Northern Territory 2018
PLANT QUARANTINE MANUAL



DEPARTMENT OF **PRIMARY INDUSTRY AND RESOURCES**

NORTHERN TERRITORY GOVERNMENT

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Disclaimer

While all care has been taken to ensure that information contained in The Northern Territory Plant Quarantine Manual is true and correct at the time of publication, changes in circumstances after the time of publication may impact on the accuracy of its information.

This document is provided only as a guide to the legal requirements outlined in The *Northern Territory Plant Health Act*, The Northern Territory Plant Health Regulations and The Northern Territory Government Gazette. The Northern Territory of Australia disclaims any liability, responsibility or duty of care towards any person for loss or damage caused by the use of or reliance on the information contained in this Plant Quarantine Manual.

You should not rely upon information in this publication for the purpose of making any serious, business or investment decisions without obtaining independent and/or professional advice in relation to your particular situation.

AMENDMENT TABLE

VERSION	DATE	AMENDMENTS
1.0	01/09/2011	All Sections
2.0	01/07/2012	All Sections
3.0	01/07/2013	All Sections
4.0	01/12/2017	Removed Condition 11 Myrtle Rust

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PART 1: BACKGROUND

1.1 Introduction

This document – the Northern Territory Plant Quarantine Manual, herein referred to as the Plant Quarantine Manual – is a summary of the requirements for the introduction of plant material and plant-related material into and within the Northern Territory.

Conditions for the introduction of plants and plant-related material and the management of pests and diseases are specified in the *Plant Health Act*, the Plant Health Regulations and Gazette notices under the *Plant Health Act*. The Act, Regulations and Gazette notices are statements of the legal requirements, whereas this manual is provided only as a guide.

Objectives of the Act are to ensure that appropriate actions can be taken for the control of pests; and to facilitate the production and trading of plants and plant products that are free from pests.

The Act provides for:

a) declaration of pests, notifiable pests and host plants;
b) the obligations of owners to prevent infestation of a plant or plant-related material by declared pests and to prevent their spread;
c) the establishment of requirements in relation to the introduction, export, possession, storage or transportation of plants or plant-related materials into or within the Northern Territory;
d) the prescription of measures for the eradication or control of plant diseases or pests within the Northern Territory's boundaries including declaration of a quarantine place for control of a declared pest;
e) the making and publication of plant health management plans;
f) inspection certificates;
g) declaration of accredited production places;
h) establishment of plant health assurance schemes; and
i) administrative functions such as appointment of a Chief Inspector and inspectors.

The requirements for movement of plants and plant-related materials may be specified by the Plant Health Regulations or, when urgently needed, by the Chief Inspector by notice in the Government Gazette.

Failure to comply with the requirements outlined in the Plant Quarantine Manual may be an offence under the Act or the Regulations and may attract significant penalties.

1.2 Purpose of Manual

The Plant Quarantine Manual summarises the requirements for **all** commercial and non-commercial movements of plant material, machinery and equipment which may pose a quarantine risk to the Northern Territory with regard to plant pests.

The Plant Quarantine Manual is designed particularly for commercial trade. Members of the travelling public may have difficulty in meeting some requirements or obtaining some services described. It is advised that travellers plan their travel arrangements to reach state borders with minimal quarantine risk material. If in doubt about conditions, travellers may also surrender fruit and other plant material into quarantine bins provided at the Darwin, Katherine and Alice Springs Railway Terminals, at Darwin International and Domestic Airport, Katherine Airport, Gove Airport

and Alice Springs Airport, and at Kulgera, Aileron and Ti Tree Roadhouses, or dispose of the materials prior to entry into the Northern Territory.

In particular, produce listed in this document **must not** be brought into the Northern Territory without an appropriate treatment and/or documentation. If a State or Territory has been granted State Freedom from a particular pest, then the entry condition for that pest does not apply.

Each State and Territory in Australia has legislation relating to plant health. The conditions expressed in the Plant Quarantine Manual form a part of a network of Commonwealth and State legislation to maintain and protect the health and wellbeing of Australia's agricultural and horticultural industries. This Plant Quarantine Manual is a summary designed to accommodate changing conditions rapidly and effectively. Conditions for entry are established to comply with national quarantine objectives. A formal expression of those objectives may be found in the Principles of Interstate Plant Market Access (see section 1.5).

1.3 Definitions

For the purpose of this Plant Quarantine Manual the words and terms appearing below **shall** be interpreted as follows:

Definitions	
Accredited person	A person appointed as an accredited person by the Chief Inspector for a plant health assurance scheme. For example, for the Interstate Certification Assurance (ICA) scheme and for an Arrangement relevant to the plant or product they produce. An accredited person can issue their own assurance certificates for exporting produce to other states.
Accredited production place	Refers to a property or area of production that has been declared by Chief Inspector in a Gazette notice to be an accredited production place for a specified plant or plant product.
Affected by pest	A thing is affected by a pest if it contains the pest, or is, or has been in close proximity to, or in contact with, the pest.
Approved inspection	A specified inspection for the detection of a pest, approved by the Chief Inspector.
Approved test	A specified test for the detection of a pest, approved by the Chief Inspector.
Approved treatment	A specified treatment for the control of a pest, approved by the Chief Inspector.
Area freedom	Means that a specified pest has not been recorded in a specified area of the Northern Territory, or if at some time it did occur, the Chief Inspector has certified that it has been eradicated from the area.
Assurance certificate	A certificate issued by an accredited person to state that specified requirements for the production of the plants or plant products have been met. This may be issued under a related scheme.
Attached label	For a plant or plant product, means a label attached to the plant, plant product or packaging of the plant or plant product.
Bare-rooted	In relation to a plant, means the plant has no soil on or around its roots.
Chief Inspector	The person holding or occupying the office of the Chief Inspector of Plant Health, as appointed by the Minister.

Definitions	
Compost	A mixture of one or both of decaying or decayed organic matter.
Control of a pest	To control a pest is to either prevent an outbreak of a pest, manage the spreading of the pest, or to eradicate the pest.
Cuttings	Live plant material that is to be used as planting material and has not yet been planted in soil and has not yet developed any roots.
Declared pest	A pest declared by Gazette notice by the Chief Inspector.
Disease	Includes bacterium, fungus, protozoon, virus or any other organism, pathogen, or condition that causes an abnormality, disorder or injury to any part of a fruit or plant.
Equipment	Refers to any equipment including hand held tools, harvesters, bins and containers that are used in the production and harvesting of plants and plant products or which has come into contact with plants or top soil.
Fruit	Refers to fruit of a plant and includes the flesh, peel, skin, shell, husk, seed, stone or nut of any fruit.
Government Certificate	An inspection certificate or document (whether called a certificate or not) made by a government inspector or official under a law of another country, State or Territory to certify matters to which the document relates. For example a Plant Health Certificate.
Grape must	Grape product produced by crushing grape berries and may include skins, seeds, pulp, stems and leaves.
Grape product	Refers to grape must and fresh unfiltered grape juice.
Grapevine material	Any part of a grapevine including for example cuttings, rootlings and grape berries.
Host plant	A plant of a species that is susceptible to, uses or harbours a specified pest or disease.
Household plant	Means a plant intended to be grown at or within the vicinity of a dwelling house and that is grown in a container or is in a bare-rooted form.
Inspector	An inspector of plant health as appointed by the Chief Inspector.
Interstate Certification Assurance (ICA) Scheme	A national system of plant health certification assurance developed to meet State or Territory government requirements for the certification of produce for interstate quarantine purposes.
Introduction	Of plants/plant-related material into the Northern Territory, includes the importation or transportation of plants into the Northern Territory, whether from another country, State or Territory.
Notifiable pest	A declared pest that has been further specified as a notifiable pest by the Chief Inspector in a Gazette notice. (Refer 2.1)
Nursery Stock	A plant that is grown for production or stock for planting elsewhere or for sale (whether for commercial or domestic purposes), e.g. cuttings, scions, bulbs, tubers, rhizomes.
Owner	Of a place includes, but is not limited to, an occupier e.g. manager, superintendent or person in charge. Of a thing includes, but is not limited to, someone having possession or control of the thing.
Packaging	Of a plant or plant product, includes any container (for example, crate and carton) and any kind of covering for individual plants, plant products or a collection of plants or plant products.

Definitions	
Permit for introduction	A permit issued by the Chief Inspector outlining requirements to allow for the introduction of specified plants or plant-related materials.
Pest	An organism (whether or not taxonomically classified) that feeds on a plant or causes an abnormal or unhealthy condition in a plant. Pests may be declared by Gazette Notice.
Phylloxera Exclusion Zone (PEZ)	An area in the Northern Territory specified by the Chief Inspector to be free of the pest grape phylloxera; **or** All or part of a State or another Territory specified under a corresponding law to be an area not infested with the pest.
Phylloxera Infested Zone (PIZ)	An area in the Northern Territory specified by the Chief Inspector to be infested with the pest grape phylloxera; **or** All or part of a State or another Territory specified under a corresponding law to be an area infested with the pest.
Phylloxera Risk Zone (PRZ)	An area in the Northern Territory specified by the Chief Inspector that is neither PEZ nor PIZ; **or** All or part of a State or another Territory that is neither PEZ nor PIZ.
Place of consignment	The destination or place to which the plant or plant product has been or will be sent.
Place	Includes an area of land and/or a building, vehicle or vessel, or any part of a building, vehicle or vessel, or aircraft.
Place of origin	For a plant or product being introduced into the Northern Territory, means the place where the product was last grown before its transportation into the Territory.
Plant Health Assurance Certificate (PHAC)	See Assurance Certificate.
Plant Health Assurance Scheme	A scheme that provides for the making of assurance certificates by accredited persons for the production of a specified plant or plant product.
Plant Health Certificate (PHC)	See Government Certificate.
Plant product	A product that is wholly or partly derived from a plant.
Plant	Any kind of organism or part of an organism (including a genetically modified organism) in the plant kingdom, whether dead or alive.
Plant-related material	Is any of the following: a) plant product; b) the packaging of a plant or plant product; c) soil or a growth medium; d) a pest; and e) any other thing that is or might reasonably be affected by a pest.
Potting mix	A growing medium for plants that is composed of organic and inorganic components (or both) and includes sand, perlite, vermiculite, peat or woodchip, but not soil.
Production requirements	The requirements for the production of the plant or product for the making of an assurance certificate under a scheme.

Definitions	
Production	Of a plant or plant product, includes the processing of the plant or product.
Quarantine place	A place declared by the Chief Inspector, by Gazette notice, to be a quarantine place if the Chief Inspector reasonably believes it is necessary to do so for the control of a declared pest.
Regulation	Refers to subordinate legislation made by the Administrator under authority of the *Plant Health Act*, designed to provide for such matters as requirements for the entry, export, storage and transport of plants and plant-related materials.
Related scheme	For an assurance certificate, means the scheme under which the certificate is made.
Rootlings	Any grapevine material that has developed roots (including callus) and includes original and grafted plants.
Sand	Naturally occurring granular material that is composed of finely divided rock and mineral particles, with no organic material or soil present, e.g. washed river sand and deep mined sand.
Seed potato	Potato grown for or intended for propagation.
Soil	The upper layer of earth that is composed of rock and mineral particles that may contain organic matter in which plants are grown or may grow.
State freedom	In relation to the Northern Territory, means that a specified pest has not been recorded in the Northern Territory or, if at some time it did occur, the Chief Inspector has certified that it has been eradicated from the Northern Territory.
Turf	A layer of live grass, and includes sods, stolons, runners and roots but not soil.
Unfiltered grape juice	Refers to the liquid fraction of must greater than 50 microns.
Ware potato	Potato grown for consumption rather than as seeds for propagation or any other purpose.

1.4. References

- *Plant Health Act*
- Plant Health Regulations

These documents can be found on the Northern Territory legislation database.

www.nt.gov.au/dcm/legislation/current.html

1.4.1 Corresponding Laws

Each of the following is a corresponding law for section 45(3) of the *Plant Health Act*.

- *Pest Plants and Animals Act 2005* (ACT)
- *Plant Diseases Act 2002* (ACT)
- *Biosecurity Act 2015* (NSW)
- *Biosecurity Act 2014* (QLD)
- *Plant Health Act 2009* (SA)
- *Plant Quarantine Act 1997* (TAS)
- *Plant Biosecurity Act 2010* (VIC)

- *Biosecurity Act 2015* (WA)

1.5 Principles of Interstate Market Access for Plants

The Northern Territory Government is represented on the Subcommittee for Domestic Quarantine Market Access. This Subcommittee ensures that the development of domestic market access conditions for plants and plant products is:

1. Technically justified to minimise regulatory burdens on industry.
2. Coordinated and harmonised (aligned and compatible), where possible, across the country and regions.
3. Consistent with Australia's International import and export plant market access conditions and policies.

1.6 Certification of Plant Health

1.6.1 Government Certificate and Assurance Certificate

A government certificate, also known as an inspection certificate or Plant Health Certificate (PHC) may be issued by an inspector or, in some States, by an authorised officer.

An assurance certificate, also known as a Plant Health Assurance Certificate (PHAC) may be issued by either an accredited inspector or an accredited person. Original certificates may be required to accompany plants or plant-related material when being introduced into the Northern Territory.

These certificates certify that **all** requirements for import have been complied with. The relevant certificate required for particular plant materials is specified in the certification section under each import requirement. **Then fax, e-mail or post a copy of the appropriate certificate to NT Quarantine prior to sending the consignment.**

1.6.2 Matters Specified in Government Certificate or Assurance Certificate

If a government certificate or assurance certificate is required to accompany plant or plant-related materials, the certificate **must** state the name of each plant, including genus and species. For convenience, these names may be specified on a separate document attached to the certificate and, for consignments of many plants with the same name, the certificate is taken to accompany each plant.

In accordance with the *Plant Health Act*, an inspector may specify on a certificate the result of an inspection and may include any details of examination and treatment carried out in connection with the inspection.

1.6.3 Permit for Introduction

Specific plants and plant-related materials, including machinery and equipment, may require a Permit for Introduction. The Chief Inspector may issue a permit only if satisfied that the introduction will not expose the Northern Territory to the risk of infestation of a declared pest or disease. Applications **must** be applied for, by the person in the Northern Territory, in writing on an approved form to the Chief Inspector. For administrative purposes, applications to import need to be received at a quarantine office a minimum of 5 working days prior to the intended import date.

1.7 Inspection

In accordance with regulation 37, an inspector may request that a person introducing plant or plant-related material into the Northern Territory:

a) present the thing to the inspector for the purpose of examination;

OR

b) present a government certificate, assurance certificate or permit for introduction required to accompany the thing.

1.8 Labelling of Plants and Plant Products

In accordance with regulation 38, plants or plant products destined to be introduced for sale in the Northern Territory **must** include the following information on an attached label:

a) a detailed description of the plant or plant product; and
b) the names and addresses of the grower, consignor, packer or consignee for the plant or plant product; and
c) the location where the plant, or plant used in making the plant product, was grown; and
d) the date the plant or plant product was packed for transportation to the Northern Territory; and
e) if the plant or product has been produced under a plant health assurance scheme, the information required by the scheme; and
f) the information **must** be in English, clear and eligible, and in lettering no less than 5mm in height.

Un-labelled or incorrectly labelled consignments may result in prosecution.

1.9 Approved Inspection, Tests and Treatments for Pests

In accordance with regulation 40, the Chief Inspector may, in writing, approve an inspection, test or treatment in relation to a specified pest. In doing so the Chief Inspector **must** be satisfied that the inspection, test and treatment are:

a) specified in a current code, standard or protocol;
b) being used for a law of the Commonwealth, State or Territory governments for detection or control of a pest;
c) corresponds with instructions specified by manufacturers in relation to the use of a product;
d) follows provisions or laws of the Commonwealth, State or Territory in relation to the use of products; and
e) correspond with generally accepted scientific view about detecting or controlling of the pest.

1.10 Infringement Notices

Infringement notices may be given for any of the offences described in sections 19, 25, 27, 28 and 37 of the *Plant Health Act*. These relate to:

a) not complying with a notice to treat or dispose for the control of a pest;
b) a person not giving specified information as required;
c) removing or tampering with a sign or barrier;
d) not complying with a specified requirement that is marked on a place or thing in relation to storage, transportation or handling; and
e) not complying with a notice about an accredited production place.

