains of pests

Where there is documented evidence that a pest associated with the imported commodity has a different host range, different pesticide resistance, vectors a different range of organisms, or is more virulent than that of the same species present in New Zealand, then the different strain (denoted by "strain" on the pest list) of that pest will be categorised accordingly as a risk group 1 or 2 regulated pest.

3.1.9 Unidentifiable organisms

Should identification of an organism not be possible within the required time frame, the organism will be categorised as a regulated pest (either risk groups 1, 2, or 3) until such time as shown otherwise.

3.1.10 Unlisted organisms

Should an organism be intercepted that is not included on the pest list for that commodity, it will be categorised into the appropriate risk group and action taken accordingly.

3.2 NON-REGULATED ORGANISMS

Non-regulated organisms are those organisms for which phytosanitary actions would not be undertaken if they were intercepted/detected. These would include new organisms which could not establish in New Zealand. Non-regulated organisms are sub-divided into the following groups:

3.2.1 Non-regulated non-quarantine pests

Non-regulated non-quarantine pests are either already present in New Zealand and are not under official control or, could not establish in New Zealand.

3.2.2 Non-regulated non plant pests

Non-regulated non plant pests are not pests of plants and are not of concern to the Ministry of Agriculture and Forestry or any other New Zealand government department.

3.3 CONTAMINANTS (INCLUDING SOIL)

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.

4 APPLICATION OF PHYTOSANITARY MEASURES

A number of different phytosanitary measures may be applied to pests in each risk group, depending on the commodity and the type of pest. These measures include:

4.1 QUARANTINE: RISK GROUP 1 PESTS

Phytosanitary measures required for risk group 1 pests may include:

- inspection and phytosanitary certification of the consignment according to appropriate procedures by the national plant protection organisation of the exporting country,
- testing prior to export for regulated pests which cannot be readily detected by inspection (eg. viruses on propagating material from accredited facilities), and verified by an additional declaration, to that given on the phytosanitary certificate,
- inspection/testing of the consignment by the New Zealand Ministry of Agriculture and Forestry prior to biosecurity clearance, to ensure the specified pest tolerance has not been exceeded.

4.2 QUARANTINE: RISK GROUP 2 PESTS

Phytosanitary measures required for risk group 2 pests may include all the requirements for risk group 1 pests and may also require pre-export pest control activities to be undertaken by the contracting party, and confirmed by additional declarations to the phytosanitary certificate.

4.3 QUARANTINE: RISK GROUP 3 PESTS

Phytosanitary measures applied to risk group 3 pests may include all the requirements for risk group 1 pests plus:

- the application of a pre-export treatment which has been developed in accordance with an approved New Zealand Ministry of Agriculture and Forestry standard,
- an official bilateral quarantine arrangement between the New Zealand Ministry of Agriculture and Forestry and Australia national plant protection organisation which includes descriptions of each approved treatment system(s),
- specific additional declarations on the phytosanitary certificate.

4.4 REGULATED NON-QUARANTINE PESTS

Phytosanitary measures applied to regulated non-quarantine pests will generally be the same as for risk group 1 pests, or according to the contingencies implemented for that pest if detected in New Zealand.

4.5 NON-REGULATED NON-QUARANTINE PESTS

No phytosanitary measures are applied to non-regulated non-quarantine pests.

5 GENERAL CONDITIONS FOR FRESH FRUIT/VEGETABLES

Commodity sub-class: fresh fruit/vegetables includes fresh fruit and vegetables for consumption.

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

All host material (fruit/vegetables) of fruit fly species (Diptera: Tephritidae) of economic significance shall only be imported under the terms of a bilateral quarantine arrangement (e.g. agreement, workplan) between the New Zealand Ministry of Agriculture and Forestry's Director, Plants Biosecurity and the head of the supply country's national plant protection organisation.

6 SPECIFIC CONDITIONS FOR GRAPES FROM AUSTRALIA

This import health standard covers the requirements for the entry of grapes, commodity sub-class: fresh fruit/vegetables from Australia only.

