

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 official contact point in New Zealand for overseas NPPOs is the Ministry for Primary Industries (MPI). All communication pertaining to this import health standard should be addressed to:

Manager, Import and Export Plants Ministry for Primary Industries
PO Box 2526
Wellington
NEW ZEALAND

Fax: 64-4-894 0662
E-mail: PlantImports@mpi.govt.nz
<http://www.mpi.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 MPI, 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 MPI of any change in its address.

The national plant protection organisation of the exporting country is required to inform MPI 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:

Environmental Protection Authority
Private Bag 63002
Wellington 6140
NEW ZEALAND

Or info@epa.govt.nz

Note:

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

3 EXPLANATION OF PEST CATEGORIES

MPI 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 (e.g. 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 MPI or any other New Zealand government department.

3.3 CONTAMINANTS (INCLUDING SOIL)

Consignments contaminated with soil, or other potential carriers of regulated pests (e.g. 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 (e.g. 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 MPI 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 MPI standard,
- an official bilateral quarantine arrangement between MPI and the 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 MPI's Chief Technical Officer 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

MPI 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 MPI), 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 MPI 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 MPI

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 MPI.

AND

- been treated in accordance with Appendix 2, 5 or 12 of the Arrangement between MPI 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

MPI will check the accompanying documentation on arrival to confirm that it reconciles with the actual consignment.

MPI 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, MPI 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

MPI may, on the specific request of the Chief Technical Officer, 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 Chief Technical Officer 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 MPI. Once the requirements of MPI have been met to the satisfaction of the Chief Technical Officer, 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 MPI 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, MPI 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 neohumeralis

lesser Queensland fruit fly

Bactrocera tryoni

Queensland fruit fly

Ceratitis capitata

Mediterranean 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

Insect

Insecta

Coleoptera

Cerambycidae

Dihammus vastator

fig longhorn

Chrysomelidae

Altica grvida

metallic flea beetle

Monolepta australis

red-shouldered leaf beetle

Monolepta divisa

small monolepta beetle

Curculionidae

Orthorhinus cylindrirostris

elephant weevil

Orthorhinus klugi

immigrant acacia weevil

Otiorhynchus cribricollis

cribrate weevil

Nitidulidae

Carpophilus maculatus

dried fruit beetle

Scarabaeidae

Dilochrosis atripennis

flower chafer

Diphucephala sp.

green scarab beetles

Diptera

Drosophilidae

Drosophila spp.

vinegar flies

Hemiptera	
Coreidae	
<i>Fabriciilis australis</i>	squash bug
<i>Mictis profana</i>	crusader bug
Lygaeidae	
<i>Nysius vinitor</i>	Rutherglen bug
<i>Oxycarenus arctatus</i>	coon bug
Pentatomidae	
<i>Plautia affinis</i>	green stink bug
Pyrrhocoridae	
<i>Dysdercus sidae</i>	pale cotton stainer
Scutelleridae	
<i>Scutiphora pedicellata</i>	metallic shield bug
Homoptera	
Aleyrodidae	
<i>Aleurocanthus spiniferus</i>	orange spiny whitefly
Margarodidae	
<i>Icerya seychellarum</i>	Seychelles scale
Pseudococcidae	
<i>Ferrisia virgata</i>	striped mealybug
Lepidoptera	
Lymantriidae	
<i>Porthesia paradoxa</i>	tussock moth
Noctuidae	
<i>Agrotis munda</i>	brown cutworm
<i>Eudocima fullonia</i>	fruit-piercing moth
Psychidae	
<i>Hyalarcta huebneri</i>	leaf case moth
Sphingidae	
<i>Hippotion celerio</i>	grapevine hawk moth
<i>Theretra oldenlandiae</i>	vine hawk moth
Tortricidae	
<i>Epiphyas</i> spp. (except <i>E. postvittana</i>)	leafrollers
Orthoptera	
Acrididae	
<i>Austracris guttulosa</i>	spur-throated locust
<i>Valanga irregularis</i>	giant grasshopper
Thysanoptera	
Phlaeothripidae	
<i>Haplothrips froggatti</i>	black plague thrips
Thripidae	
<i>Scirtothrips dorsalis</i>	chilli thrips
Mite	
Arachnida	
Acarina	
Tenuipalpidae	
<i>Brevipalpus lewisi</i>	bunch mite
Tetranychidae	
<i>Calepitrimerus vitis</i>	grapeleaf rust mite
<i>Eutetranychus orientalis</i>	pear leaf blister mite
Mollusc	
Gastropoda	
Stylommatophora	
Bradybaenidae	
<i>Bradybaena similaris</i>	snail

Fungus

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

<i>Ascochyta ampelina</i>	leaf spot
<i>Ascochyta chlorospora</i>	-
<i>Coniella diplodiella</i>	white rot