If an inspector reasonably believes a person has committed an offence under the Act, the inspector may issue an infringement notice. The infringement notice **must** specify:

a) name and address of the person;
b) date the infringement notice is given to the person;
c) the date, time and place of the offence;
d) a description of the offence;
e) the prescribed amount payable for the offence; and
f) the enforcement agency to whom the prescribed amount is payable.

A person may avoid further action by paying the prescribed amount on the infringement notice to the specified enforcement agency within 28 days. If a person declines to pay the notice, enforcement action may be taken. To dispute the fine, persons **should** elect to do so within 28 days as guided by the infringement notice.

1.11 Biosecurity Fees

Plant Biosecurity fees will apply to businesses that participate in ICA/CA arrangements and for Application for Permit. NTQ can be contacted for a schedule of the Plant Biosecurity fees.

2.1 Declared and Notifiable Pests

The following schedule lists organisms that have been declared by the Chief Inspector as pests by Gazette notice under section 6(2) of the *Plant Health Act*. In the column headed 'Notifable Pest', the letter 'Y' indicates that the pest has also been declared as a notifiable pest under section 6(4). The letter 'N' indicates it is only a declared pest.

In the column headed 'State Freedom', the letter 'Y' indicates that the Territory is free of that pest. The letter 'N' indicates that the Territory is not free of the pest. Pests in the schedule are listed firstly under the pest type as the common name for the Phylum or Class of organism (e.g. Bacteria, Fungi, Insects, Nematodes, Snails or Viruses) then listed alphabetically by common name, followed by scientific name.

Obligations

Under sections 13 and 14 of the Act, the owner of a plant or plant-related material has obligations to prevent infestation of the plant and material by a declared pest and to prevent spread of the pest.

Under section 15 of the Act, a person **must** notify an inspector of the presence of a declared pest which has been specified as being a notifiable pest.

Schedule

Common Name of or Condition Caused by the Pest	Pest Type Scientific Name of Pest	Notifiable Pests	State Freedom
	Bacteria		
Bacterial blight	*Pseudomonas syringae* pv *glycinea* (Coerper) Young, Dye & Wilkie	Y	Y
Bacterial blight	*Xanthomonas campestris* pv *cyamopsidis* (Patel. Dhande & Kulkarni) Dye	Y	Y
Bacterial blight	*Xanthomonas campestris* pv *manihotis* (Berthet & Bondar) Dye	Y	Y
Bacterial blight	*Xanthomonas campestris* pv *vignicola* (Burkholder) Dye	Y	Y
Bacterial canker	*Clavibacter michiganensis* pv *michiganensis* (Smith) Jenson	Y	N
Bacterial leaf spot	*Pseudomonas syringae* pv *syringae* van Hall	Y	Y
Bacterial leaf streak	*Xanthomonas campestris* pv *holcicola* (Elliott) Dye	Y	N
Bacterial wilt (maze)	*Pantoea stewartii* (Smith) Dye	Y	Y
Bacterial wilt (moko disease)	*Ralstonia solanacearum* (E.F. Smith) (Biotype 1)	Y	Y
Black leg	*Erwinia carotovora* pv *atroseptica* van Hall	Y	N

Common Name of or Condition Caused by the Pest	Pest Type Scientific Name of Pest	Notifiable Pests	State Freedom
Citrus canker	*Xanthomonas axonopodis* pv. *Citri*	Y	Y
Common scab	*Streptomyces scabies* (Thaxt.) Waksm. & Henrici	Y	N
Corm & rhizome rot	*Erwinia chrysanthemi* Burkholder, McFadden & Dimock	N	N
Grapevine bacterial blight	*Xanthomonas ampelina* Panagopoulos	Y	Y
Wildfire	*Pseudomonas syringae* pv *tabaci* (Wolf & Foster) Young, Dye & Wilkie	Y	Y
Fungi			
Banana freckle	*Phyllosticta musarum* (Cooke) van der Aa	Y	Y
Banana freckle (Cavendish strain)	*Guignardia musae* Racib**.**	Y	Y
Banana freckle (Cavendish strain)	*Phyllosticta cavendishi*	Y	N
Banana fusarium wilt (Panama diseaseTropical race 4)	*Fusarium oxysporum* Schlecht. Ex Fries f.sp. *cubense* (E.F. Smith) Snyder & Hansen Tropical race 4	Y	N
Banana fusarium wilt (Panama disease Tropical races 1 and 2)	*Fusarium oxysporum* Schlecht. Ex Fries f.sp. *cubense* (E.F. Smith) Snyder & Hansen	Y	Y
Black Sigatoka (Black Leaf Streak)	*Mycosphaerella fijiensis* Morelet	Y	Y
Black Shank (top rot)	*Phytophthora nicotianae* B. de Hann var *parasitica* (Dast.) Waterh.	Y	Y
Citrus leaf spot	*Cryptosporiopsis* sp.	Y	Y
Cotton fusarium wilt	*Fusarium oxysporum* f.sp. *vasinfectum* (G.F. Atk.) W.C. Snyder & H.N. Hansen	Y	Y
Covered kernel smut	*Sphacelotheca sorghi* (Link) Clint	Y	Y
Cucumber fusarium wilt	*Fusarium oxysporum* f.sp. *cucumerinum* J.H. Owen	Y	Y
Downy mildew	*Peronospora manshurica* (Naum) Syd. Ex Gaun	Y	Y
Eumusae leaf spot	*Mycosphaerella eumusae* Crous & Mour.	Y	Y
Grapevine leaf rust	*Phakopsora euvitis* Ono	N	Y
Head smut (maize)	*Sphacelotheca reiliana* (kuehn) Clint	Y	Y
Java downy mildew	*Sclerospora maydis* (Racib.) Butler	Y	N
Long smut	*Tolyposporium ehrenbergii* (Kuehn) Potouillard	Y	Y
Loose kernel smut	*Sphacelotheca cruenta* (Kuehn) Potter	Y	Y
Mango malformation	*Fusarium mangiferae* Britz, Wingfield *et* Marasas	Y	N

Common Name of or Condition Caused by the Pest	Pest Type Scientific Name of Pest	Notifiable Pests	State Freedom
Mango malformation	*Fusarium sterilihyphosum* Britz, Marasas & Wingfield	Y	N
Myrtle rust	*Uredo rangelii* J.A.Simpson, K. Thomas and C.A. Grgurinovic	N	N
Papaya black spot	*Asperisporium caricae* (Speg.) Maubl	N	Y
Passionfruit fusarium wilt	*Fusarium oxysporum* f. sp. *passiflorae* W.L. Gordon	Y	Y
Pea fusarium wilt	*Fusarium oxysporum* f.sp. *pisi* (Linford) Snyder & Hansen	Y	Y
Philippine downy mildew	*Peronosclerospora philippinensis* Weston	Y	Y
Phytophthora rot (soya bean stem rot)	*Phytophthora sojae* Kaufmann & Gerdemann	Y	Y
Powdery scab	*Spongospora subterranean* (walbr.) Lagerh. F. sp. *subterranean* Tomlinson	Y	N
Rockmelon fusarium wilt	*Fusarium oxysporum* f.sp. *melonis* (Leach & Currence) Snyder & Hansen	Y	Y
Top rot or dieback/ Root and Stem Rot	*Phytophthora megasperma* Drechs F. sp. *Glycinea* Kuan & Erwin	Y	Y
Rust (maize)	*Puccinia sorghi* Schw	Y	Y
Rust (pigeon pea)	*Uromyces dolicholi* Arthur	Y	Y
Rust	*Phakopsora pachyrhizi* Sydow	Y	N
Rust (maize)	*Physopella zeae* (Mains) Cummins & Ramachar	Y	Y
Soft rot or fruit rot	*Ceratocystis paradoxa* (Dade) C. Moreau	Y	N
Sorghum downy mildew	*Peronosclerospora sorghi* Weston & Uppal	Y	Y
Sugarcane downy mildew	*Peronosclerospora sacchari* Miyake	Y	Y
Tomato fusarium wilt	*Fusarium oxysporum* Schlecht. Fr. F.sp. *lycopersici* (Sacc.) Snyder & Hansen	Y	Y
Top rot or dieback	*Phytophthora cinnamomi* Rands	Y	Y
Verticillium wilt	*Verticillium dahliae* Kleb	Y	Y
Insects			
Argentine ant	*Linepithema humile* (Mayr)	Y	Y
Bamboo borer	*Dinoderus minutus* (Fabricius)	Y	Y
Banana fruit fly	*Bactrocera musae* (Tryon)	Y	Y
Banana scab moth	*Nacoleia octasema* (Meyrick)	Y	Y
Cabbage looper	*Trichoplusia ni* (Hubner)	Y	Y
Cabbage white butterfly	*Pieris rapae* (Linnaeus)	Y	N
Citrus Gall Wasp	*Bruchophagus fellis*	Y	Y

Common Name of or Condition Caused by the Pest	Pest Type Scientific Name of Pest	Notifiable Pests	State Freedom
Colorado potato beetle	*Leptinotarsa decemlineata* (Say)	Y	Y
Cowpea weevils	*Callosobruchus* spp.	N	N
Cucumber fly	*Bactrocera cucumis* (French)	Y	Y
Drywood termite	*Cryptotermes domesticus* (Haviland)	Y	Y
Drywood termite	*Cryptotermes dudleyi* Banks	Y	Y
Drywood termite	*Cryptotermes primus* (Hill)	Y	Y
Electric ant	*Wasmannia auropuctata* (Roger)	Y	Y
European corn borer	*Ostrinia nubilalis* (Hubner)	Y	Y
European house borer	*Hylotrupes bajulus* (Linnaeus)	Y	Y
Exotic fruit fly	*Bactrocera philippinensis* Drew & Hancock	Y	Y
Formosan termite	*Coptotermes formosanus* Siroki	Y	Y
Fruit Spotting bug	*Amblypelta nitida* Stål	Y	Y
Grape phylloxera	*Daktulosphaira vitifoliae* (Fitch)	Y	Y
Greenbug	*Schizaphis graminum* (Rondarii)	Y	Y
Hessian fly	*Mayetiola destructor* (Say)	Y	Y
Japanese beetle	*Popillia japonica* (Newman)	Y	Y
Khapra beetle	*Trogoderma granarium* Everts	Y	Y
Mango flower jassid	*Idioscopus clypealis* (Lethierry)	Y	Y
Mango fruit borer	*Citripestis eutraphera* Meyrick	Y	N
Mango fruit fly	*Bactrocera frauenfeldi* (Schiner)	Y	Y
Mango leafhopper	*Idioscopus nitidulus* (Walker)	Y	N
Mango pulp weevil	*Sternochetus frigidus* (Fabricius)	Y	Y
Mango seed weevil	*Sternochetus mangiferae* (Fabricius)	Y	N
Mediterranean fruit fly	*Ceratitis capitata* (Wiedemann)	Y	Y
Melanesian corn borer	*Ostrinia furnacalis* (Guenée)	Y	Y
Melon Fruit Fly	*Bactrocera cucurbitae* (Coquillette)	Y	Y
Melon thrips	*Thrips palmi* Karny	N	N
Mexican bean beetle	*Epilachna varivestis* Mulsant	Y	Y
Mexican fruit fly	*Anastrepha ludens* (Loew)	Y	Y
Mosquito bugs	*Helopeltis* spp.	Y	N
Northern Territory fruit fly	*Bactrocera aquilonis* (May)	N	N
Orchid weevil	*Orchidophilus aterrimus* (Waterhouse)	Y	Y
Oriental fruit fly species complex	*Bactrocera dorsalis* species complex	Y	Y
Paddy bugs	*Leptocorisa* spp.	Y	N
Papaya fruit fly	*Bactrocera papayae* Drew & Hancock	N	Y
Parlatoria date scale	*Parlatoria blanchardi* (Targioni)	N	N

Common Name of or Condition Caused by the Pest	Pest Type Scientific Name of Pest	Notifiable Pests	State Freedom
Poinsettia whitefly (Silverleaf whitefly)	*Bemisia tabaci* (Gennadius) Biotype B	Y	N
Purple scale	*Lepidosaphes beckii* (Newman)	N	Y
Queensland fruit fly	*Bactrocera tryoni* (Froggatt)	N	N
Red imported fire ant	*Solenopsis invicta* (Buren)	Y	Y
Red-banded mango caterpillar	*Deanolis sublimbalis* Snellen	Y	Y
Rice pink stem borer	*Sesamia inferens* (Walker)	Y	Y
San José Scale	*Quadraspidiotus perniciosus* (Comstock)	N	Y
Small mango tip borer	*Peperita euthysticha* Turner	Y	Y
Soybean webspinner	*Hedylepta indicata* (Fabricius)	Y	Y
Spiralling whitefly	*Aleurodicus dispersus* Russel	Y	N
Spotted alfalfa aphid	*Therioaphis trifolii* (Monell)	Y	Y
Subterranean termite	*Coptotermes havilandi* Holmgren	Y	Y
Subterranean termite	*Coptotermes vastator* Light	Y	Y
Warehouse beetle	*Trogoderma variabile* Ballion	Y	Y
West Indian drywood termite	*Cryptotermes brevis* (Walker)	Y	Y
Western flower thrips	*Frankliniella occidentalis* Pergande	Y	Y
White-fringed weevil	*Graphognathus leucoloma* (Boheman)	Y	Y
Yellow crazy ant	*Anoplolepis gracilipes* (Fr. Smith)	Y	N
Nematodes			
Burrowing nematode or banana root nematode	*Radopholus similis* (Cobb) Thorne	N	N
Potato cyst nematode	*Globodera pallida* Stone	Y	Y
Potato cyst nematode	*Globodera rostochiensis* (Woll.) Skarbilovich	Y	Y
Spiral nematode	*Helicotylenchus multicinctus* (Cobb) Golden	N	N
Snails			
Conical snail (or pointed snail)	*Cochlicella acuta (*Müller)	Y	Y
Giant African snail	*Achatina fulica* Bowditch	Y	Y
Green snail	*Cantareus apertus* (Born) Schultes	Y	Y
Small Conical Or Pointed Snail	*Prietocella barbara* (Linnaeus)	Y	Y
Vineyard snail or common white snail	*Cernuella virgata (Da Costa)*	*Y*	*Y*
White Italian snail	*Theba pisana (Müller)*	*Y*	*Y*
Viruses and Viroids			
Banana bract mosaic	*Banana bract mosaic virus*	Y	N

Common Name of or Condition Caused by the Pest	Pest Type Scientific Name of Pest	Notifiable Pests	State Freedom
Banana streak	*Banana streak virus* (BSV)	Y	Y
Bunchy top	*Banana bunchy top virus* (BBTV)	Y	Y
Infectious chlorosis	*Cucumber mosaic virus* (CMV)	Y	Y
Leaf shrivel	*Potato virus Y* (PVY)	Y	Y
Mosaic	*Squash mosaic virus* (SqMV)	Y	Y
Mosaic	*Cassava mosaic virus* (CMV)	Y	Y
Mosaic	*Lettuce mosaic virus* (LMV)	Y	Y
Mosaic	*Tobacco mosaic virus* (TMV) (tomato strain)	Y	Y
Mosaic and woodiness	*Passionfruit woodiness virus* (PWV)	Y	Y
Mottle	*Peanut mottle virus* (PeMoV)	N	N
Pangola stunt	*Pangola stunt virus* (PaSV)	Y	Y
Papaya ring spot	*Papaya ringspot virus* (PRSV) (papaya strain)	N	Y
Potato spindle tuber	*Potato spindle tuber viroid* (PSTVd)	Y	Y
Stem pitting	*Citrus tristeza virus* (CTV) (sweet orange stem pitting strain)	N	Y
Sun blotch	*Avocado sunblotch viroid* (ASBVd)	N	N
Tungro disease	*Rice tungro bacilliform virus* (RTBV)	Y	Y
Yellow top	*Tomato yellow top virus* (TYTV)	Y	Y

