LORD HOWE ISLAND BOARD
LORD HOWE ISLAND
PLANT IMPORTATION STRATEGY
JULY 2015

Contents

Executive Summary

The Lord Howe Island Plant Importation Strategy 2013 (the Strategy) aims to protect and mitigate against the risk of invasive plants and pathogens that may threaten the island's biodiversity, agricultural capacity, health and well being and economy. The review of the Strategy is identified as a priority under the Lord Howe Biodiversity Management Plan 2007 and is an important component of the LHIB Quarantine Strategy 2003. The Strategy addresses the Lord Howe Island Board's (LHIB's) legislative and management responsibilities to protect the islands World Heritage values.

The Strategy provides background information on the biosecurity risks associated with the importation plant and plant materials. The risk of the exotic fungus myrtle rust *Puccinia psidii sens. lat.* still remains high, despite Lord Howe Island (LHI) remaining myrtle rust free. Plants from the Myrtaceae family are prohibited from import, and risk management procedures apply for the import of other plants and plant materials.

This Strategy applies to plants and plant materials (including cut flowers) that may be imported by sea freight, air, by post and in passenger luggage. Approval is required from the LHIB to import permissible species. This requires that an 'Intent to Import Form and myrtle rust checklist' to be submitted to the LHIB. Only plants or plant materials listed as permissible can be imported. New plant species not known on the island require a Weed Risk Assessment (WRA) to determine their potential to become a weed and ascertain their suitability for import. No application is required to import clean and packaged seeds of listed permissible species or any fruit and vegetables (except Myrtaceae) for consumption. Importation forms, lists of 'permissible plant species' and 'prohibited plant species' are provided in the appendices.

The Strategy has limitations with the Boards capacity to intercept undeclared imports. Ongoing community engagement and consultation with the nursery and cut flower industry is required to increase awareness of the plant importation protocols pertaining to LHI. The strategy will remain adaptive to address new biosecurity risks associated with plant imports.

1. Introduction

The Lord Howe Island Plant Importation Strategy 2013 (the Strategy) aims to protect Lord Howe Island (LHI) against the risks that may arise from introduced plants and pathogens entering, establishing and spreading on LHI. LHI is known to be free of many of the pests and diseases that occur on mainland Australia–and we intend to keep it that way.

The Lord Howe Island Board (LHIB) has developed a Plant Importation Policy to guide the importation of plants and plant material to LHI (Appendix 1), which relies upon a science-based risk assessment process and establishes clear, consistent management objectives and elements to manage these risks.

The LHIB Plant Importation Policy and Strategy 2013 were adopted by the Lord Howe Island Board at the May 2013 Board meeting subject to investigating options to "*facilitate the importation of plants and reduce the financial burden on importers without markedly increasing the risk of disease"*. A review of procedures and a risk assessment were undertaken to assess the risk of the introduction of myrtle rust *Puccinia psidii* to LHI. A list of recommended plant importation protocols to reduce the risk of myrtle rust was adopted by the Board in September 2013.

The Plant Importation Policy (2013) adopts an Appropriate Level of Protection (ALOP) to deliver a high level of sanitary or phytosanitary protection aimed at reducing risk to a low level , but not to zero. To reduce the risk of introduction of myrtle rust from import of non myrtaceous nursery stock to LHI, an ALOP that achieves a moderate level of sanitary or phytosanitary protection has been adopted. These were based on careful consideration of the likelihood and consequences of pest introduction, and the implications of these restrictions on the community and trade on LHI. It acknowledges that myrtle rust could be imported through non plant material such as clothing or general freight that has been in contact with myrtle rust spore.

The Plant Importation Policy and Strategy are based on the principle that the most cost-effective means of managing weeds, plant pests and pathogens is to prevent their introduction and establishment in the first instance. This requires a collaborative effort between the LHIB, Commonwealth and State government agencies, suppliers, transport companies and the community.