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales

Dematiaceae

<i>Alternaria vitis</i>	leaf disease
<i>Cladosporium viticola</i>	cladosporium leaf spot

Weed

Angiospermae

Asterales

Asteraceae

<i>Baccharis halimifolia</i> [contaminant]	baccharis
<i>Chondrilla juncea</i> [contaminant]	skeleton weed
<i>Sonchus</i> spp. (except <i>S. arvensis</i> , <i>S. asper</i> , <i>S. oleraceus</i> , <i>S. kirkii</i>) [contaminant]	sowthistle
<i>Xanthium</i> spp. (except <i>X. spinosum</i>) [contaminant]	bur

Geraniales

Zygophyllaceae

<i>Tribulus terrestris</i> [contaminant]	caltrop
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Poales

Poaceae

<i>Cenchrus</i> spp. (except <i>C. ciliaris</i>) [contaminant]	grass
<i>Digitaria</i> spp. (except <i>D. aequiglumis</i> , <i>D. ciliaris</i> , <i>D. ischaemum</i> , <i>D. sanguinalis</i> , <i>D. setigera</i> , <i>D. violascens</i>) [contaminant]	grass
<i>Echinochloa</i> spp. (except <i>E. crus-galli</i> , <i>E. crus-pavonis</i> , <i>E. esculenta</i> , <i>E. telmatophila</i>) [contaminant]	grasses
<i>Eragrostis curvula</i> [contaminant]	African love grass
<i>Pennisetum alopecuroides</i> [contaminant]	Chinese pennisetum
<i>Pennisetum polystachion</i> [contaminant]	mission grass
<i>Phragmites</i> spp. [contaminant]	grass
<i>Sorghum halepense</i> [contaminant]	Johnson grass
<i>Sorghum x almum</i> [contaminant]	Columbus grass

Solanales

Solanaceae

<i>Lycium</i> spp. (except <i>L. barbarum</i> , <i>L. ferocissimum</i>) [contaminant]	boxthorn
<i>Solanum elaeagnifolium</i> [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider

Arachnida

Araneae

Theridiidae

<i>Latrodectus hasselti</i>	Australian red-back spider
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NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta

Coleoptera

Curculionidae

Otiorhynchus sulcatus black vine weevil

Nitidulidae

Carpophilus dimidiatus corn sap beetle

Carpophilus hemipterus dried fruit beetle

Urophorus humeralis dried fruit beetle

Scarabaeidae

Heteronychus arator black beetle

Hemiptera

Pentatomidae

Nezara viridula green vegetable bug

Homoptera

Aleyrodidae

Trialeurodes vaporariorum greenhouse whitefly

Aphididae

Aphis craccivora cowpea aphid

Aphis gossypii cotton aphid

Aphis spiraecola spirea aphid

Macrosiphum euphorbiae potato aphid

Coccidae

Coccus persicae grapevine scale

Parasaissetia nigra nigra scale

Parthenolecanium corni European fruit scale

Diaspididae

Aspidiotus nerii oleander scale

Quadraspidiotus perniciosus San Jose scale

Phylloxeridae

Viteus vitifoliae grape phylloxera

Pseudococcidae

Planococcus citri citrus mealybug

Pseudococcus calceolariae citrophilus mealybug

Pseudococcus longispinus longtailed mealybug

Pseudococcus viburni obscure 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 occidentalis western flower thrips

Heliothrips haemorrhoidalis greenhouse thrips

Thrips imaginis plague thrips

Thrips tabaci onion 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 armeniaca

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 vitis*)

isariopsis blight

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 gloeosporioides*)

bitter rot

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Fusicoccum luteum

bunch rot

Macrophomina phaseolina

ashy stem blight

Phoma pomorum

phoma fruit and leaf spot

Phomopsis viticola

dead arm fungus

Unknown Coelomycetes

Unknown Coelomycetes

Greeneria uvicola

bitter rot

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales

Moniliaceae

Aspergillus niger

aspergillus rot

Oomycota

Peronosporales

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 grass

Digitaria ischaemum [contaminant]

summer grass

Digitaria sanguinalis [contaminant]

crab grass

Digitaria setigera [contaminant]

-

Digitaria violascens [contaminant]

-

Echinochloa crus-galli [contaminant]

barn grass

Echinochloa crus-pavonis [contaminant]

gulf barnyard grass

Echinochloa esculenta [contaminant]

Japanese millet

Echinochloa telmatophila [contaminant]

-

Pennisetum macrourum [contaminant]

African feather grass

Solanales

Solanaceae

Lycium barbarum [contaminant]

boxthorn

Lycium ferocissimum [contaminant]

boxthorn

Non-regulated non plant pests

None