6.1 PRE-EXPORT REQUIREMENTS

6.1.1 Inspection of the consignment

The New Zealand Ministry of Agriculture and Forestry requires that the Australia national plant protection organisation sample and inspect the consignment according to official procedures for all visually detectable regulated pests (as specified by the New Zealand Ministry of Agriculture and Forestry), with a 95% confidence level, that not more than 0.5% of the units in the consignment are infested (this equates to an acceptance level of zero units infested by quarantine pests in a sample size of 600 units).

6.1.2 Testing of the consignment

Testing of the consignment prior to export to New Zealand for quarantine pathogens which are not visually detectable is not generally required for fresh grapes from Australia.

6.1.3 Documentation

Bilateral quarantine arrangement: Required

Grapes, commodity sub-class: fresh fruit/vegetables, may only be imported into New Zealand from Australia under the terms of the bilateral quarantine arrangement.

Phytosanitary certificate: Required.

Import permit/Authorisation to import: Exempt under Gazette Notice: No. AG12, 13 July 1995.

6.1.4 Phytosanitary certification

A completed phytosanitary certificate issued by the Australia national plant protection organisation must accompany all grapes, commodity sub-class: fresh fruit/vegetables exported to New Zealand.

Before an export phytosanitary certificate is to be issued, the Australia national plant protection organisation must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry have been undertaken.

The grapes have:

been inspected in accordance with appropriate official procedures and found to be free
of visually detectable regulated pests specified by the New Zealand Ministry of
Agriculture and Forestry.

AND

- undergone an agreed treatment that is effective against species in Quarantine: Risk group 3.

AND

- undergone appropriate pest control activities that are effective against:

Conogethes punctiferalis Latrodectus hasselti Maconellicoccus hirsutus

OR

been sourced from an area free (verified by an official detection survey) from the following:

Conogethes punctiferalis Maconellicoccus hirsutus

Note: Combinations of treatments and area freedom are permissible for the aforementioned risk group 2 regulated pests.

6.1.5 Additional declarations to the phytosanitary certificate

If satisfied that the pre-export activities have been undertaken, the Australia national plant protection organisation must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The grapes in this consignment have:

been inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by the New Zealand Ministry of Agriculture and Forestry.

AND

- been treated in accordance with Appendix 2 or 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australia national plant protection organisation concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

AND

- undergone appropriate pest control activities that are effective against:

Conogethes punctiferalis Latrodectus hasselti Maconellicoccus hirsutus

OR

been sourced from an area free (verified by an official detection survey) from the following:

Conogethes punctiferalis Maconellicoccus hirsutus."

Note: For *Latrodectus hasselti*, either an additional declaration is required whereby *Latrodectus hasselti* is treated using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes OR the treatment specification for *Latrodectus hasselti* is detailed in the treatment section of the Phytosanitary Certificate.

6.2 TRANSIT REQUIREMENTS

The grapes must be packed and shipped in a manner to prevent contamination by regulated pests.

The package should not be opened in transit. However, where a consignment is either stored, split up 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 it is kept in the original shipping container, a "Re-export Certificate" is not required.

6.3 INSPECTION ON ARRIVAL

The New Zealand Ministry of Agriculture and Forestry will check the accompanying documentation on arrival to confirm that it reconciles with the actual consignment.

The New Zealand Ministry of Agriculture and Forestry requires, with 95% confidence, that not more than 0.5% of the units (for grapes, a unit is one bunch) in a consignment are infested with visually detectable regulated pests. To achieve this, the New Zealand Ministry of Agriculture and Forestry 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 commodity may be directed to a facility for further treatment if required.

6.5 TESTING FOR REGULATED PESTS

The New Zealand Ministry of Agriculture and Forestry may, on the specific request of the Director, Plants Biosecurity, test grapes (commodity subclass: fresh fruit/vegetables) from Australia for regulated pests.