2. Background

The introduction, establishment and spread of introduced plants and plant diseases present a major threat to the environment and economy of LHI (Biodiversity Management Plan 2007). LHI is particularly vulnerable to the impacts of new pest introductions due to its resident human population and associated trade/transport routes, its small size, long term geographic isolation and resultant finely adapted ecology.

Weed invasion is identified as a major threat to the biodiversity of LHI, and affects all vegetation communities. The LHIB has developed a Weed Management Strategy (2006) which:

a) Identifies the level of weed risk to LHI; and
b) Provides a strategy for the eradication of at least 25 priority invasive species (based on threat) and recommendations for an adaptive and integrated approach to weed management.

Over $ 4.5 million dollars (as of November 2013) has been invested towards the eradication of key weed species on LHI since the project commenced in 2004. There are 241 species of native vascular

plants on LHI, of which 115 (47%) are endemic and 10 are listed as threatened. Native plants are heavily outnumbered by introduced plant species, with over 670 introduced plants recorded from the island, of which 271 possess invasive attributes and are defined as exotic weeds in the LHI Biodiversity Management Plan 2007 (BMP). Many ornamental plants in gardens on LHI are recognised as sleeper weeds that are yet to demonstrate their invasive capacity in the local environment.

Preventing the introduction of any new or potential weeds, pests and pathogens and targeting the removal of newly emerging sleeper weeds or plant pathogens before they become established is cost effective and is critical to protecting the islands biodiversity, agriculture and tourism.

To address the threat posed by plant imports, the LHIB initially adopted a LHI Plant Importation Policy in March 2004. This policy introduced:

a) The requirement to obtain approval from the LHIB for all proposed plant imports (except seeds of approved vegetable and flowers);
b) The requirement for a Weed Risk Assessment to be undertaken for all new plants to the Island; and
c) Procedures for the inspection and clearance of imported plants and plant material.

The LHIB Plant Importation Policy 2004 was revised in 2013 to incorporate newly identified weeds and risk pathways, address emerging risks of plant pathogens such as myrtle rust and to improve quarantine measures.

The LHI Plant Importation Policy and Strategy 2013 aims to protect the islands economic capacity and sustainability while maintaining the integrity of the natural environment which provides the foundation for the island's tourism industry and economy. The importation of plants and plant material represents a high risk entry pathway for plant pathogens. Measures to mitigate the risk of plant pathogens being transported with plants or plant material have been incorporated into the Policy and Strategy 2013. The Strategy 2013 applies a range of measures that are the least trade restrictive available to achieve our appropriate level of protection (ALOP).

The root rot fungal disease *Phytophthora cinnamomi* has been identified as a major threat to the vegetation of LHI. In 2003 it was detected in an orchard at Mulley Drive at the south of the Island and has since been eradicated through targeted treatment with fungicides. The site is monitored every few years. This disease may be reintroduced to LHI through infected soil on the shoes or hiking poles of visitors or returning residents, on imported plants and plant products and on used garden and sports equipment.

LHI is currently myrtle rust free. All of LHI's endemic Myrtaceae plant species are considered at risk from myrtle rust. Four out of five of LHI's endemic Myrtaceae plant species have tested susceptible to the rust in laboratory conditions (Morin 2011- unpublished report). *Leptospermum polygalifolium*, the mainland equivalent to the LHI endemic *Leptospermum polygalifolium* subsp *howense* has tested susceptible to the rust (Morin *et al* 2011) and is regarded as a reliable surrogate to the LHI species. The impact of myrtle rust to the islands terrestrial ecosystems is of concern as the endemic Myrtaceae species are dominant in many of the plant communities on LHI including the Critically Endangered Ecological Community – Gnarled Mossy Cloud Forest.

Whilst the risk of introduction of myrtle rust via spores through people movement is considered as a medium risk, the risk through importation of nursery stock and plants is high and can be effectively managed to reduce risks. New South Wales, Victoria and Queensland state governments are no

longer pursing the eradication of Myrtle Rust which potentially increases the risk of spread of spores through nursery stock.