2.2 Northern Territory Freedom - Diseases

Common Name	Scientific Name
Bacterial blight	*Pseudomonas syringae* pv *glycinea* (Coerper) Young, Dye & Wilkie
Bacterial blight	*Xanthomonas campestris* pv *cyamopsidis* (Patel. Dhande & Kulkarni) Dye
Bacterial blight	*Xanthomonas campestris* pv *manihotis* (Berthet & Bondar) Dye
Bacterial blight	*Xanthomonas campestris* pv *vignicola* (Burkholder) Dye
Bacterial canker	*Clavibacter michiganensis* pv *michiganensis* (Smith) Jensen
Bacterial leaf spot	*Pseudomonas syringae* pv *syringae* van Hall
Bacterial leaf streak	*Xanthomonas campestris* pv *holcicola* (Elliott) Dye
Bacterial wilt (maze)	*Pantoea stewartii* subsp. *stewartii* (Smith) Mergaert et al.
Bacterial wilt (moko disease)	*Ralstonia solanacearum* (E.F. Smith) (Biotype 1)
Banana fusarium wilt (Panama disease)	*Fusarium oxysporum* Schlecht. Ex Fries f.sp. *cubense* (E.F. Smith) Snyder & Hansen (races 1 and 2)
Banana streak	*banana streak virus*
Black shank (top rot)	*Phytophthora nicotianae*

Common Name	Scientific Name
Black Sigatoka (Black Leaf Streak)	*Mycosphaerella fijiensis* Morelet
Boil smut	*Ustilago maydis* (D.C.) Cda.
Bunchy top	*banana bunchy top virus*
Citrus canker	*Xanthomonas axonopodis* pv *citri* (Hasse) Dye
Citrus Gall Wasp	*Bruchophagus fellis*
Citrus leaf spot	*Pseudocercospora angolensis*
Common smut (maize)	*Ustilago zeae*
Cotton fusarium wilt	*Fusarium oxysporum* f.sp. *vasinfectum* (G.F. Atk.) W.C. Snyder & H.N. Hansen
Covered kernel smut	*Sphacelotheca sorghi* (Link) Clint
Cucumber fusarium wilt	*Fusarium oxysporum* f.sp. *cucumerinum* J.H. Owen
Downy mildew	*Peronospora manshurica* (Naum) Syd. Ex Gaun
Freckle (banana)	*Phyllosticta musarum* (Cooke) van der Aa (Cavendish strain) and *Guignardia musae* Racib.
Grapevine bacterial blight	*Xanthomonas ampelina* Panagopoulos
Grapevine leaf rust	*Phakopsora euvitis* Ono
Head smut (maize)	*Sphacelotheca reiliana* (kuehn) Clint
Infectious chlorosis	*cucumber mosaic virus*
Leaf shrivel	*potato virus Y* (leaf shrivelling strain)
Long smut	*Tolposporium ehrenbergii* (Kuehn) Potouillard
Loose kernel smut	*Sphacelotheca cruenta* (Kuehn) Potter
Mango malformation disease	*Fusarium* spp (apart from *F. mangiferae* and *F. sterilihyposum*)
Mosaic	*cassava mosaic virus*
Mosaic	*lettuce mosaic virus*
Mosaic	*squash mosaic virus*
Mosaic	*tobacco mosaic virus* (tomato strain)
Mosaic & Woodiness	*passionfruit woodiness virus*
Pangola stunt	*pangola stunt virus*
Papaya black spot	*Asperisporium caricae* (Seg.) Maubl
Papaya ring spot	papaya strain of the *papaya ring spot virus*
Passionfruit fusarium wilt	*Fusarium oxysporum* f. sp. *passiflorae* W.L. Gordon

Common Name	Scientific Name
Pea fusarium wilt	*Fusarium oxysporum* f.sp. *pisi* (Linford) Snyder & Hansen
Philippine downy mildew	*Peronosclerospora philippinensis* Weston
Potato spindle tuber	*potato spindle tuber viroid*
Rockmelon fusarium wilt	*Fusarium oxysporum* f.sp. *melonis* (Leach & Currence) Snyder & Hansen
Rust (maize)	*Physopella zeae* (Mains) Cummins & Ramachar
Rust (maize)	*Puccinia sorghi* Schw
Rust (pigeon pea)	*Uromyces dolicholi* Arthur
Sorghum downy mildew	*Peronosclerospora sorghi* (W. Weston and Uppal) CG Shaw
Stem pitting	*citrus tristeza virus* (sweet orange stem pitting strain)
Sugarcane downy mildew	*Peronosclerospora sacchari* Miyake
Sugarcane smut	*Ustilago scitaminea*
Tomato Fusarium wilt	*Fusarium oxysporum* Schlecht. Fr. F.sp. *lycopersici* (Sacc.) Snyder & Hansen
Top rot or dieback	*Phytophthora cinnamomi* Rands
Top rot or dieback/ Root and Stem Rot	*Phytophthora megasperma* Drechs f. sp. *glycinea* Kuan & Erwin
Tungro disease	*tungro virus*
Verticillium wilt	*Verticillium dahlia* Kleb.
White root rot (apple trees)	*Dematophora necatrix*
Wildfire	*Pseudomonas syringae* pv *tabaci* (Wolf & Foster) Young, Dye & Wilkie

2.3 Northern Territory Freedom – Pests

Common Name	Scientific Name
Argentine Ant	*Iridomyrmex humilis* (Mayr)
Bamboo Borer	*Dinoderus minutus* (Fabricius).
Banana Fruit Fly	*Bactrocera musae* (Tryon)
Banana Scab Moth	*Nacoleia octasema* (Meyrick)
Black Parlatoria Scale	*Parlatoria ziziphi* Lucas.
Cabbage Looper	*Trichoplusia ni* (Hubner)
Cane Weevil Borer	*Rhabdoscelus obscurus* (Boisduval)
Citrus Mite	*Panonychus citri* McGregor.
Cocoa Pod Borer	*Conopomorpha cramerella*
Colorado Potato Beetle	*Leptinotarsa decemlineata* (Say)

Common Name	Scientific Name
Currant Lettuce Aphid	*Nasonovia ribisnigri* (Mosley)
Drywood Termite	*Cryptotermes domesticus* (Haviland)
Drywood Termite	*Cryptotermes primus* (Hill)
European Corn Borer	*Ostrinia nubilalis* (Hubner)
European House Borer	*Hylotrupes bajulus* (Linnaeus)
Exotic Fruit Fly	*Bactrocera philippinensis* Drew & Hancock
Formosan Termite	*Coptotermes formosanus* Siroki
Fruit Spotting Bug	*Amblypelta nitida* Stål
Giant African Snail	*Achatina fulica* Bowditch
Grape Phylloxera	*Daktulosphaira vitifolii* (Fitch)
Green Snail	*Cantareus apertus* (Born) Schultes
Greenbug	*Schizaphis graminum* (Rondarii)
Hessian Fly	*Mayetiola destructor* (Say)
Indian Cotton Leaf Hopper	*Amrasca biguttula* Ishida
Japanese Beetle	*Popillia japonica* (Newman)
Khapra Beetle	*Trogoderma granarium* (Everts)
Leaf Miner	*Liriomyza sativae* Blanchard.
Lesser Auger Beetle	*Heterobostrychus aequalis* (Waterhouse).
Mango Flower Jassid	*Idioscopus clypealis* (Lethierry)
Mango Fruit Fly	*Bactrocera frauenfeldi* (Schiner)
Mediterranean Fruit Fly (Medfly)	*Ceratitis capitata* (Wiedemann)
Melanesian Corn Borer	*Ostrinia furnacalis* Guenee
Melon Fruit Fly	*Bactrocera cucurbitae* (Coquillette)
Mexican Bean Beetle	*Epilachna varivestis* Mulsant
Mexican Fruit Fly	*Anastrepha ludens* (Loew)
Orchid Weevil	*Orchidophilus aterrimus* (Waterhouse)
Oriental Fruit Fly	*Bactrocera dorsalis* species complex
Papaya Fruit Fly	*Bactrocera papayae* Drew & Hancock
Potato Cyst Nematode	*Globodera pallida* Stone
Potato Cyst Nematode	*Globodera rostochiensis* Woll.
Purple Scale	*Lepidosaphes beckii* (Newman)
Purple Scale (Round)	*Chrysomphalus ficus* Ashmead.
Red Imported Fire Ant	*Solenopsis saevissima* Forel
Red-Banded Mango Caterpillar	*Deanolis sublimbalis* Snellen (syn. Noorda *albizonalis* Hampson)
Rice Pink Stem Borer	*Sesamia inferens* (Walker)
San Jose Scale	*Quadraspidiotus perniciosus* (Comstock)

Common Name	Scientific Name
Small Conical Or Pointed Snail	*Prietocella barbara* (Linnaeus)
Small Mango Tipborer	*Peperita euthysticha* Turner
Soybean Webspinner	*Hedylepta indicata* (Fabricius)
Spotted Alfalfa Aphid	*Therioaphis trifolii* (Monell)
Subterranean Termite	*Coptotermes havilandi* Holmgren
Subterranean Termite	*Coptotermes vastator* Light
Tomato Potato Psyllid	*Bactericera cockerelli*
Vineyard Or Common White Snail	*Cernuella virgata* (Da Costa)
Warehouse Beetle	*Trogoderma variabile* (Ballion)
West Indian Drywood Termite	*Cryptotermes brevis* (Walker)
Western Flower Thrips	*Frankliniella occidentalis* Pergande
White Italian Snail	*Theba pisana Theba pisana (*Müller)
White-Fringed Weevil	*Graphognathus leucoloma* (Boheman)

2.4 Declared Accredited Production Places

The following areas which were declared as being free of specified fruit flies, and as accredited production areas, are accredited production places for any plant product that is susceptible to the specified fruit flies.

Accredited Production Places	Declared free of the following pests
Limestone Bore	Mediterranean fruit fly, Northern Territory fruit fly, Queensland fruit fly
Ti-Tree Farm Area	Mediterranean fruit fly, Northern Territory fruit fly, Queensland fruit fly
Arid Gold Farm	Mediterranean fruit fly, Northern Territory fruit fly, Queensland fruit fly
Pine Hill Farm	Mediterranean fruit fly, Northern Territory fruit fly, Queensland fruit fly
Territory Grapes Area	Mediterranean fruit fly, Northern Territory fruit fly, Queensland fruit fly
Rocky Hill	Mediterranean fruit fly, Northern Territory fruit fly, Queensland fruit fly

PART 3: REQUIREMENTS FOR ENTRY OR MOVEMENT WITHIN THE TERRITORY

3.1 Explanatory Notes

Fruit, plants and certain related items may, under the *Plant Health Act*, Plant Health Regulations and Gazette notices:

a) be prohibited entry into the Northern Territory;
b) be subject to treatment or other requirement.

Where such requirements apply, a certificate or other relevant declaration **must** accompany fruit, plants or plant-related materials. Plants may have multiple entry requirements which need to be met before importation into the Northern Territory. Please ensure you verify that **all** requirements have been met. **Then fax, e-mail or post a copy of the appropriate certificates and plant list to NT Quarantine prior to sending the consignment**.

Pests and disease name key for Index of Requirements	
AT	Ants (species listed page 31)
FF	Fruit flies (species listed page 40)
MT	Melon thrips
SN	Snails (species listed page 59)
WFT	Western flower thrips
GP	Grape phylloxera
SWF	Spiralling white fly
PCN	Potato cyst nematode
SOSP	Sweet orange stem pitting virus
SC	Scale insects
FW	Fusarium wilt (various strains)

3.2 Index of Requirements

The following index table summarises the requirements of entry (the numbers in the table refer to the requirement number) for a range of plants and plant products imported into the Northern Territory and specifies some of the main diseases and/or pests of major quarantine concern. This list is not extensive. If the product is not listed here, please contact NT Quarantine for advice.

* means plant or plant-related material may require a permit for introduction
^ plant-related material includes equipment, machinery, packaging and other plant material

Product	Fruit and Vegetables	Plants & Flowers	Plant-related material ^	Disease or pest
Achachairu	5, 6	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, MT, SWF, WFT
Amaranthaceae family	10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT, MT
Angled Loofa	6, 10	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT, MT

Product	Fruit and Vegetables	Plants & Flowers	Plant-related material ^	Disease or pest
Apple	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Apricot	5,6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Aquatic Plants	19	1, 18, 19	12, 19	AT, SN, SC, SWF
Asteraceae family		1, 10, 18, 19	12, 19	AT, SN, PCN, SC, SWF, MT
Avocado*	5, 6	1, 2, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT, MT, verticillium wilt, top rot, sun blotch
Babaco	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, WFT, SWF
Bamboo	10	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, MT, SWF, WFT
Banana*	5, 6	1, 3, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, FW, SWF, WFT, various other diseases
Beans	10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT, MT
Bitter Gourd (Bitter Melon)	6, 10	1, 18, 19	12, 19	AT, SN, PCN, SC, FF, MT
Black Sapote	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, WFT, SWF
Blackberry	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Blueberry	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Broccoli	19, 22	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT
Cabbage	19, 22	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT
Caimito, Star apple	5, 6	1, 18, 19	12, 19	AT, SN, PCN, SC, FF, SWF,
Cape Gooseberry	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Capsicum / Chillies	5, 6, 10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT, MT
Carambola, Star Fruit	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Carrots	19, 22	1, 16, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT
Casimoira (White Sapote)	5, 6	1, 18, 19,	12, 19	AT, SN, PCN, SC, FF, SWF
Cauliflower	19, 22	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT

Product	Fruit and Vegetables	Plants & Flowers	Plant-related material ^	Disease or pest
Cherry	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Chives	See onions			
Citrus	5, 6	1, 4, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, MT, SOSP, SWF, WFT
Cotton		1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FW, MT, SWF, WFT
Cucumber	6, 10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, FW, SWF, WFT, MT
Custard Apple (Atemoya, Cherimoya, Sugar Apple, Sweetsop, Ramphala)	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Cut Flowers		10, 22	12, 19	MT, WFT
Dates	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Dragon fruit, pitaya		1, 18, 19,	12, 19	AT, SN, PCN, SC, SWF
Durian	5, 6	1, 18, 19,	12, 19	AT, SN, PCN, SC, FF, SWF
Eggplant (Eggfruit, Aubergine)	5, 6, 10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT, MT
Fig	5, 6	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT, MT
Garlic	See onions			
Grapefruit	See citrus			
Grape marc and must	7	1, 18, 19,	8, 12, 19	AT, SN, PCN, SC, GP
Grapes (Table)*	5, 6, 7	1, 18, 19, 22	8, 12, 19	AT, SN, PCN, SC, FF, SWF, WFT, GP
Grapes (Wine)	5, 6, 7	1, 18, 19, 22	8, 12, 19	AT, SN, PCN, SC, FF, SWF, WFT,GP
Grapevines*	7	1, 7, 18, 19, 22	8, 12, 19	AT, SN, PCN, GP, SC, SWF, WFT
Hay		1, 19, 20	19	AT, SN, PCN,
Herbs (Fresh)		1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT
Honeydew melon	6, 10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, MT, SWF, WFT

Product	Fruit and Vegetables	Plants & Flowers	Plant-related material ^	Disease or pest
Jackfruit	5, 6	1, 18, 19,	12, 19	AT, SN, PCN, SC, FF, SWF
Kiwifruit	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Leafy Vegetables	10, 22	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT, MT
Leeks	See onions			
Lemons	See citrus			
Lettuce	22	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT
Lime	See citrus			
Longan	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Loquat	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Lychee	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Maize	9, 22 with husk	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT, Boil smut
Mandarin	See citrus			
Mango	5, 6	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT, MT
Mangosteen	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Medlar	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Melons	6, 10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT, MT
Mulberry	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Myrtaceae family	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT,
Nectarine	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Okra	10	1, 10, 18, 19,	12, 19	AT, SN, PCN, SC, SWF, MT
Olive	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Onions (includes spring onions, shallots, leeks, chives and garlic)	22 (with tops)	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT
Orange	See citrus			