6.6 ACTIONS UNDERTAKEN ON THE INTERCEPTION/DETECTION OF ORGANISMS/CONTAMINANTS

If regulated pests are intercepted/detected on the commodity, or associated packaging, the following actions will be undertaken as appropriate:

6.6.1 Quarantine: Risk group 1 pests

If a risk group 1 pest is intercepted, the importer will be given the option of:-

- treatment (where possible) of the consignment at the importer's risk,
- re-sorting (specific conditions apply) of the consignment,
- reshipment of the consignment,
- destruction of the consignment.

6.6.2 Quarantine: Risk group 2 pests

If a risk group 2 pest is intercepted, the importer will be given the option of:-

- treatment (where possible) at the discretion of the Director, Plants Biosecurity and immediate feedback to the national plant protection organisation of the exporting country with a request for corrective action,
- reshipment of the consignment,
- destruction of the consignment.

6.6.3 Quarantine: Risk group 3 pests

Actions for the interception of risk group 3 pests will include:-

- reshipment of the consignment OR destruction of the consignment,

AND

the suspension of trade, until the cause of the non-compliance is investigated, identified and rectified. The appropriate actions may be audited by the New Zealand Ministry of Agriculture and Forestry. Once the requirements of the New Zealand Ministry of Agriculture and Forestry have been met to the satisfaction of the Director, Plants Biosecurity, and supporting evidence is provided and verified by the Australia national plant protection organisation, the trade suspension will be lifted.

6.6.4 Regulated non-quarantine pests

Actions for the interception/detection of regulated non-quarantine pests will be in accordance with the contingencies implemented for that pest if detected in New Zealand.

6.6.5 Regulated non plant pests

Actions for the interception/detection of regulated non plant pests will be in accordance with the actions required by the relevant government department.

6.6.6 Non-regulated non-quarantine pests

No action is undertaken on the interception of non-regulated non-quarantine pests.

6.6.7 Non-regulated non plant pests

No action is undertaken on the interception of non-regulated non plant pests.

6.6.8 Contaminants

Lots with more than 25 grams of soil per 600 unit sample shall be treated, reshipped or destroyed.

Interception of extraneous plant material (e.g. leaves, twigs) in the 600 unit sample will result in the lot 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 FEEDBACK ON NON-COMPLIANCE

The Australia national plant protection organisation will be informed by the New Zealand Ministry of Agriculture and Forestry's Director, Plants Biosecurity of the interception (and treatment) of any regulated pests, "unlisted" organisms, or non-compliance with other phytosanitary requirements.

7 CONTINGENCIES FOLLOWING BIOSECURITY CLEARANCE

Should a regulated pest be detected subsequent to biosecurity clearance, the New Zealand Ministry of Agriculture and Forestry 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

Pest List Commodity Sub-class: Fresh Fruit/Vegetables Grape, Vitis vinifera from Australia

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests

Insect Insecta Diptera Tephritidae

Bactrocera neohumeralislesser Queensland fruit flyBactrocera tryoniQueensland fruit flyCeratitis capitataMediterranean fruit fly

Quarantine: Risk group 2 pests

Insect Insecta Homoptera Pseudococcidae

Maconellicoccus hirsutus pink hibiscus mealybug

Lepidoptera Pyralidae

Conogethes punctiferalis yellow peach moth

Quarantine: Risk group 1 pests

Insecta

Coleoptera Cerambycidae

Dihammus vastator fig longhorn

Chrysomelidae

Altica gravidametallic flea beetleMonolepta australisred-shouldered leaf beetleMonolepta divisasmall monolepta beetle