The following recommendations have been incorporated into the Plant Importation Policy and Strategy 2013 to reduce the risk of the introduction of myrtle rust to LHI:

a) Seek gazettal of LHI as a myrtle rust protected area under the NSW Plant Diseases Act 1924;
b) The import of plants and plant material from the Myrtaceae family is prohibited;
c) An appropriate Level of Protection (ALOP) of 'Moderate' will be adopted; (refer to Risk Assessment - Table 2) to reduce the risk of introduction of myrtle rust from import of non myrtaceous nursery stock to LHI;
d) Plant imports are prohibited from nurseries unless they hold NIASA accreditation (or equivalent), or a current Myrtle Rust Management Plan or operate under ICA 42;
e) Approval from the LHIB is required to import all plants and plant materials to LHI except for fruit and vegetables for consumption (except Myrtaceae) and approved flower and vegetable seeds supplied in clean packaging, as per LHIB Plant Importation Policy. Approval requires submission of the following 2 forms prior to import:
    - 'Notice of Intention to Import Plants Form' (to be completed by the importer) and;
    - 'LHI Plant Phytosanitary and Myrtle Rust Checklist' (to be completed by the supplier);
f) Cut flowers/bouquets containing Myrtaceous plant material will be contained and destroyed. The risk of import of Myrtaceous plant material in flower arrangements is very high. Cut flowers/bouquets must be kept at the airport and inspected by a quarantine officer prior to release;
g) Implement a surveillance and post-entry monitoring program, including the investigation of a real time myrtle rust detector (i.e. PCR-based DNA test for myrtle rust detector) currently in the final stages of development in New Zealand;
h) Continue to undertake ongoing engagement and consultation with the community, nursery and cut flower industry; and
i) Train LHIB staff in myrtle rust detection and treatment procedures.

It should be noted that there is no longer a requirement to treat non- Myrtaceous plants prior to import provided appropriate accreditation and management plans are in place. However, the pre-entry fungicide treatment of nursery stock is encouraged.

Risk analysis and biosecurity protocols for the revised Policy and Strategy are drawn from best practise systems adopted by Tasmania and Western Australia which have commonality to LHI owing to their relative isolation and requirements for certain pest and disease free status.

3. Objective

The Policy and Strategy objectives are "to minimise the risk on the economy and environment of LHI from the introduction of non-native plants, plant material and exotic plant diseases and pathogens."

4. Scope

The Policy and Strategy relates specifically to the importation of plants, plant material, plant diseases and pathogens (such as phytophthora and myrtle rust).

Under this Strategy plants refer to:

a) Potted plants;
b) Plant material that is intended for the use of growing e.g. seeds, bulbs, cuttings, and root stock (bare rooted);
c) Cut flowers and foliage including bouquets;
d) Stock feed/hay; and
e) Mulch.

"Plant" can be defined as "the whole or any part of any tree, shrub, fern, creeper, vine, palm, plant, flower, seed, root, herbage or other vegetative cover" as described in the *Lord Howe Island Regulation, 2014.*

The Policy and Strategy does not apply to the importation of:

a) Fruit and vegetables for consumption (except prohibited species, including all Myrtaceae);
b) Wood products such as timber, crates and furniture; or
c) Compost and potting mix products certified free of soil in accordance with Australian Standard ISO 5 ticks.

Relevant Australian Standards for potting mixes is AS 3743 and for composts and soil conditioners (including mushroom kits) is AS 4454.

5. Legislation, Policy and Planning

5.1 Legislation

The primary piece of legislation regulating plant imports to LHI is the *Lord Howe Island Regulation, 2014*. Plant biosecurity is also supported by the following State and Commonwealth Statutes.

5.1.1 State Legislation

Lord Howe Island Act 1953

The *Lord Howe Island Act 1953* provides for the care, control and management of LHI to protect its unique values and the interests of its residents. The Act contains provisions for the management, protection, restoration, enhancement and conservation of the Island's environment in a manner that recognises the World Heritage values of LHI. This Act is administered by the LHIB.