Product	Fruit and Vegetables	Plants & Flowers	Plant-related material ^	Disease or pest
Papaya (Pawpaw)	5, 6, 13	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT, Papaya black spot, papaya ring spot
Passionfruit	5, 6,	1, 14, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, FW, SWF, WFT, passionfruit woodiness virus
Peach	5, 6	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT, MT
Peanut	15	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT, Peanut mottle virus
Pear	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Peas	10, 22	1, 18, 19, 20, 22	12, 19	AT, SN, PCN, SC, FW, MT, SWF, WFT
Persimmon	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Pineapples		1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Pinewood		12, 16	12, 16, 19	European house borer
Plants (Household / Potted / Nursery)		1, 10, 11, 18, 19, 22	11, 12, 19	AT, SN, PCN, SC, SWF, WFT, MT,PHY
Plants General (not otherwise specified)	5, 6	1, 10, 11, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT. MT,PHY
Plum	5, 6	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT, MT
Poaceae family (not otherwise specified)		1, 10, 18, 19	12, 19	AT, SN, PCN, SC, SWF, MT
Pomegranate	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Potatoes*	17	1, 10, 17, 18, 19, 20, 22	12, 19, 20	AT, SN, PCN, SC, MT, SWF, WFT
Prickly Pear	5, 6	1, 18, 19	12, 19	AT, SN, PCN, SC, FF, SWF
Pumpkins	6, 10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, MT, SWF, WFT
Quince	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Rambutan	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT

Product	Fruit and Vegetables	Plants & Flowers	Plant-related material ^	Disease or pest
Raspberry	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Rockmelon	6, 10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, FW, SWF, WFT, MT
Rollinia	5, 6	1, 18, 19	12, 19	AT, SN, PCN, SC, FF
Sapodilla	5, 6	1, 18, 19	12, 19	AT, SN, PCN, SC, FF, SWF
Shallots	See onions			
Silver Beet	10, 18, 19, 22	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, MT, SWF, WFT
Smooth Loofah	10	1, 18, 19,	12, 19	AT, SN, PCN, SC, MT
Solanaceae family	5, 6, 10, 17	1, 17, 18, 19, 20, 22	12, 19, 20	AT, SN, PCN, SC, FF, SWF, WFT
Soursop	5, 6	1, 18, 19	12, 19	AT, SN, PCN, SC, FF, SWF
Soybean*	10, 21	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT, Phytophthora
Spinach	10, 18, 19, 22	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, MT, SWF, WFT
Squash	6, 10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, MT, SWF, WFT
Strawberry	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Sweet corn	22 with husk	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT
Sweet Potato	19	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, SWF, WFT
Tahitian Limes	See citrus			
Tamarillo	5, 6	1, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, SWF, WFT
Tobacco		1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, MT, WFT
Tomato	5, 6, 10	1, 10, 18, 19	12, 19	AT, SN, PCN, SC, FF, FW, MT, SWF
Turf*		1, 18, 19, 20	12, 19, 20	AT, SN, PCN, SC
Watermelon	6, 10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, FW, MT, SWF, WFT
Zucchini	6, 10	1, 10, 18, 19, 22	12, 19	AT, SN, PCN, SC, FF, MT, SWF, WFT

3.3 Conditions for Entry or Movement

Condition 1: Ants in Potting Mix or Turf

This condition refers to regulation 7.

Intent

To restrict the entry of the following pests which may be introduced into the Northern Territory in potting mix or turf.

Common Name	Scientific Name
Red Imported Fire Ant (RIFA)	*Solenopsis invicta* (Buren)
Yellow crazy ant	*Anoplolepsis gracilipes* (Fr. Smith)
Argentine ant	*Linepithema humile* (Mayr)
Electric ant	*Wasmannia auropunctata* (Roger)

Conditions

Plants that are grown in potting mix **must not** be introduced into the Northern Territory unless accompanied by a government certificate or assurance certificate stating:

a) the plant was inspected before it was transported to the Northern Territory and found to be free of the pests,

OR

b) the place where the plant originated from is more than 5km from the boundary of an area infested with the pest.

Turf **must** not be introduced into the Northern Territory unless it is accompanied by a permit for introduction.

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- Permit for introduction of turf (Refer 1.6.3).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 2: Avocado

This condition refers to regulation 14.

Intent

To restrict the entry of the following pests which may be introduced into the Northern Territory with the plant *Persea americana* Mill (avocado).

Scientific Name	Disease Caused
Avocado sun blotch viroid	sun blotch
Phytophthora cinnamomi Rands	top rot or die back
Verticillium dahliae Kleb	verticillium wilt

Conditions

Avocado plants, other than fruit, **must** not be introduced into the Northern Territory unless they are accompanied by:

a) a permit for introduction.

AND

b) a government certificate or assurance certificate stating.
   i) the place where the plants originated from is not infested by any of the pests.

AND

   ii) for an assurance certificate, the requirements under the related scheme for growing the plants have been met.

Related Scheme

For the importation of avocado plants, plants **must** be grown and accredited under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS).

Documentation

Plants **must** be accompanied by a:

- Permit for introduction (Refer 1.6.3).
- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 3: Banana, Plantain and Manila Hemp

This condition refers to regulation 15.

Intent

To restrict the entry of the following pests, which may be introduced into the Northern Territory with plants belonging to the genera Musa (including banana, plantain and Manila hemp) and Ensete (ornamental banana).

Common Name or Condition Caused by Pest	Scientific Name of Pest
Banana bract mosaic	*Banana bract mosaic virus*
Banana streak	*Banana streak virus*
Banana bunchy top	*Banana bunchy top virus*
Banana weevil borer or banana rot weevil	*Cosmopolites sordidus* (Germar)
Banana infectious chlorosis	*Cucumber mosaic virus*
Banana corm and rhizome rot	*Erwinia chrysanthemi* Burkholder, McFadden & Dimock
Banana fusarium wilt	*Fusarium oxysporum* Schlecht. ex Fries f.sp. *cubense* (E.F. Smith) Snyder & Hansen. Race 1, Race 2, Race 4 and Tropical Race 4
Banana freckle	Phyllosticta musarum (Cooke) van der Aa (Cavendish strain) and Guignardia musae Racib and *Phyllosticta cavendishi*
Spiral nematode	*Helicotylenchus multicinctus* (Cobb) Golden
Eumusae leaf spot	*Mycosphaerella eumusae* Crous & Mour
Banana black sigatoka	*Mycosphaerella fijiensis* M. Morelet
Burrowing nematode or banana rot nematode	*Radopholus similis* (Cobb) Thorne
Banana bacterial wilt or bugtok or moko disease	*Ralstonia solanacearum* (Smith) Yabuuchi *et al.* biovar 1 or race

Conditions

Plants of the genera Musa (including banana, plantain and Manila hemp) and Ensete (ornamental banana) **must not** be introduced into the Northern Territory unless they are accompanied by:

a) a permit for introduction.

AND

b) a government certificate or assurance certificate stating.

i) the plants were originally grown as tissue culture under the related scheme and they are introduced into the Northern Territory in the container in which they were grown,

OR

ii) the plant was originally grown as a tissue culture and has been grown out under the related scheme.

Fruit of the genera listed above **must not** be introduced into the Northern Territory unless they are accompanied by a government certificate or assurance certificate stating that the fruit did not originate within 50km from the boundary of an area infested with banana black sigatoka.

Plants of the genera listed above (other than fruit) **must not** be transported from one part of the territory to another if the plant is infested with any of the pests listed under this condition.

Related Scheme

For the importation of banana plants, plants **must** be grown and accredited under the Quality Banana Approved Nursery scheme (QBAN).

Documentation

Plants **must** be accompanied by a:

- Permit for introduction (Refer 1.6.3).
- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 4: Citrus and Fortunella

This condition refers to regulation 16.

Intent

To restrict the entry of the pest Sweet Orange Stem Pitting Strain (SOSP) of *Citrus tristeza virus*, which may be introduced into the Northern Territory on plants belonging to the genera *Citrus* and *Fortunella*.

Condition

Plants of the genera listed above **must not** be introduced into the Northern Territory unless they are accompanied by a government certificate or assurance certificate stating:

a) the place where the plants originated,
   i) was not infested with the pest when the certificate was made,

   AND

   ii) is at least 20km from the boundary of any area infested with the pest during the two years immediately before the certificate was made,

   AND

b) for an assurance certificate, the plants meet the requirements of the related scheme.

Related Scheme

For the importation of citrus plants, plants **must** be propagated and grown from certified propagation material under the Australian Citrus Nursery Certification Scheme (ACNCS).

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 5: Fruit Flies – Introduction of Fruits of Declared Host Plants into the Northern Territory

This condition refers to regulation 8.

Intent

To restrict the entry of the following pests which may be introduced into the Northern Territory in the fruit of declared host plants listed in Appendix 4.4.

Common Name	Scientific name
Banana fruit fly	*Bactrocera musae* (Tryon)
Mediterranean fruit fly	*Ceratitis capitata* (Weidmann)

Conditions

Fruit of a declared host plant **must not** be introduced into the Northern Territory unless the fruit is accompanied by a government certificate or assurance certificate stating:

a) the place where the fruit originated was not infested with any of the pests under this requirement when the certificate was made,

OR

b) the fruit is part of a consignment that was inspected and found free from the pests,

OR

c) the fruit has undergone an approved treatment for the pests.

Approved Treatments

Caution: The following treatments are accepted as individual treatments. They are generalised and are not suitable for all fruits. Some fruit may be damaged by these treatments. A trial treatment is recommended unless the response of the fruit to this treatment is known.

Hard Green or Similar Condition

Host fruit from an area where pest fruit flies are known to occur, **must** be of hard green or similar condition as specified below to ensure a stage of maturity in which damage or infestation by fruit fly is unlikely.

1. **Bananas** – **must** be hard green, have unbroken skin and be of Cavendish type derived from healthy plants of adequate vigour. For other varieties, fruit **must** be mature green with unbroken skin at the time of inspection and packaging.
2. **Pawpaw and Babaco** – **must** be immature hard green with no ripe colouration when assessed over the entire surface area or; **must** be mature hard green with no more than 25% ripe colouration when assessed over the entire surface area and **must not** be of defective flower end-type pawpaws.
3. **Passionfruit, Tahitian limes and black sapotes** – **must** be of mature green condition with unbroken skin. Mature green means for passionfruit the skin is free from any wrinkling; for Tahitian limes the fruit is free from any yellow colouring and; for black sapote the fruit is free from any black colouring.

4. **Achachairú, durian, jaboticaba, jackfruit, longan, lychee, mangosteen, rambutan and pomegranate**- **must** be firm with unbroken skin that has no pre-harvest crack, puncture, pulled stem or other break that penetrates through to the flesh and has not healed with callus tissue, at the time of inspection and packaging.

Dipping With Dimethoate

The host fruit, from an area where pest fruit flies are known to occur, **must** be treated after harvest with dimethoate such that full immersion of each fruit in the solution occurs for a period no less than 60 seconds. Dipping **must** be the last treatment before packing.

Pest	Dimethoate	
Mediterranean fruit fly		
Other fruit fly species	400mg/L	

Longan, Lychee, Passionfruit, Star Apple and Rambutan may be dipped for 10 seconds, after which they **must** remain wet for a period not less than 60 seconds.

Citrus fruit may:

a) have a non-recovery gloss coating applied not less than 60 seconds after dipping.

OR

b) be washed and treated with a fungicide and/or a gloss coating applied a minimum of 24 hours after dipping.

Flood Spraying with Dimethoate

From an area where pest fruit flies are known to occur, treatment after harvest via flood spraying the fruit in a single layer **must** occur. The mixture containing dimethoate in a high volume application of at least 16L/minute per each square metre of the area being sprayed, **should** provide complete coverage of the fruit for a minimum of 10 seconds, after which the fruit **must** remain wet for not less than 60 seconds. Flood spraying **must** be the last treatment before packing.

Pest	Dimethoate	
Mediterranean fruit fly		
Other fruit fly	400 mg/L	

If treating with dimethoate, citrus fruit may:

a) have a non-recovery gloss coating applied not less than 60 seconds after treatment.

OR

b) be washed and treated with a fungicide and/ or a gloss coating applied a minimum of 24 hours after dipping.

Cold Treatment

From an area where pest fruit flies are known to occur (except Mediterranean fruit fly), host fruit **must** be held in cold storage for one of the following temperature ranges and duration in terms of centre core flesh temperature.

Caution: Some fruit may be damaged by this treatment. A trial treatment is recommended unless the response of the fruit to this treatment is known.

Temperature	Minimum Number of Days
0.0°C ± 0.5ºC	14
1°C ± 0.5ºC	16 (Lemons14)
2°C± 0.5ºC	16 (Lemons14)
3°C± 0.5ºC	16 (Lemons14)

Applicable host fruit (kiwifruit, pome fruits, stone fruits, and other fruits including all citrus, which are unaffected by these temperature/time regimes) from an area where Mediterranean fruit fly is known to occur, **must** be held in cold storage for one of the following temperature ranges and duration in terms of centre core flesh temperature.

Temperature	Minimum Number of Days
0.0°C ± 0.5ºC	14
1°C ± 0.5ºC	16 (Lemons14)
2°C± 0.5ºC	18 (Lemons16)
3°C± 0.5ºC	20 (Lemons18)

Explanations: A minimum of three sensors/probes, two for centre core flesh and one for air temperature are to be used for the first 250 cubic metres of fruit or less. For each additional 250 cubic metres, or part thereof, one additional centre core flesh sensor is to be used. In all instances the cold storage chamber **must** be capable of sustaining the stated temperatures throughout the prescribed time periods and records **must** be available to the supervising inspector to ensure that the temperature and time requirements have been met.

Hot Water Treatment (Mangoes only)

From an area where pest fruit flies are known to occur, mango fruit treated by this method **must** be fully immersed in hot water and then maintained at 46ºC for a minimum period of 10 minutes in an approved treatment facility under the supervision of an approved person.

High Temperature Forced Air (HTFA)

From an area where pest fruit flies are known to occur, fruit treated under this method **must** be heated in an approved HTFA chamber over a period of no less than 3.5 hours until a minimum pulp temperature of 47.2°C is reached. This temperature **must** be taken from the heaviest fruit from each batch undergoing treatment. Fruit may be hydro-cooled immediately after treatment.

Vapour Heat (Mangoes only)

From an area where pest fruit flies are known to occur, mango fruit treated by this method **must** have done so in an approved vapour heat treatment facility under the supervision of an approved person.

Temperature (°C)	Time
46.5	20 minutes
47	15 minutes

Methyl Bromide Fumigation

From an area where pest fruit flies are known to occur, fruit treated by this method **must** be fumigated with methyl bromide for 2 hours at one of the combinations of rate and temperature specified below.

Core Temperature (°C)	Methyl Bromide Concentration (g/m³)
10-10.9	56
11-15.9	48
16-20.9	40
21+	32

Note: Temperature prior to fumigation **must** be above 10°C.

Irradiation

From an area where pest fruit flies are known to occur, fruit treated by this method **must** be treated with irradiation at a minimum dose rate of 150 Gy.

Systems Approach

Any combination of procedures or measures under this category that have demonstrated efficacy against fruit fly and have been approved by the Chief Inspector.

Documentation

Fruit **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 6: Fruit Flies – Introduction of Fruits of Declared Host Plants into Accredited Production Places

This condition refers to regulation 9.

Intent

To restrict the entry of the following pests likely to be introduced into accredited production zones (refer 2.4) within the Northern Territory, in the fruit of declared host plants listed in Appendix 4.4.

Common Name	Scientific Name
Northern Territory fruit fly	*Bactrocera aquilonis* (May)
Cucumber fruit fly	*Bactrocera cucumis* (French)
Banana fruit fly	*Bactrocera musae* (Tryon)
Queensland fruit fly	*Bactrocera tryoni* (Froggatt)
Mediterranean fruit fly	*Ceratitis capitata* (Weidmann)

Conditions

Fruit of a declared host plant **must not** be introduced into an accredited production place unless:

a) the fruit is in transit through the accredited production place and is not to be unloaded in the accredited production place.

AND

b) the fruit is packaged and transported in such a way that will prevent the spread of any of the pest species listed under this condition,

OR

c) the fruit is accompanied by a government certificate or assurance certificate that states that the fruit:

i) originates from an area that is not know to be infested with the pest(s) and is in transit to a place that is also not known to be infested with the pest(s),

OR

ii) the fruit is in transit from an accredited production area in the Northern Territory to another accredited production place,

OR

iii) the fruit has undergone approved treatment for the pests.

Approved Treatments

As outlined under Condition 5 of this manual.

Documentation

Fruit **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 7: Grapes, Grape Product And Grapevines

This condition refers to regulation 17.

Intent

To restrict the entry of the pest *Daktulosphaira vitifolii* (Fitch) (grape phylloxera) which may be introduced on plants belonging to the genus *Vitis* (grapevines).