Curculionidae

Orthorhinus cylindrirostris elephant weevil

Orthorhinus klugi immigrant acacia weevil

Otiorhynchus cribricollis cribrate weevil

Nitidulidae

Carpophilus maculatus dried fruit beetle

Scarabaeidae

Dilochrosis atripennisflower chaferDiphucephala sp.green scarab beetles

Diptera

Drosophilidae

Drosophila spp. vinegar flies

Hemiptera

Coreidae

Fabrictilis australis squash bug
Mictis profana crusader bug

Lygaeidae

Nysius vinitor Rutherglen bug Oxycarenus arctatus coon bug

Pentatomidae

Plautia affinis green stink bug

Pyrrhocoridae

Dysdercus sidae pale cotton stainer

Scutelleridae

Scutiphora pedicellata metallic shield bug

Homoptera

Aleyrodidae

Aleurocanthus spiniferus orange spiny whitefly

Margarodidae

Icerya seychellarum Seychelles scale

Pseudococcidae

Ferrisia virgata striped mealybug

Lepidoptera

Lymantriidae

Porthesia paradoxa tussock moth

Noctuidae

Agrotis munda brown cutworm
Eudocima fullonia fruit-piercing moth

Psychidae

Hyalarcta huebneri leaf case moth

Sphingidae

Hippotion celerio grapevine hawk moth
Theretra oldenlandiae vine hawk moth

Tortricidae

Epiphyas spp. (except E. postvittana) leafrollers

Orthoptera Acrididae

Austracris guttulosa spur-throated locust Valanga irregularis giant grasshopper

Thysanoptera

Phlaeothripidae

Haplothrips froggatti black plague thrips

Thripidae

Scirtothrips dorsalis chilli thrips

Mite

Arachnida

Acarina

Tenuipalpidae

Brevipalpus lewisi bunch mite

Tetranychidae

Calepitrimerus vitis grapeleaf rust mite Eutetranychus orientalis pear leaf blister mite

Mollusc

Gastropoda

Stylommatophora Bradybaenidae

Bradybaena similaris snail

Fungus

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Ascochyta ampelina leaf spot

Ascochyta chlorospora -

Coniella diplodiella white rot

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales Dematiaceae

Alternaria vitis leaf disease

Cladosporium viticola cladosporium leaf spot

Weed

Angiospermae

Asterales

Asteraceae

Baccharis halimifolia [contaminant]baccharisChondrilla juncea [contaminant]skeleton weedSonchus spp. (except S. arvensis, S. asper, S. oleraceus, S.sowthistle

kirkii) [contaminant]

Xanthium spp. (except X. spinosum) [contaminant] bur

Geraniales Zygophyllaceae

Tribulus terrestris [contaminant] caltrop

Poales Poaceae

Cenchrus spp. (except *C. ciliaris*) [contaminant] grass Digitaria spp. (except *D. aequiglumis, D. ciliaris, D.* grass

ischaemum, D. sanguinalis, D. setigera, D. violascens)

[contaminant]

Echinochloa spp. (except E. crus-galli, E. crus-pavonis, E. grasses

esculenta, E. telmatophila) [contaminant]

Eragrostis curvula [contaminant]

Pennisetum alopecuroides [contaminant]

Pennisetum polystachion [contaminant]

Phragmites and [contaminant]

Phragmites and [contaminant]

Phragmites and [contaminant]

Phragmites spp. [contaminant] grass

Sorghum halepense [contaminant] Johnson grass
Sorghum x almum [contaminant] Columbus grass

Solanales Solanaceae

Lycium spp. (except L. barbarum, L. ferocissimum) boxthorn

[contaminant]

Solanum elaeagnifolium [contaminant] silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider

Arachnida

Araneae

Theridiidae

Latrodectus hasselti Australian red-back spider

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

l	n	c	Δ	^	ł
п	П	Э	ᆫ	u	ι

Insecta

Coleoptera

Curculionidae

Otiorhynchus sulcatus black vine weevil

Nitidulidae

Carpophilus dimidiatuscorn sap beetleCarpophilus hemipterusdried fruit beetleUrophorus humeralisdried fruit beetle

Scarabaeidae

Heteronychus arator black beetle

Hemiptera

Pentatomidae

Nezara viridula green vegetable bug

Homoptera

Aleyrodidae

Trialeurodes vaporariorum greenhouse whitefly

Aphididae

Aphis craccivoracowpea aphidAphis gossypiicotton aphidAphis spiraecolaspirea aphidMacrosiphum euphorbiaepotato aphid

Coccidae

Coccus persicae grapevine scale
Parasaissetia nigra nigra scale
Parthenologonium corni