Lord Howe Island Regulation 2014

The *Lord Howe Island Regulation 2014* requires approval of the LHIB for the importation of seeds, plants or any part of a seed or plant to the Island (Clause 61). Importation of seeds and plants without approval may incur a maximum penalty of 50 penalty units. Any seed, plant or plant material brought to the Island in contravention of this requirement may be seized by the LHIB and destroyed (Clause 63).

Noxious Weeds Act 1993

The NSW *Noxious Weeds Act 1993* provides for the identification, classification and control of noxious weeds in New South Wales. Declaration of 3weeds is by way of a Weed Control Order and is published in the Government Gazette.

Up to 65 weeds are declared noxious for the Lord Howe Island Board Control Area, with an additional 56 species that are declared state wide. The Act outlines five control categories from prohibition of sale and trade to enforced control. The Act provides for the review of noxious weed declarations every five years, based on a WRA matrix aligned to the Act's control categories. The Act provides a mechanism for the LHIB to list introduced plants that have demonstrated a level of invasiveness and enforce their removal or management. This may include plants that have been brought to the island prior to the enforcement of the Plant Importation Policy, illegally or through an earlier approval process.

Threatened Species Conservation Act 1995

The NSW Threatened Species Conservation Act 1995 (TSC Act) lists Key Threatening Processes (KTPs) that impact on threatened species and their habitat. Relevant KTP's that apply to Plant Importation on LHI include, but are not limited to:

a) Infection of native plants by *Phytophthora cinnamomi*;
b) Introduction and establishment of Exotic Rust Fungi of the order *Pucciniales* pathogenic (Myrtle Rust) on plants of the family Myrtaceae;
c) Invasion and establishment of exotic vines and scramblers;
d) Invasion and establishment of Scotch Broom (*Cytisus scoparius*);
e) Invasion, establishment and spread of Lantana (*Lantana camara*);
f) Invasion of native plant communities by African *Olive Olea europaea* L. subsp. *cuspidata*;
g) Invasion of native plant communities by *Chrysanthemoides monilifera;*
h) Invasion of native plant communities by exotic perennial grasses; and
i) Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants.

Plant Diseases Act 1924

The NSW Plant Diseases Act 1924 has provisions that regulate the importation of listed plants and plant diseases or pests into NSW (or into any specified portion thereof) and have powers to control the pests should they become established. This Act is administered by the NSW Department of Primary Industries.

Whilst LHI remains free of myrtle rust the LHIB should seek gazettal as a protected area free from myrtle rust under the NSW Plant Diseases Act 1924 through the NSW Department of Primary Industries. Myrtle Rust has been detected along the extent of the east coast of NSW and the restrictions on the import of Myrtaceae species into NSW lifted. It is important that the myrtle rust free status of LHI is widely recognised to improve awareness and compliance with protocols.

5.1.2 Commonwealth Legislation

Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) and the *Quarantine Act 1908

These acts regulate the import of live animals and plants into Australia. The legislation is enforced at Australian borders by the Department of Agriculture Fisheries and Forestry (DAFF) - Biosecurity and the Australian Customs & Border Protection. On LHI, this service was performed by NSW Police, but is currently under review. All plants and fresh produce are to remain on board and visiting yachts continuing in Australia should proceed to a proclaimed port on the Australian mainland for a full inspection and clearance process.

The EPBC Act lists Key Threatening Processes (KTPs) that impact on threatened species and their habitat listed under the EPBC Act. Relevant KTP's that apply to Plant Importation on LHI include (but are not limited to):

a) Dieback caused by the root-rot fungus (*Phytophthora cinnamomi*);
b) Loss and degradation of native plant and animal habitat by invasion of escaped garden; and plants, including aquatic plants.

Actions:

- Review relevant legislation and their effectiveness to control identified risks. Consideration to be given for the declaration of quarantine/biosecurity risk material.
- Review biosecurity arrangements to mitigate risks from international vessels and aircraft to an acceptable level.
- Seek gazettal of LHI as a myrtle rust protected area in NSW under the NSW Plant Diseases Act 1924.

5.2 Policy and Planning

The LHIB has developed a Policy (Appendix 1) for the importation of plants and plant material to LHI, which relies upon a science based risk assessment process and establishes clear, consistent management objectives to manage these risks.