Requirements

Grapevine plant material **must not** be introduced into the Northern Territory from another country unless accompanied by a Northern Territory permit for introduction issued by the Chief Inspector.

Grapevine plant material (other than table or wine grapes) **must not** be introduced into the Northern Territory from another State or Territory unless accompanied by:

a) permit for introduction.

AND

b) a government certificate or assurance certificate that states.
   i) the grapevine plant material originated from within a PEZ.

AND

   ii) the plant has undergone an approved treatment for the pest.

Grape product **must not** be introduced into the Northern Territory unless accompanied by a government certificate or assurance certificate stating that the product originated within a PEZ.

Table grapes originating from a PIZ or PRZ **must not** be introduced into the Northern Territory unless accompanied by:

a) a permit for introduction.

AND

b) a government certificate or assurance certificate stating that the grapes have undergone an approved treatment for the pest.

Table grapes originating from within a PEZ **must** be accompanied by a government certificate or assurance certificate specifying that the place of origin is within a PEZ.

Wine grapes **must not** be introduced into the Northern Territory unless accompanied by a government certificate or assurance certificate stating that the grapes originated within a PEZ.

Approved Treatments

Plants **must** be washed free of soil and treated by submersion in a hot water bath at one of the following combinations.

Temperature	Time
54°C ± 1°C	5 minutes
50°C ± 1°C	30 minutes

Table grapes requiring treatment (i.e. from a PIZ or PRZ) **must** be either packed with sulphur pads containing a minimum of 970g/kg of sodium metabisulphite at a rate specified on the label in accordance with the manufacturers instructions, or fumigated with methyl bromide for 2 hours at one of the combinations of rate and temperature specified below.

Core Temperature (°C)	Methyl Bromide Concentration (g/m³)
10-10.9	56
11-15.9	48
16-20.9	40
21+	32

Note: Temperature prior to fumigation **must** be above 10°C.

Documentation

Plants and/or products **must** be accompanied by a:

- Permit for introduction for grapevine plant material or table grapes (Refer 1.6.3).
- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 8: Grape Related Equipment

This condition refers to regulation 24.

Intent

To restrict the entry of the pest *Daktulosphaira vitifolii* (Fitch) (grape phylloxera) which may be introduced on equipment including tools and machinery used in the production of grapes or grapevines belonging to the genus *Vitis*.

Conditions

Machinery and equipment used in the production of grapes or grapevines **must not** be introduced to the Northern Territory unless accompanied by:

a) a permit for introduction,

AND

b) a government certificate stating that the equipment/machinery has undergone approved treatment before being transported into the Northern Territory.

OR

c) a government certificate stating that the equipment or machinery has been located continuously in a PEZ for a minimum of two weeks before its transportation into the Northern Territory.

Approved Treatments

Machinery and equipment **must** be thoroughly cleaned and washed free of soil and plant material. Machinery **should** be sterilised via steam treatment applied above 100°C or via dry heat at the combinations specified below.

Temperature (°C)	Time
40	120 minutes
45	75 minutes

Equipment including tools, bins and containers **should** be sterilised by hot water submersion at a minimum of 70°C for a minimum of 2 minutes.

Documentation

Machinery and Equipment **must** be accompanied by a:

- Permit for introduction (Refer 1.6.3).
- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- Copies of all certificates **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 9: Maize

This condition refers to regulation 18

Intent

To restrict the entry of the pest *Ustilago maydis* (DC.) Cda, which causes the disease boil smut, which may be introduced to the Northern Territory with plants belonging to the species *Zea mays* L.

Conditions

Plants of the species mentioned above that consist of or include maize seeds (excluding sweet corn) originating from New South Wales or Queensland **must not** be introduced into the Northern Territory unless they are accompanied by a government certificate stating:

a) the seed has undergone approved treatments for the pest.

OR

b) their place of origin is free from boil smut and the seeds were cleaned and packed on a premises used only for handling maize seeds that originated from an area free of boil smut.

Approved Treatments

Seed of maize **should** be treated with 200g/L Thiram plus 200g/L carboxin at 500ml of product per 100kg seed or an approved flowable fungicide following label directions or instructions for which the Australian Pesticides and Veterinary Medicines Authority (APVMA) has issued a permit for the treatment of boil smut.

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 10: Melon Thrips

This condition refers to regulation 10.

Intent

To restrict the movement of the pest *Thrips palmi* Karny (melon thrips) on declared host plants listed in Appendix 4.5 to accredited production places in the Northern Territory and to areas outside of a quarantine place.

Conditions

Declared host plants **must not** be introduced into a part of the Territory that is an accredited production place for the plant, or to areas outside a quarantine place for the pest unless accompanied by a government certificate or assurance certificate stating:

a) the place of origin of the plants has been monitored by regular trapping and inspection and found to be free of the pest during the 6 months immediately before transportation of the plants to the Northern Territory,

OR

b) the place of origin of the plants has been inspected and found to be free of the pest and is at least 100km from an area infested with the pest,

OR

c) the plants have been inspected and found to be free of the pest,

OR

d) the plants have undergone an approved treatment for the pest.

Note: A quarantine place is all that area generally north of the Adelaide River Township.

Approved Treatments

Fumigation with Methyl Bromide

Plants treated by this method **must** have a Plant Health Certificate or a Plant Health Assurance Certificate stating the plants were fumigated with methyl bromide for 2 hours at one of the combinations of rate and temperature specified below.

Core Temperature (°C)	Methyl Bromide Concentration (g/m³)
10-10.9	56
11-15.9	48
16-20.9	40
21+	32

Approved Inspection

Host plants **should** be inspected at the international sampling rate of 600 units or 2% by a government inspector.

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 11: VACANT

Condition 12: Used Machinery, Equipment and Other Plant Related Materials

This condition refers to regulation 26.

Intent

To restrict the entry of any pest or disease that may be introduced into the Northern Territory in specified plant-related materials including packaging, pallets, plant containers, and agricultural or earth moving equipment and machinery.

Requirements

Any plant-related material mentioned above **must not** be introduced into the Northern Territory unless:

a) it is new,

OR

b) if it is not new;
   i) it has been cleaned and is visibly free of soil, plant residues, pests and any other matter that may transport pests,

   AND

   ii) it is accompanied by a permit for introduction,

   AND

   iii) it is accompanied by a government certificate stating that before transportation to the Northern Territory, it was visibly clean and free of soil, plant residues, pests and any other matter that may transport pests,

   OR

   iv) it is accompanied by a government certificate stating that it has undergone an approved treatment.

Note: Field tested agricultural equipment/machinery or earthmoving equipment/machinery is not considered to be new.

Approved treatment

Machinery and equipment **must** be washed thoroughly with water under high pressure and **must** be visibly free of soil and plant material.

Following washing, machinery **must** be disinfected with a chlorine based detergent, preferably applied with a foaming spray nozzle, left for 10 minutes, and then rinsed off with water.

Documentation

Plant-related materials, including packaging, that are not new may need to be accompanied by either a:

- Permit for Introduction (Refer 1.6.3).
- Plant Health Certificate (Refer 1.6.1).
- Copies of all certificates **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 13: Papaya

This condition refers to regulation 19.

Intent

To restrict the entry of the following pests which may be introduced to the Northern Territory with the plants belonging to the species *Carica papaya* L.

Disease Caused	Scientific Name
Papaya black spot	*Asperisporium caricae* (Speg.) Maubl
Papaya ring spot	*Papaya ring spot virus*

Conditions

Plants including fruit of the species *Carica papaya* L. from and area infected with these disease's, **must not** be introduced into the Northern Territory unless they are accompanied by a government certificate or assurance certificate stating:

a) they have undergone an approved inspection for the pests and have been found to be free of the symptoms of the pests.

AND

b) if the place of origin of the plant or fruit is infested with papaya black spot, they **must** have undergone an approved treatment for the pest.

Approved Inspection and Treatments

An approved inspection for *Papaya ring spot virus* may include testing of plants and fruit by Enzyme-linked Immunosorbent Assay (ELISA).

Plants and fruit from an area known to be affected by Papaya black spot **must** receive pre-harvest treatment with mancozeb or tebuconozole or both of these treatments applied alternatively, in accordance with label directions.

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 14: Passionfruit

This condition refers to regulation 20.

Intent

To restrict the entry of the pest *Passionfruit woodiness virus* which may be introduced to the Northern Territory on plants belonging to the genus *Passiflora.*

Conditions

Plants of the genus mentioned above (other than fruit) **must not** be introduced into the Northern Territory unless they are accompanied by a government certificate or assurance certificate stating:

a) the plants did not originate from an area infested with the pest.

AND

b) they have undergone an approved inspection and found to be free of the pest.

AND

c) for an assurance certificate, the conditions for the related scheme have been met.

Approved Inspection

An approved inspection for *Passionfruit woodiness virus* may include testing of plants by Enzyme-Linked Immunosorbent Assay (ELISA).

Related Scheme

For the importation of passionfruit plants, plants **must** be grown under an accredited scheme in which the plants have been virus-indexed for *Passionfruit woodiness virus*.

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 15: Peanut

This condition refers to regulation 21.

Intent

To restrict the entry of the pest *Peanut mottle virus* which causes the disease mottle, likely to be introduced into the Northern Territory with plants belonging to the species *Arachis hypogaea* L. consisting of only seeds.

Conditions

Plants of the species mentioned above **must not** be introduced into the Northern Territory unless they are accompanied by a government certificate or assurance certificate stating that their place of origin is free of mottle.

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 16: Pinewood, Seasoned Pinewood and Pinewood Articles

This condition refers to Gazette No. G3, 18th January 2012 9/3

Intent

To restrict the entry of the pest *Hylotrupes bajulus* L. (European House Borer) into the Northern Territory, which may be introduced with wood and wood products made from trees of the genera *Pinus, Abies, Araucaria, Picea* and *Pseudotsugata*.

Conditions

Host material, meaning any raw, unprocessed and untreated coniferous timbers including pine, fir and spruce and includes untreated pinewood building timber, untreated pinewood pellets and commercial lots of firewood from Western Australia **must not** be introduced into the Northern Territory unless:

a) for pinewood building timber, the timber is accompanied by a government certificate or assurance certificate stating that it has undergone an approved treatment for the pest or has been sourced from a pest free area.
b) for commercial lots of pine firewood, it **must** be accompanied by a government certificate or assurance certificate stating that the firewood has undergone an approved treatment for the pest or has been sourced from a pest free area.
c) for pinewood pallets that are sourced from, or manufactured in, Western Australia are:
    i) managed in accordance with a copmliance arrangement,agreed to in writing between the Chief Inspector and either the person importing the pallets or the manufacturer of the pallets, with regard to management or manufacture of the pallets;

OR

    ii) accompanied by a government certificate or assurance certificate stating that the pallets were sourced from a pest free area.

Note: Host material does not include untreated pinewood products such as dunnage and timber packing material, furniture, ornaments, artefacts, craft materials or household effects with pinewood componants.

Approved treatments

Pinewood building timber and firewood entering the NorthernTerritory from Western Australia may only do so if certified as being treated by one of the following methods:

(a) Heat Treatment
The core of the Host Material at it greatest thickness is heated to at least 56°C and held at that temperature for at least 30 minutes.

OR

(b) Fumigation with Methyl Bromide
The Host Material, **must** have a cross section less than 20cm, is treated with Methyl Bromide Fumigation for 24 hours at a concentration indicated below and monitored at 2, 4, 12, and 24 hours to maintain those required concentrations;

Minimum Methyl Bromide Fumigation Standard

Temperature	Dosage (gm3)	Minimum concentration (g/m3) at:			
		2hrs	4hrs	12hrs	24hrs
21°C and above	48	36	31	28	24
16 °C to 20.9°C	56	42	36	32	28
10°C to 15.9°C	64	48	42	36	32

The treatment **must** be verified by using the IPPC (ISPM 15) mark and symbols and date of treatment **must** be stamped on the timber in an easily visible location, and the treatment **must** have occurred within 21 days prior to the arrival in the NorthernTerritory;

OR

(c) Preservative Treatment (impregnation and envelope)

The pinewood has been treated with a specific insecticidal preservative treatment for European House Borer, either by vacuum pressure impregnation, dipping or spraying as approved by the Chief Inspector.

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- Copies of all certificates **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 17: Potato

This condition refers to regulation 22.

Intent

To restrict the entry of the pest *Globodera rostochiensis* (Woll.) Skarbilovich, or potato cyst nematode (PCN) into the Northern Territory, which may be introduced with plants belonging to the species *Solanum tuberosum* L. (potato).

Conditions

1. Plants of the species mentioned above that consist of or include seed potatoes **must not** be introduced into the Northern Territory unless accompanied by:

a) potatoes for propagation/planting including one-off seed (smalls) from a crop grown in a state with a current and recognised freedom certificate for potato cyst nematode must be accompanied by documentation that verifies the origin of the crop e.g. Certified Seed Label/Tag attached to individual containers, Plant Health Certificate or Declaration.

Proof: Documentary proof of origin e.g. Certified Seed Label/Tag attached to individual containers, Plant Health Certificate or Declaration (see Part 4 Appendices).

If the above condition can be met and the required origin proof accompanies them, seed potatoe or potatoes for propagation may commence entering the Northern Territory without PCN testing immediately.

OR

b) a permit for introduction.

AND

c) a government certificate or assurance certificate stating that,
   i) the plants originated from an area that is at least 20km from the boundary of an area infested with the pest or is not linked to an area infested by the pest (via shared ownership, equipment, shared seed, shared boundaries or shared drainage).

AND

   ii) the potatoes have undergone approved treatments and tests and found to be free of the pest.

2. Plants that are intended for propagation which do not consist of seed potatoes are to be grown as a tissue culture under a related scheme. They are to be introduced in the original sealed container and accompanied by a permit for introduction.

   Plants of the species mentioned above that consist of or include ware potatoes **must not** be introduced into the Northern Territory unless:

a) the potatoes originated from an area that is at least 20km from the boundary of an area infested with the pest and is not linked to an area infested by the pest (via shared ownership, equipment, shared seed, shared boundaries or shared drainage),

OR

b) for potatoes that originate from an area that is linked to an area that is infested with the pest they **must** be accompanied by a permit for introduction.

AND

c) the potatoes have undergone an approved treatment.

Related Scheme

For the importation of potato plants intended for propagation, plants **must** be grown and accredited under the Victorian Certified Seed Potato Authority (ViCSPA) certification scheme.

Approved Treatment and Tests

All potatoes **should** be brushed free of soil to the Soil Adhesion Standard (previously the Thorpdale Standard).

Crops **should** be tested for PCN using fork testing following the National standards and protocol conducted on a grid system approved by the Chief Inspector. Tests **must** be conducted in the current growing season and found free of potato cyst nematode.

Documentation

Plants **must** be accompanied by a:

- Permit for introduction for seed potatoes, tissue cultured plants and ware potatoes that originate from an area linked to an area infested with the pest (Refer 1.6.3).
- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 18: Scale Insects and Sucking Insects – Nursery Stock

This condition refers to regulation 11.

Intent

To restrict the entry of the pests belonging to Superfamily *Coccoidea*, (such as scales) or Superfamily *Aleyrodoidea*, (such as whitefly) that may be introduced into the Northern Territory with nursery stock and household plants.

Conditions

Nursery stock and household plants **must not** be introduced to the Northern Territory unless they are accompanied by a government certificate or assurance certificate stating that they have undergone an approved treatment for the pests.

Approved Treatments

All nursery stock and household plants **must** be certified to have received insecticide treatment against scale insects and whitefly within 72 hours before consignment. They **must** be treated with Bifenthrin together with a commercial wetting agent according to the manufacturer's instructions.

Vegetable and herb seedlings for transplanting **must** be treated with Bifenthrin as per APVMA Permit 9795 Version 6.

Vegetable and herb plants for growing on or pot culture **must** be treated with white oil as per APVMA Permit 11815 Version 1.

Herbs that are cut washed and packaged in plastic sleeves for the supermarket trade are exempt from the treatment, as they are not considered to be nursery stock.

Note: Some plants may be damaged by chemical treatment. Seek advice on chemical use specific to your requirements.

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 19: Soil Borne Pests and Snails – Plants Generally

This requirement refers to regulation 12 as amended 8th February 2012 and Gazette No. S17, 30th March 2012.