Parthenolecanium corni European fruit scale

Diaspididae

Aspidiotus nerii oleander scale
Quadraspidiotus perniciosus San Jose scale

Phylloxeridae

Viteus vitifoliae grape phylloxera

Pseudococcidae

Planococcus citricitrus mealybugPseudococcus calceolariaecitrophilus mealybugPseudococcus longispinuslongtailed mealybugPseudococcus viburniobscure mealybug

Lepidoptera Agaristidae

Phalaenoides glycinae grapevine moth

Noctuidae

Spodoptera litura cluster caterpillar

Tortricidae

Cydia molesta oriental fruit moth Epiphyas postvittana light brown apple moth

Thysanoptera Thripidae

Frankliniella occidentaliswestern flower thripsHeliothrips haemorrhoidalisgreenhouse thripsThrips imaginisplague thripsThrips tabacionion thrips

Mite

Arachnida

Acarina

Tarsonemidae

Polyphagotarsonemus latus broad mite

Tenuipalpidae

Brevipalpus californicus bunch mite

Tetranychidae

Panonychus ulmi European red mite
Tetranychus urticae twospotted spider mite

Mollusc

Gastropoda

Stylommatophora

Helicidae

Helix aspersa common garden snail

Fungus

Ascomycota

Diatrypales Diatrypaceae

Eutypa armeniacae eutypa dieback
Eutypa lata eutypa dieback

Dothideales

Botryosphaeriaceae

Botryosphaeria dothidea (anamorph Fusicoccum aesculi) canker

Elsinoaceae

Elsinoe ampelina (anamorph Sphaceloma ampelinum) anthracnose

Mycosphaerellaceae

Mycosphaerella personata (anamorph Pseudocercospora isariopsis blight

itis)

Mycosphaerella tassiana (anamorph Cladosporium herbarum) black leaf spot

Erysiphales Erysiphaceae

Uncinula necator (anamorph Oidium tuckeri) powdery mildew

Leotiales

Sclerotiniaceae

Botryotinia fuckeliana (anamorph Botrytis cinerea) grey mould Sclerotinia sclerotiorum cottony rot

Phyllachorales Phyllachoraceae

Glomerella cingulata (anamorph Colletotrichum bitter rot

gloeosporioides)

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales Sphaerioidaceae

Fusicoccum luteumbunch rotMacrophomina phaseolinaashy stem blightPhoma pomorumphoma fruit and leaf spotPhomopsis viticoladead arm fungus

Unknown Coelomycetes
Unknown Coelomycetes

Greeneria uvicola bitter rot

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales Moniliaceae

Aspergillus niger aspergillus rot

Oomycota

Peronosporaceae

Plasmopara viticola downy mildew

Zygomycota: Zygomycetes

Mucorales Mucoraceae

Rhizopus arrhizus wet rot

Rhizopus stolonifer rhizopus soft rot

Weed

Angiospermae

Asterales

Asteraceae

Sonchus arvensis [contaminant] perennial sow thistle Sonchus asper [contaminant] prickly sow thistle

Sonchus kirkii [contaminant] Sonchus oleraceus [contaminant] puha
Xanthium spinosum [contaminant] bur

Poales Poaceae

Cenchrus ciliaris [contaminant] buffel grass

Digitaria aequiglumis [contaminant]

Digitaria ciliaris [contaminant]summer grassDigitaria ischaemum [contaminant]summer grassDigitaria sanguinalis [contaminant]crab grass

Digitaria setigera [contaminant] - Digitaria violascens [contaminant] -

Echinochloa crus-galli [contaminant] barn grass

Echinochloa crus-pavonis [contaminant]gulf barnyard grassEchinochloa esculenta [contaminant]Japanese millet

Echinochloa telmatophila [contaminant] -

Pennisetum macrourum [contaminant] African feather grass

Solanales Solanaceae

Lycium barbarum [contaminant]boxthornLycium ferocissimum [contaminant]boxthorn

Non-regulated non plant pests

None