Intent

To restrict the entry of the following pests that may be introduced into the Northern Territory in soil or plants.

Common Name	Scientific Name
Grape phylloxera	*Daktulosphaira vitifolii* (Fitch)
Potato cyst nematode	*Globodera rostochiensis* (Woll.) Behrens
Top rot (or die back)	*Phytophthora cinnamomi* Rands
Green snail	*Cantareus apertus* (Born) Schultes
Vineyard or common white snail	*Cernuella virgata* (Da Costa)
Conical or pointed snail	*Cochlicella acuta* (Müller)
Small conical or pointed snail	*Prietocella barbara* (Linnaeus)
White Italian snail	*Theba pisana* (Müller)
Cucumber fusarium wilt	*Fusarium oxysporum* f.sp. *cucumerinum* J.H. Owen
Tomato fusarium wilt	*Fusarium oxysporum* f. sp. *lycopersici* W. C. Snyder & H. N.Hansen
Rockmelon fusarium wilt	*Fusarium oxysporum* f.sp. *melonis* (Leach & Currence) Snyder & Hansen
Watermelon fusarium wilt	*Fusarium oxysporum* f.sp. *niveum* (E.F. Sm.) Snyder & H.N. Hansen
Passionfruit fusarium wilt	*Fusarium oxysporum* f. sp. *passiflorae* W.L. Gordon
Pea fusarium wilt	*Fusarium oxysporum* f.sp. *pisi* (Linford) Snyder & Hansen
Cotton fusarium wilt	*Fusarium oxysporum* f.sp. *vasinfectum* (G.F. Atk.) W.C. Snyder & H.N. Hansen

Conditions

Plants (including bulbs and rhizomes) **must not** be introduced into the Northern Territory unless:

a) the plant is bare-rooted and otherwise free of soil;

AND

b) the plant is accompanied by a government certificate or assurance certificate stating; that the plant is soil free and has undergone an inspection for the pests, Grape phylloxera (grapevines only), Top rot or die back symptoms (all plants), and the visible symptoms of the host specific fusarium wilts listed in this condition; andthe plant has **not** been grown within:

   i) 50m of a grapevine (all plants)

ii) 20km of the boundary of an area infested with potato cyst nematode (PCN), or was grown under the related scheme
iii) or packed within 25km of the boundary of an area infested with green snail, or the plant was grown and packed under the related scheme;

OR

c) the plant is grown in a medium, for example potting mix or compost, that is free of soil, and within a container that is free of soil.

AND

d) the plant is accompanied by a government certificate or assurance certificate stating;that the plant has undergone an inspection for the pests, Grape phylloxera (grapevines only), Top rot or die back symptoms (all plants), and the visible symptoms of the host specific fusarium wilts listed in this condition; and the plant has **not** been grown within:
   i) 50m of a grapevine (all plants)
   ii) 20km of the boundary of an area infested with potato cyst nematode (PCN), or was grown under the related scheme
   iii) or packed within 25km of the boundary of an area infested with green snail, or the plant was grown and packed under the related scheme;

AND

e) the plant has been inspected and found to be free of the other snail species listed in this requirement, or have undergone an approved treatment for the snails.

Note: If an area freedom certificate has been provided by a jurisdiction then that particular condition or endorsement for that pest does not apply.

Approved Treatments

Snails

All plants, other than those bare rooted, that have been inspected for snails and found to be infested **must** receive a treatment with Methiocarb 750g/kg or Metaldehyde 50g/kg as per manufacturer's instructions or an APVMA Permit.

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 20: Soil, Compost and Potting Mix

This condition refers to regulation 25.

Intent

To restrict the entry of any declared pests into the Northern Territory which may be introduced in soil, compost or potting mix.

Conditions

Soil **must not** be introduced into the Northern Territory unless accompanied by a permit for introduction. This includes plant and soil samples for the purpose of laboratory testing.

Note: This condition does not apply to light road dust on the surface of vehicles, shoes and equipment. The person who has control over the vehicle, shoes or equipment **must** exercise reasonable caution in preventing the introduction of soil.

Note: This condition does not apply to soil on potatoes that are being imported under condition 17.

Compost and potting mix that is packaged or in bulk is not permitted into the Northern Territory unless it is manufactured in accordance with Australian Standards and is labelled as such. Unlabelled compost or potting mix **must** be accompanied by a Plant Health Certificate.

Documentation

Soil, compost and potting mix **must** be accompanied by a:

- Permit for Introduction for soil (Refer 1.6.3).
- Plant Health Certificate for unlabelled compost or potting mix (Refer 1.6.1).
- For compost – Australian standard AS4454.
- For potting mix – Australian standard AS3743.
- Copies of all certificates **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 21: Soybean

This condition refers to regulation 23.

Intent

To restrict the entry of the pest *Phytophthora sojae* Kaufmann & Gerdemann which causes Phytophthora rot, into the Northern Territory, which may be introduced with plants belonging to the species *Glycine max* (L.) Merr (or soybean).

Conditions

Plants of the species mentioned above that consist of or include seeds for sowing **must not** be introduced into the Northern Territory unless accompanied by a permit for introduction.

Documentation

- Permit for Introduction (Refer 1.6.3).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

Condition 22: Western Flower Thrips

This condition refers to regulation 13.

Intent

To restrict the entry of the pest *Frankinella occidentalis* Pergande (or western flower thrips) into the Northern Territory, which may be introduced with the declared host plants listed in Appendix 4.6.

Conditions

Declared host plants **must not** be introduced into the Northern Territory if the plant originates from any part of the country, State or Territory that was infested with western flower thrips at any time within two years prior to transportation, unless accompanied by a government certificate or assurance certificate stating

a) the plants have undergone an approved inspection and found to be free of the pest,

OR

b) the plants have undergone an approved treatment of the pest,

OR

c) the plant originates from an area that has been regularly monitored by a method approved in writing by the Chief Inspector for at least 4 weeks before the plant was packed for transportation and found to be free of the pests.

Approved Treatments

Fumigation with Methyl Bromide

From an area where Western Flower Thrips are known to occur, plants treated by this method **must** be fumigated with methyl bromide for 2 hours at one of the combinations of rate and temperature specified below.

Core Temperature (°C)	Methyl Bromide Concentration (g/m³)
10-10.9	56
11-15.9	48
16-20.9	40
21+	32

Note: Temperature prior to fumigation **must** be above 10°C.

Treatment with Spinosad

Plants **must** be accompanied by a Plant Health Certificate or Plant Health Assurance Certificate stating the plant was treated with an approved cover spray of spinosad (Success®) or spinetoram (Success Neo®). As per label.

Approved Inspection

Host plants **should** be inspected at the international sampling rate of 600 units or 2% by a government inspector.

Trap Monitoring Protocol

Nurseries or businesses with accreditation for CA-10 PMNT (South Australia) or PS-27 (Victoria) may export host plants if accompanied by a PHAC. Nurseries or businesses without accreditation **must** undertake a western flower thrips monitoring program and be found free of the pest for a minimum of 4 weeks prior to importation. The trapping program will be the responsibility of the authorised signatories and **shall** be audited by a government inspector or other accredited officer.

Placing Traps

The number of traps used will depend on the total area of field blocks or green/polyhouses as shown in the table below. Traps **should** be placed in a way that gives good coverage of the total area (eg; following a Z or M pattern), and **should** be placed first among plants soon to be harvested. Traps **should** be numbered and a map of trap locations and detailed records of trap numbers used **must** be kept.

Field Blocks		Green/Polyhouses	
Total Area (hectares)	**Number of Traps**	**Total area (m2)**	**Number of Traps**
<0.5	6	0 – 200	1
0.5 – 1	10	200 – 500	2
1 – 5	12	500 – 1000	4
5 – 10	15	1000 – 5000	6
>10	20	5000 – 10000	10
		>10000	15

Inspecting and Collecting Traps

Traps are to be inspected and collected every two weeks during summer (October 1 to April 30) or in artificially heated green/polyhouses. In winter (May 1 to September 30) traps are to be inspected and collected every 4 weeks.

Immediately upon collection, traps **must** be placed into zip-lock plastic bags labelled with the trap number, date and name of the nursery or business. These traps **must** be stored and presented for inspection by an inspector or other government official.

Documentation

Plants **must** be accompanied by a:

- Plant Health Certificate or a Plant Health Assurance Certificate (Refer 1.6.1).
- All plants and plant products **must** be labelled correctly (Refer 1.8).
- Copies of all certificates and plant lists **must** be forwarded to NT Quarantine prior to sending the consignment (Refer 3.1).

4.1 Application Forms and Reference Material

A copy of the following documents and forms can be obtained by contacting NT Quarantine on (08) 8999 2118 or quarantine@nt.gov.au or by visiting our website.

- *Plant Health Act.*
- Plant Health Regulations.
- Application to import Equipment/Machinery.
- Application to import Quarantine Material.
- Application to Import Plants and Plant Products.

Information regarding Interstate Certification Assurance (ICA) arrangements, including Operating Procedures and application forms can be obtained from the Subcommittee Domestic Quarantine Market Access (SQMA) website below.

http://www.domesticquarantine.org.au/go/dqmawg/ica-database

4.2 Fruit Fly Host List

Common Name	Scientific Name	QFF	MFF	BFF	CF	NTFF
Abiu	*Pouteria caimito* (Ruiz and Pavon) Radlk.	Y	Y	N	N	N
Achachairu	*Garcinia humilis* (previously known as *Rheedia laterifolia*).	Y	Y			
Acerola, Barbados cherry, West Indian cherry	*Malpighia glabra* (Millsp.) *M.glabra* x *M.punicifolia* (L.)	Y	Y	N	N	N
Akee	*Blighia sapida* K. Konig	N	Y	N	N	N
Akia	*Wikstroemia phillyreifolia* Gray	N	Y	N	N	N
Almond (with husk)	*Prunus amygdalus* Batsch, *Prunus dulcis* (Mill) D. A. Webb	N	Y	N	N	N
Angled luffa	*Luffa acutangula*	N	N	N	Y	N
Apple, Crab apple	*Malus domestica* Borkh L. *Malus sylvestris* Mill.	Y	Y	N	N	N
Apricot	*Prunus armeniaca* L.	Y	Y	N	Y	N
Avocado	*Persea americana* Mill.	Y	Y	N	Y	N
Babaco (ripe)	*Carica pentagona* Heilb.	Y	Y	N	N	N
Bamaga stainash	*Syzygium bamagense*.	Y	Y	Y	N	N
Banana	*Musa* spp.	Y	Y	Y	N	N
Billy-goat plum	*Terminalia ferdinandiana*.	Y	N	N	N	Y
Bitter Gourd	*Momordica charantia*.	N	N	N	Y	Y
Black sapote	*Diospyros ebenum* J. König ex Retz. *Diospyros digyna*.	Y	Y	N	Y	N
Black walnut	*Juglans nigra* L.	N	Y	N	N	N
Blackberry	*Rubus fruticosus* L.	Y	Y	N	N	N
Blue quandong	*Elaeocarpus angustifolius*.	N	N	N	N	Y
Blueberry	*Vaccinium corymbosum* L. *Vaccinium ashei* (Reade).	Y	Y	N	N	N
Bourbon orange	*Ochrosia elliptica* Labill.	N	Y	N	N	N
Boxthorn	*Lyceum europaeum* L.	N	Y	N	N	N
Boysenberry	*Rubus ursinus* (Cham. & Schlecht) var. *loganobaccus*	Y	N	N	N	N
Brazil Cherry, Grumichama,	*Eugenia brasiliensis* Lam.*Eugenia uniflora* L.	Y	Y	N	N	N
Breadfruit	*Artocarpus altilis* (Parkinson) Fosb.	Y	Y	N	N	N
Broad-leaved lillypilly	*Acmena hemilampra*.	Y	N	N	N	Y
Brown damson	*Terminalia arenicola*.	Y	N	N	Y	Y
Caimito (Star apple)	*Chrysophyllum caimito* L., C *cainito*.	Y	Y	N	N	N

Common Name	Scientific Name	QFF	MFF	BFF	CF	NTFF
Calamondin orange	*X Citrofortunella mitis* (Blanco) J. W. Ingram & H. E. Moore.	N	Y	N	N	N
Cape canary beech	*Polyalthia australis*.	Y	N	N	N	N
Cape gooseberry, Goldenberry, Ground cherry, Peruvian cherry	*Physalis peruviana* L.	Y	Y	N	N	N
Capsicum	*Capsicum annuum* L. var. *grossum* (L.) Sendt.	Y	Y	N	Y	N
Carambola, Five corner fruit, Star fruit	*Averrhoa carambola* L.	Y	Y	N	Y	N
Cashew apple	*Anacardium occidentale* L.	Y	Y	N	N	N
Cherrimoya	*Annona cherimolia* Mill.	Y	Y	N	N	N
Cherry	*Prunus avium* L. (sweet cherry). *Prunus cerasus* L. (sour cherry).	Y	Y	N	N	N
Chilli	*Capsicum annuum* var *acuminatum* Fingerh. (chillies) *Capsicum annuum* var *cerasiforme* (Miller) Irish (cherry peppers) *Capsicum annuum* var *conoides* (Miller) Irish (tabasco)	Y	Y	N	Y	N
Choko	*Sechium edule* (Jacq.) Sw.	N	N	N	Y	N
Citron, tangor	*Citrus medica* L.	Y	Y	N	N	N
Citrus, not otherwise listed	*Citrus* spp.	Y	Y	N	N	Y
Coast caper	*Capparis lucida*.	Y	N	Y	N	N
Coffee cherry	*Coffea canephora* Pierre and Froehner. *Coffea excelsa* Chiov. (excelsa coffee) *Coffea liberica* Hiern. (Liberian coffee) *Coffea robusta* Linden (robusta coffee)	N	Y	N	N	N
Coffee Cherry	*Coffea arabica* (Arabian coffee)	Y	Y	N	N	N
Corky passionfruit	*Passiflora suberosa*.	Y	Y	N	Y	N
Cucumber	*Cucumis sativas* L.	N	N	N	Y	N
Custard apple, Cherimoya, Sugar apple, Sweetsop	*Annona squamosa* L. Mill. *A. squamosa* L. x *A. cherimolia* Mill. *A. cherimolia* Mill.	Y	Y	N	N	N
Date	*Phoenix dactylifera* L.	Y	Y	N	N	N
Durian	*Durio zibethinus* Murray.	Y	Y	N	N	N
Eggplant	*Solanum melongena* L.	Y	Y	N	Y	N
Feijoa	*Acca sellowiana* (Berg.) Burret.	Y	Y	N	N	N
Fibrous satinash	*Syzygium fibrosum*.	Y	Y	N	N	Y
Fig	*Ficus carica* L.	Y	Y	N	N	N

Common Name	Scientific Name	QFF	MFF	BFF	CF	NTFF
Granadilla	*Passiflora quadrangularis* L.	Y	Y	N	N	N
Grape (Table)	*Vitis vinifera* L. (table grape)	Y	Y	N	N	N
Grape (Wine)	*Vitis vinifera* L. (wine grape) *Vitis labrusca* L. (Isabella grape)	Y	Y	N	N	N
Grapefruit	*Citrus paradisi* Macf.	Y	Y	Y	Y	Y
Guada bean	*Trichoanthes anguina*.	N	N	N	Y	N
Guava	*Psidium* spp.	Y	Y	Y	Y	Y
Hawthorn	*Crataegus* spp.	N	Y	N	N	N
Honeydew, Casaba	*Cucumis melo* L. Cv.	N	N	N	Y	N
Ironwood	*Sideroxylon inerme* L.	N	Y	N	N	N
Ixora	*Ixora klanderiana*.	N	N	N	N	Y
Jaboticaba	*Myrciaria cauliflora* (DC.) Berg.	Y	Y	N	N	N
Jackfruit	*Artocarpus heterophyllus* Lam.	Y	Y	N	N	N
Jambu	*Syzygium cumini* (L.) Skeel.	Y	Y	N	N	N
Jerusalem cherry	*Solanum pseudocapsicum* L.	N	Y	N	N	N
Jew plum, Ambarella, Hog plum, Golden apple, Otaheite apple, Polynesian plum, Tahitian Quince, Yellow apple	*Spondias cytherea* Sonn.	Y	Y	N	N	N
Jujube, Chinese date	*Ziziphus jujube* Miller.	Y	Y	N	N	N
Kiwifruit	*Actinidia deliciosa* (A. Chev.) Liang and Ferguson.	Y	Y	N	N	N
Kumquat	*Fortunella japonica* (Thunb.) Swingle *Fortunella margarita* (Lour.) Swingle.	Y	Y	N	Y	N
Laurel, Coconut Laurel	*Cryptocarya cunninghamii*.	N	N	N	N	Y
Lemon	*Citrus limon* (L) Burm. F. *Citrus limon* x C. chinense. *Citrus meyeri* Tanaka L.	Y	Y	N	Y	N
Lime	*Citrus aurantiifolia* (Christm.) Swingle (West Indian lime) *Citrus reticulata* var. *austera* Lyb. (Rangpur lime)	Y	Y	N	N	N
Lime berry	*Micromelum minutum*.	N	N	N	N	Y
Loganberry	*Rubus loganobaccus* L. H. Bailey.	Y	Y	N	N	N
Longan	*Euphoria longan* (Lour.) Stued.	Y	Y	N	N	N
Loquat, Japanese medlar	*Eriobotrya japonica* (Thunb.) Lindley.	Y	Y	N	N	N
Lychee	*Litchi chinensis* Sonn.	Y	Y	N	N	N

Common Name	Scientific Name	QFF	MFF	BFF	CF	NTFF
Madagascar olive	*Noronhia emarginata* (Lam.) Thours ex Hook.	N	Y	N	N	N
Malay apple	*Eugenia malaccensis* L.	Y	Y	N	N	N
Malaysian persimmon	*Diospryos maritima*.	Y	Y	N	N	Y
Mamey sapote	*Pouteria sapota* (jacq.) H. E. Moore & Stearn.	N	Y	N	N	N
Mandarin	*Citrus reticulata* Blanco.	Y	Y	Y	Y	N
Mango	*Mangifera indica* L.	Y	Y	N	Y	N
Mangosteen	*Garcinia mangostana* L.	Y	Y	N	N	N
Maranthes	*Maranthes corymbose*.	N	N	N	N	Y
Medlar	*Mespilus* Spp	Y	Y	N	N	N
Mock orange	*Murraya paniculata* L. Jack, M exotica L.	N	Y	N	N	N
Mombin	*Spondias* spp.	N	Y	N	N	N
Monstera	*Monstera deliciosa* Liebm.	N	Y	N	N	N
Mountain apple	*Syzygium malaccensis* L. Merrill & L. M. Perry.	N	Y	N	N	N
Mueller's damson	*Terminalia Muelleri*.	N	N	N	Y	N
Mulberry	*Morus nigra* L.	Y	Y	N	N	N
Nashi	*Pyrus pyrifolia* var. *culta* (Mak.) Nakai or *P. betulaefolia* Bunge.	Y	Y	N	N	N
Natal plum	*Carissa macrocarpa*.	N	Y	N	N	N
Nectarine	*Prunus persica* var. *nectarina* (R.Br.) Maxim.	Y	Y	N	N	N
Olive	*Olea europaea* L. Subsp. Europea L.	N	Y	N	N	N
Orange	*Citrus aurantium* L. (Seville or sour orange) *Citrus sinensis* (L.) Osbeck (Sweet orange)	Y	Y	N	Y	N
Orange berry	*Glycosmis pentaphylla*, *Glycosmis trifoliata*.	Y	N	N	N	Y
Papaya, Pawpaw	*Carica papaya* L. non defective flower end-type papaws *Carica papaya* L. defective flower end-type papaws	Y	Y	Y	Y	N
Passionfruit	*Passiflora edulis* f. *edulis* Sims (Purple passionfruit) *Passiflora edulis* f. *flavicarpa* Degener (Yellow passionfruit).	Y	Y	Y	Y	N
Peach	*Prunus persica* L. Batsch.	Y	Y	N	N	Y
Peacharine	*Prunus persica* var. nucipersica.	Y	Y	N	N	N
Pear	*Pyrus communis* L.	Y	Y	N	N	N
Pepino	*Solanum muricatum* Aiton.	Y	Y	N	N	N

Common Name	Scientific Name	QFF	MFF	BFF	CF	NTFF
Persimmon	*Diospyros kaki* L.f. (Japanese persimmon) *Diospyros decandra* Lour. (persimmon)	Y	Y	N	Y	N
Pineapple	*Ananus comosus* (L.) Merr.	N	N	N	N	N
Plum	*Prunus domestica* (prune) *Prunus insitita* L. (damson plum) Prunus salicina (Japanese plum)	Y	Y	N	N	N
Plumwood	*Terminalia grandiflora*.	N	N	N	N	Y
Pomegranate	*Punica granatum* L.	Y	Y	N	N	N
Pond apple	*Annona glabra* L.	Y	Y	N	N	N
Prickly pear	*Opuntia ficus-indica* L. Miller. *Opuntia stricta* (Haw.) Haw.	Y	Y	N	N	N
Pummelo, Shaddock	*Citrus grandis* (L.) Osbeck.	Y	Y	N	N	N
Pumpkin	*Cucurbita maxima* Duch.exLam. *C. moschata* (Duch.exLam.) Duch. exPoir (Tropical)	N	N	N	Y	N
Putit	*Ximemia Americana*.	N	N	Y	N	N
Quince	*Cydonia oblonga* Miller.	Y	Y	N	N	N
Quinine tree	*Petalostigma pubescens*.	N	N	N	N	Y
Rambutan	*Nephelium lappaceum* L.	Y	Y	N	N	N
Raspberry	*Rubus idaeus* L.	Y	Y	N	N	N
Rockmelon	*Cucumis melo* L. Cv.	N	N	N	Y	N
Rollinia	*Rollinia deliciosa* Safford. *Rollinia mucosa* Baill.	Y	Y	N	N	N
Rose apple	*Syzygium jambos* (L.) Alston.	Y	Y	N	N	N
Sand palm	*Livingstonia humilis*.	N	N	N	N	Y
Santol	*Sandoricum indicum* Cav.	Y	Y	N	N	N
Sapodilla	*Manilkara zapota* (L.) Van Royen.	Y	Y	N	N	N
Soursop	*Annona muricata* L.	Y	Y	N	N	N
Spanish cherry	*Mimusops elengi* L.	Y	Y	N	N	N
Squash	*Cucurbita pepo* L. var. *melopepo* Alef.	N	N	N	Y	N
Strawberry	*Fragaria* X *ananassa* Duch.	Y	N	N	N	N
Striped cucumber	*Diplocyclos palmatus*.	Y	N	N	Y	N
Swamp satinash	*Syzygium angophoroides*.	Y	Y	N	N	Y
Sweetsop, sugar apple	*Annona squamosa* L.	Y	Y	N	N	N
Tahitian lime	*Citrus. latifolia* Tanaka.	Y	Y	N	N	N
Tamarillo, Tree tomato	*Cyphomandra betacea* (Cav.) Sendtner	Y	Y	N	N	N
Tangelo	*Citrus tangelo* J. Ingram & H. E. Moore (*C. reticulata* x *C. paradisi*).	Y	Y	N	N	N

Common Name	Scientific Name	QFF	MFF	BFF	CF	NTFF
Tomato,Cherry tomato	*Solanum lycopersicum*. *Lycopersicon esculentum* Mill. *Lycopersicon lycopersicum* (L.) Karst. Ex Farw.	Y	Y	Y	Y	N
Tropical almond	*Terminalia catappa* L., T. *chebula* Retz.	Y	Y	N	N	N
Vegetable sponge	*Luffa cylindrica*.	N	N	N	Y	N
Walnut	*Juglans regia* L.	Y	Y	N	N	N
Watermelon	*Citrullus lanatus* (Thunb.) Mansf.	N	N	N	Y	N
Wax apple, Malabar plum, Rose apple, Wax jambu	*Eugenia jambos* L. (L.) Alston *Syzgium samarangense* (Blume) Merrill and L.M. Perry.	Y	Y	N	N	N
White apple	*Syzygium forte*.	N	N	N	N	Y
White bush apple	*Syzygium armstrongii*.	N	N	N	N	Y
White sapote, Casimiroa, Mexican apple	*Casimiroa edulis* La Llave and Lex.	Y	Y	N	Y	N
Wild apple	*Syzygium suborbiculare*.	Y	Y	N	N	Y
Wild Plum	*Terminalia platyphylla*.	Y	N	N	N	Y
Wild prune/mongo	*Pouteria sericea*.	N	N	N	N	Y
Youngberry	*Rubus ursinus* x R. *loganobaccus*.	Y	N	N	N	N
Zucchini	*Cucurbita pepo* L.	N	N	N	Y	N

4.3 Melon Thrip Host List

Host Common Name	Host Scientific Name	Fruit and Vegetables	Plants and Flowers
Amaranthus	*Amaranthus* spp.	Y	Y
Angled luffa	*Luffa acutangula* Mill.	Y	
Aster	*Aster* spp.		Y
Asthma plant (weed)	*Euphorbia hirta* L.		Y
Avocado	*Persea americana* Mill.		Y
Bamboo	Poaceae family	Y	
Beans	Fabaceae family	Y	Y
Bitter melon	*Momordica charantia* L.	Y	Y
Bunchgrass	*Eragrostis tenella* (L.) P. Beauv. ex Roem. & Schult.		Y
Calopo (weed)	*Calopogonium mucunoides* Desv.		Y
Capsicum, chilli	*Capsicum* spp.	Y	Y
Carnations	*Dianthus* spp.		Y
Certastium	*Certastium* spp.		Y
Chocolate-weed	*Melochia corchorifolia* L.		Y
Chicory	*Cichorium intybus* L.	Y	Y
Chrysanthemum	*Chrysanthemum* spp.		Y
Citrus	*Citrus* spp.		Y
Coast button grass, Egyptian grass (weed)	*Dactyloctenium aegyptium* (L.) Willd.		Y
Common vetch	*Vicia sativa* L.	Y	
Cotton	*Gossypium* spp.		Y
Cowpea	*Vigna unguiculata* (L.) Walp.	Y	
Crowsfoot grass (weed)	*Eleusine indica* (L.) Gaertn.		Y
Cucumber	*Cucumis sativus* L.	Y	Y
Cyclamen	*Cyclamen* spp.		Y
Eggplant/ Aubergine	*Solanum melongena* L.	Y	Y
Endive	*Cichorium endivia* L.	Y	Y
Fig	*Ficus* spp. [Moraceae]		Y
Five leafed cassia (weed)	*Cassia mimosoisea* L.		Y
French, Snake, Wing (bean)	*Phaseolus vulgarisL*.	Y	Y
Gerbera	*Gerbera* spp. [Asteraceae]		Y
Helitrope (weed)	*Heliotropium ventricosum* R.Br.		Y
Hibiscus	*Hibiscus* spp.		Y

Host Common Name	Host Scientific Name	Fruit and Vegetables	Plants and Flowers
Honeydew Melon, Hami Melon, Rockmelon, Green Delicia Melon, Asian melon, Hairy melon	*Cucumis melo* L.	Y	Y
Kang kong	*Ipomoea aquatica* Forssk.	Y	
Leafy vegetables		Y	Y
Mango	*Mangifera indica* L.		Y
Okra	*Abelmoschus esculentus* L. Moench.	Y	Y
Oldenlandia (weed)	*Hedyotis corynbosa* L. Lam.		Y
Orchids	Orchidaceae family		Y
Peach	*Prunus persica* L. Batsch.		Y
Peas	*Pisum* spp.	Y	
Pennywort	*Centella asiatica* L.		Y
Pigweed (weed)	*Portulaca* spp.		Y
Plum	*Prunus* spp.		Y
Potato	*Solanum tuberosum* L.		Y
Pumpkin, Squash, Zucchini, Gourds (Bitter Gourd)	*Cucurbita* spp.	Y	Y
Purpletop chloris (weed)	*Chloris inflata* Link.		Y
Rice flat sedge (weed)	*Cyperus iria* L.		Y
Sesame	*Sesamum indicum* L.	Y	Y
Silverbeet	*Beta* spp.	Y	Y
Smooth luffa	*Luffa cyclindrica* Mill.	Y	
Soybean	Glycine max (L.) Merr.	Y	
Spade flower (weed)	*Hybanthus enneaspermus* (L.) F.Muell.		Y
Spinyhead sida	*Sida acuta* Burm.f.		Y
Sunflower	*Helianthus annus* L.		Y
Tobacco	*Nicotiana tabacum* L.		Y
Tomato	*Lycopersicon esculentum* L.	Y	Y
Turkey Berry (Cherry eggplant)	*Solanum torvum* L.	Y	Y
Water grass (weed)	*Bulbostylis barbata* (Rottb.) C.B.Clarke.		Y
Watermelon	*Citrullus lanatus* (Thunb.).	Y	Y
Wild gooseberry	*Physalis minima* L.		Y

4.4 Spiralling White Fly (SWF) and Western Flower Thrip (WFT) Host List

Host Common Name	Scientific Name	Fruit and Vegetables	Plants and Flowers
Abiu	*Pouteria caimito* (Ruiz and Pavon) Radlk.		SWF
Acacia	*Acacia* spp.		SWF
Acalypha	*Acalypha* spp.		SWF
Acerola	*Malpighia glabra* (Millsp.). *M.glabra* x *M.punicifolia* (L.) (Barbados cherry)		SWF
Alders	*Alnus* spp.		WFT, SWF
Almond (With Husk)	*Prunus amygdalus* Batsch, *Prunus dulcis* (Mill) D. A. Webb.		WFT, SWF
Amaranth	*Amaranthus* spp.		WFT, SWF
American Agave	*Agave americana* L.		WFT, SWF
Aniseed (Fresh Herb)	*Pimpinella anisum* L.	WFT, SWF	WFT, SWF
Apple of Peru	*Nicandra physalodes* L. Gaertn.		WFT, SWF
Apple, crab apple	*Malus domestica* Borkh L. *Malus sylvestris* Mill. (crab apple)		WFT, SWF
Apricot	*Prunus armeniaca* L.		WFT, SWF
Arrowhead	*Sagittaria latifolia* Willd.		WFT, SWF
Arrowroot	*Maranta arundinacea* L.	With top-WFT	WFT, SWF
Artichoke (Chinese)	*Stachys affinis* Bunge.		WFT, SWF
Artichoke (Globe)	*Cynara cardunculus* L.	WFT	WFT, SWF
Artichoke (Jerusalem)	*Helianthus tuberosus* L.		WFT, SWF
Ash	*Fraxinus* spp.		WFT
Asian herbs			WFT, SWF
Asparagus	*Asparagus officinalis*.	WFT	WFT, SWF
Atemoya	*Annona* x *atemoya* Mabb.		SWF
Avocado	*Persea americana* Mill.		WFT, SWF
Azalea	*Rhododendron* spp.		WFT, SWF
Babaco	*Carica pentagona* Heilb.		WFT, SWF
Bamboo	Poaceae family		WFT, SWF
Banana	*Musa* spp.		WFT, SWF
Basil	*Ocimum basilicum*		WFT, SWF
Beans	Fabaceae family		WFT, SWF
Beech	*Fagus* spp.		
Beetroot	*Beta vulgaris* L.	With top-WFT	WFT, SWF
Belladonna	*Atropa belladonna* L.		WFT, SWF
Berry (Blueberry, Bilberry, Cranberry, Huckleberry)	*Vaccinium* spp.		WFT, SWF

Host Common Name	Scientific Name	Fruit and Vegetables	Plants and Flowers
Berry (Raspberry, Thornless blackberry, Boysenberry)	*Rubus* spp.		WFT, SWF
Betel Pepper	*Piper betle* L.		WFT, SWF
Birches	*Betula* spp.		WFT, SWF
Black Nightshade	*Solanum* spp.		WFT, SWF
Black Sapote	*Diospyros ebenum* J. König ex Retz. *Diospyros digyna*.		WFT, SWF
Blue petrea	*Petraea volubilis*.		SWF
Bouganvillea	*Bouganvillea* spp.		SWF
Bourbon Orange	*Ochrosia elliptica* Labill.		WFT, SWF
Breadfruit	*Artocarpus altilis* (Parkinson) Fosb.		SWF
Broccoli, brussel sprouts	*Brassica* spp.	WFT	WFT, SWF
Buckthorn	*Rhamnus* spp.		WFT
Bunium	*Bunium* spp.		WFT, SWF
Buttonbush	*Cephalanthus occidentalis* L.		WFT
Cabbage	*Brassica* spp.	WFT	WFT, SWF
Caladium	*Caladium* spp.		SWF
Calamondin Orange	X *Citrofortunella mitis*.		WFT, SWF
Californian Christmas Berry	*Heteromeles arbutifolia* (Lindl.) M.Roem.		WFT
Camphor Laurel	*Cinnamomum camphora* L. Sieb.		WFT, SWF
Canna Lilly	*Canna* spp.		WFT, SWF
Cape Gooseberry	*Physalis peruviana* L.		WFT, SWF
Capsicum	*Capsicum* spp.		WFT, SWF
Carambola (Star Fruit)	*Averrhoa carambola* L.		WFT, SWF
Carrot	*Daucus carota* L.	With top WFT	WFT, SWF
Cashew (Fresh)	*Anacardium occidentale* L.		WFT, SWF
Cassava	*Manihot esculenta* Crantz.		WFT, SWF
Cauliflower	*Brassica* spp.	WFT	WFT, SWF
Cedars	*Cedrus* spp.		WFT, SWF
Celery, celeriac	*Apium graveolens* L., *Apium graveolens rapaceum* L.	With top-WFT	WFT, SWF
Centro	*Centrosema pubescens* Benth.		SWF
Cherry (Sour and Sweet Cherry)	*Prunus avium* L., *Prunus cerasus* L.		WFT, SWF
Cherry Tomato	*Solanum lycopersicum* L.		WFT, SWF
Chestnuts	*Castanea* spp.		WFT, SWF
Chick pea	*Cicer arietinum* L.		WFT, SWF

Host Common Name	Scientific Name	Fruit and Vegetables	Plants and Flowers
Chilli	*Capsicum* spp.		WFT, SWF
Chinese Lantern	*Physalis alkekengi* L.		WFT, SWF
Chokeberry	*Aronia* spp.		WFT
Choko	*Sechium edule* L.		WFT, SWF
Chrysanthemum Daisy	*Chrysanthemum* spp.		WFT, SWF
Citron (Tangor)	*Citrus medica* L.		WFT, SWF
Coconut	*Cocus nucifera* L.		WFT, SWF
Coffee	*Coffea* spp.		SWF
Coleus	*Coleus* spp., *Solenostemon* spp.		SWF
Comfrey	*Symphytum* spp.		WFT, SWF
Coral creeper	*Barleria repens* L.		SWF
Coriander	*Coriandrum sativum*		WFT, SWF
Corn (Maize, Sweet Corn and Popcorn)	*Zea mays* L.	With Husk WFT	WFT, SWF
Cotoneaster	*Cotoneaster* spp.		WFT, SWF
Cotton	*Gossypium* spp. L.		WFT, SWF
Cowpea	*Vigna* spp.		WFT, SWF
Cranberries	*Oxycoccus* spp.		WFT, SWF
Crape Myrtle	*Lagerstroemia* spp.		WFT
Crotolaria	*Crotolaria* spp.		SWF
Cucumber	*Cucumis sativus* L.		WFT, SWF
Custard Apple	*Annona* spp.		WFT, SWF
Dahlias	*Dahlia* spp.		WFT, SWF
Daikon	*Raphanus* spp.	With top-WFT	WFT, SWF
Daphne	*Daphne* spp.		WFT, SWF
Date (Fresh)	*Phoenix dactylifera* L.		WFT, SWF
Daylily Plants	*Hemerocallis* spp.		SWF
Dragonfruit (Pitaya)	*Hylocereus* spp.		SWF
Durian	*Durio zibethinus* spp.		SWF
Eggplant (Aubergine)	*Solanum melongena* L.		WFT, SWF
Elderberry	*Sambucus* spp.		WFT, SWF
Elms	*Ulmus* spp.		WFT, SWF
Endive	*Cichorium endivia* L.	WFT	WFT, SWF
Eucalyptus	*Eucalyptus* spp.		WFT, SWF
Eugenia	*Eugenia* spp.		SWF
Euphorbias (Poinsettia)	*Euphorbia* spp.		WFT, SWF
False Azalea	*Menziesia ferruginea* Sm.		WFT, SWF

Host Common Name	Scientific Name	Fruit and Vegetables	Plants and Flowers
Feijoa (Pineapple Guava)	*Acca sellowiana* (O Berg) Burret.		WFT, SWF
Fig	*Ficus* spp. L.		WFT, SWF
Firethorn	*Pyracantha* spp.		WFT
Frangipani	*Plumeria* spp.		SWF
Galangal	genera *Alpinia* or *Kaempferia*.		WFT, SWF
Gerbera	*Gerbera* spp.		WFT, SWF
Ginger (Wild Ginger)	*Zingiber officinale*.		WFT, SWF
Golden cane plam	*Chrysalidocarpus lutescens*.		SWF
Granadilla	*Passiflora quadrangularis* L. Mill.		WFT, SWF
Grape	*Vitis* spp.		WFT, SWF
Grapefruit	*Citrus paradise* L.		WFT, SWF
Ground Orchid	*Spathoglottis plicata*.		SWF
Groundcherry	*Physalis* spp.		SWF
Guava	*Psidium* spp.		WFT, SWF
Hawthorn	*Crataegus* spp.		WFT
Heliconia	*Heliconia* sp		WFT, SWF
Hemlocks	*Tsuga* spp.		WFT
Herbs			WFT, SWF
Hibiscus, Rosemallows	*Hibiscus* spp.		WFT, SWF
Hickory	*Carya* spp.		WFT
Holly	*Ilex* spp.		WFT
Hollyhocks	*Alcea* spp.		WFT
Horseradish	*Armoracia rusticana, syn*. *Cochlearia armoracia* P.G. Gaertn., B. Mey. & Scherb.	With tops-WFT	WFT, SWF
Hugeria	*Hugeria* spp.		WFT
Hydrangeas	*Hydrangeas* spp.		WFT
Impatiens	*Impatiens* spp.		WFT
Indian mast tree	*Polyalthia longifolia* var. *pendula Sonn*.		SWF
Indian Potato	*Claytonia* spp.		WFT
Jaboticaba	*Myrciaria cauliflora* L.		SWF
Jack Fruit	*Artocarpus heterophyllus* Lam.		SWF
Japonica	*Chaenomeles* spp.		WFT
Jew Plum	*Spondias cytherea* L.		WFT
Ju Jube	*Ziziphus jujube* (L.) H. Karst.		SWF
Juneberry	*Amelanchier* spp.		WFT
Kale	*Brassica* spp.	WFT	WFT, SWF
Kiwano	*Cucumis metuliferus* E.Mey.		WFT

Host Common Name	Scientific Name	Fruit and Vegetables	Plants and Flowers
Kiwifruit	*Actinidia deliciosa* C.F.Liang & A.R.Ferguson.		WFT, SWF
Kohl Rabi	*Brassica* spp.	WFT	WFT
Kumquat	*Fortunella japonica*, *F. margarita* (Thunb.).		WFT, SWF
Larches	*Larix* spp.		WFT
Leafy Vegetables (not otherwise specified)		WFT	WFT, SWF
Lemon	*Citrus* spp.		WFT, SWF
Lettuce	*Lactuca sativa* L.	WFT	WFT, SWF
Leucothoe	*Leucothoe* spp.		WFT
Lilacs	*Syringa* spp.		WFT
Liliums	*Lilium* spp.		WFT, SWF
Lime	*Citrus* spp.		WFT, SWF
Liquidambar	*Liquidambar* spp.		WFT, SWF
Longan	*Euphoria longan* Steud., *Dimocarpus longan* Lour.		WFT, SWF
Loquat	*Eriobotrya japonica* (Thunb.) Lindl.		WFT, SWF
Lotus Roots	*Nelumbo nucifera* Gaertn.		WFT, SWF
Lupin	*Lupinus* spp.		WFT, SWF
Lychee	*Litchi chinensis* Sonn.		WFT, SWF
Lyonia	*Lyonia* spp.		WFT, SWF
Macadamia	*Macadamia* spp.		WFT, SWF
Madeira Vine	*Anredera cordifolia* (Ten.) Steenis.		WFT, SWF
Magnolias	*Magnolia* spp.		WFT, SWF
Malanga	*Xanthosoma* spp.		WFT, SWF
Mandarin	*Citrus reticulata* Blanco.		SWF
Mango	*Mangifera indica* L.		WFT, SWF
Mangosteen	*Garcinia mangostana* L.		WFT, SWF
Maples	*Acer* spp.		WFT, SWF
Marrow	*Cucurbita* spp.		WFT, SWF
Mashua	*Tropaeolum tuberosum* Ruíz and Pavón.		WFT, SWF
Medlar	*Mespilus* spp.		WFT, SWF
Melons	*Cucumis* spp.		WFT, SWF
Milkweed	*Euphorbia heterophylla* L.		SWF
Millets	All grain producing species in the family Poaceae		WFT, SWF
Mint	*Menth* sp.		WFT, SWF
Miracle Fruit	*Synsepalum dulcificum* (Schumach. & Thonn.) Daniell.		SWF
Mock Orange	*Philadelphus* spp.		WFT, SWF
Monstera	*Monstera* spp.		WFT, SWF

Host Common Name	Scientific Name	Fruit and Vegetables	Plants and Flowers
Mulberry	*Morus nigra* L.		WFT, SWF
Mung Bean	*Vigna radiata* (L.) R. Wilczek.		WFT, SWF
Murraya	*Murraya* spp.		SWF
Nashi (Apple/ Pear)	*Pyrus* spp.		WFT, SWF
Nectarine	*Prunus persica* var. *nectarina* (L.) Batsch.		WFT, SWF
Oak	*Quercus* spp.		WFT, SWF
Oca	*Oxalis tuberosa* Molina.		WFT, SWF
Okra	*Abelmoschus esculentus* (L.) Moench.		SWF
Olive	*Olea europaea* L.		WFT, SWF
Onion (Including spring onion, shallot, chives, leek, garlic)	*Allium* spp.	With top-WFT	WFT, SWF
Orange	*Citrus* spp.		WFT, SWF
Orchids	Orchidaceae family		WFT, SWF
Papaya (Pawpaw)	*Carica papaya* L.		WFT, SWF
Parsley	*Petroselinum crispum*		WFT, SWF
Parsnip	*Pastinaca sativa* L.	With top-WFT	WFT, SWF
Passionfruit	*Passiflora* spp.		WFT, SWF
Pea	*Pisum sativum* L.	WFT	WFT, SWF
Peach	*Prunus persica* (L.) Batsch.		WFT, SWF
Peacharine	*Prunus persica* var. *nucipersica*.		WFT, SWF
Peanut	*Arachis hypogaea* L.		WFT, SWF
Pear	*Pyrus communis* L.		WFT, SWF
Peonies	*Paeonia* spp.		WFT, SWF
Peperomia	*Peperomia* spp.		WFT, SWF
Pepino	*Solanum muricatum* L.		WFT, SWF
Pernettya	*Pernettya* spp.		WFT, SWF
Persimmon	*Diospyros* spp.		WFT, SWF
Petunias	*Petunia* spp.		WFT, SWF
Photinia	*Photinia* spp.		WFT
Phyillrea	*Phyillrea* spp.		WFT
Pieris	*Pieris* spp.		WFT, SWF
Pineapple	*Ananus comosus* (L.) Merr.		SWF
Pines	*Pinus* spp.		WFT, SWF
Plantain	*Musa* x *paradisiaca* Colla.		WFT, SWF
Plants (not specified elsewhere)			WFT, SWF
Plum	*Prunus* spp.		WFT, SWF
Pod Mahogany	*Afzelia quanzensis* Welw.		WFT, SWF
Poinsettia	*Euphorbia pulcherrima* Willd. ex Klotzsch.		SWF

Host Common Name	Scientific Name	Fruit and Vegetables	Plants and Flowers
Pomegranate	*Punica granatum* L.		WFT, SWF
Poplars	*Populus* spp.		WFT, SWF
Potato	*Solanum* spp.		WFT, SWF
Prickly Pear	*Opuntia* spp.		SWF
Privet	*Ligustrum* spp.		WFT, SWF
Pseuderanthemum	*Pseuderanthemum* spp.		SWF
Pumpkin (All Types)	*Cucurbita* spp.		WFT, SWF
Pyrethrum	*Chrysanthemum* spp.		WFT, SWF
Quince	*Cydonia oblonga* Mill.		WFT, SWF
Radish	*Raphanus sativus* L.	With top-WFT	WFT, SWF
Rambutan	*Nephelium lappaceum* L.		WFT, SWF
Rangoon creeper	*Quisqualis indica*.		SWF
Redbuds	*Cercis* spp.		WFT
Rhubarb	*Rheum* spp.	With top-WFT	WFT, SWF
Rice	*Oryza sativa* L., *Oryza glaberrima* Steud.		WFT
Rollinia	*Rolliana* spp.		SWF
Rosemary	*Rosmarinus officinalis*		WFT, SWF
Roses	*Rosa* spp.		WFT, SWF
Rowan	*Sorbus* spp.		WFT, SWF
Sage	*Salvia officinalis*		WFT, SWF
Salsify	*Tragopogon* spp.		WFT, SWF
Santol	*Sandoricum* spp.		WFT, SWF
Sapodilla	*Manilkara zapota* (L.) P.Royen.		SWF
Sapote	Sapotaceae family		SWF
Sesame	*Sesamum indicum* L.		WFT, SWF
Silverbeet	*Beta* spp.	WFT, SWF	WFT, SWF
Snapdragons	*Antirrhinum* spp.		WFT, SWF
Snowflake	*Euphorbia leucocephala*.		SWF
Sorghum	*Sorghum* spp.		WFT, SWF
Soursop (Guanabana)	*Annona muricate* L.		SWF
Soyabean	*Glycine max* L. Merr.		WFT, SWF
Spinach	*Spinacia oleracea* L.	WFT, SWF	WFT, SWF
Spruce	*Picea* spp.		WFT, SWF
Star Apple	*Chrysophyllum cainito* L.		SWF
Strawberry	*Fragaria* x ananassa [Duchesne]		WFT, SWF
Sunflower	*Helianthus annuus* L.		WFT, SWF
Swede	*Brassica* spp.	With top-WFT	WFT, SWF
Sweet Potato	*Ipomoea batatas* (L.) Lam.		WFT, SWF

Host Common Name	Scientific Name	Fruit and Vegetables	Plants and Flowers
Tahitian Lime	*Citrus latifolia* Tanaka.		SWF
Tamarillo (Tree tomato)	*Cyphomandra betacea* Cav.		WFT, SWF
Tangelo	*Citrus* x *tangelo* J.W. Ingram & H.E. Moore.		WFT, SWF
Tangerine	*Citrus* x *tangerine* Tanaka.		WFT, SWF
Taro	*Colocasia esculenta* (L.) Schott.		SWF
Thyme	*Thymus valgaris*		WFT, SWF
Tobacco	*Nicotiana* spp.		WFT
Tomato	*Lycopersicon esculentum* L.		SWF
Tropical Almond	*Terminalia catappa* L.		SWF
Turmeric	*Curcuma longa* L.		WFT, SWF
Turnip	*Brassica* spp.	With top-WFT	WFT, SWF
Ulluco	*Ullucus tuberosus* Caldas.		WFT, SWF
Vegetables (not otherwise specified)			WFT, SWF
Walnut	*Juglans* spp.		WFT, SWF
Wattles	*Acacia* spp.		WFT, SWF
Wax Jambu	*Syzygium jambolana* (Blume) Merrill & Perry.		SWF
Weeping rosewood	*Pterocarpus indicus* Willd.		SWF
White Sapote	*Casimiro edulis* La Llave.		SWF
Willows	*Salix* spp.		WFT, SWF
Witlof	*Cichorium intybus* L.	WFT	WFT, SWF
Yacon	*Smallanthus* sonchifolius (Poeppig and Endlicher) H. Robinson.		WFT, SWF
Yam	*Dioscorea* spp.		WFT, SWF
Yew	*Taxus* spp.		WFT, SWF
Zingiber	*Zingiber* spp.		
Zucchini	*Cucurbita pepo* L.		WFT, SWF