This strategy advises how the LHIB will go about achieving the Policy objectives within an efficient and integrated framework of action.

The introduction, establishment and spread of introduced plants and disease presents a major threat to the environment and economy of LHI and crosses a range of public and private sectors and government agencies. On LHI, biosecurity is routinely addressed under the environment portfolio, but it is recognised that the outcomes of this Strategy will benefit the economy and trade of LHI.

The Plant Importation Strategy 2013 is an important component of the LHI Biosecurity Strategy 2015, the LHI Weed Management Strategy 2006 and the LHI Biodiversity Management Plan (BMP) 2007.

The LHI Biosecurity Strategy (2015) provides a strategic approach to minimise the risk of serious unwanted incursions to protect the island's biodiversity and agricultural assets. LHI has stringent quarantine and monitoring procedures to minimize the risk of serious unwanted incursions. The strategy is currently being reviewed.

The LHI Weed Management Strategy (2006) provides a background on the threats that weeds impose on LHI and outlines a strategic eradication approach to remove key invasive species from the island.

The LHI BMP (2007) is a multi species recovery plan for the LHI Group that identifies actions to be taken to ensure the long-term viability of threatened species and communities of LHI. The LHI BMP 2007 lists 2 actions that relate to the Plant Importation Strategy; Action 1.3 Review the LHI Plant Importation Policy; and Action 1.4 Implement the LHI Plant Importation Policy.

The LHI Plant Importation Strategy 2013 is consistent with the NSW Invasive Species Plan (2008-2015), which aims to "prevent new incursions, contain existing populations and adaptively manage

existing species" with a goal to "foster a cooperative culture where all relevant parties contribute with the aim of minimising the impacts of invasive species in NSW.

This Strategy is also consistent with the NSW Weeds Action Plan (WAP) which plans to ensure local weed control authorities and other stakeholders meet the Invasive Species Plan targets for weed management and comply with the provisions of the NSW *Noxious Weeds Act 1993*.

6. Prevention, Preparedness, Response and Recovery

6.1 Appropriate Level of Protection (ALOP)

The Plant Importation Policy (2013) adopts an Appropriate Level of Protection (ALOP) to deliver a high level of sanitary or phytosanitary protection aimed at reducing risk to a low level , but not to zero. To reduce the risk of introduction of myrtle rust from import of non myrtaceous nursery stock to LHI, an ALOP that achieves a moderate level of sanitary or phytosanitary protection has been adopted. These were based on careful consideration of the likelihood and consequences of pest introduction, and the implications of these restrictions on the community and trade on LHI. It acknowledges that myrtle rust could be imported through non plant material such as clothing or general freight that has been in contact with myrtle rust spore.

6.2 Risk Analysis

Risk analysis is undertaken using an established Weed Risk Assessment (WRA) system for proposed imports of new plants that are not listed as permitted or prohibited. For other plant products a risk evaluation matrix is used (Refer Table 1), which enables consistent, semi-quantitative and repeatable processes to establish minimum requirements for the importation of a commodity/plant product.

In accordance with the ALOP, this strategy requires that for any potential disease/pest, one of three criteria must be met before the importation of a commodity/plant product will be permitted:

a) The material/commodity is assessed as not containing a potential pathogen/pest of concern; OR
b) The risk of the material/commodity as containing a pest plant is assessed as a "low risk" (acceptable without additional risk management) or lower on the risk evaluation matrix and for the pathogen myrtle rust is assessed as a "moderate risk"; OR
c) "Risk management measures" are implemented to reduce the risk estimate for the disease/pest associated with a particular commodity so that it results in a "very low risk" for plants and "moderate" for myrtle rust or lower on the risk evaluation matrix.

Table 1: Risk Estimation Matrix

Used by Biosecurity Australia (Department of Primary Industries, Parks, Water and Environment, 2001). Risk level of below 'Low' satisfies Lord Howe Island's Appropriate Level of Protection (ALOP) for plants and "Moderate" satisfies Lord Howe Island's ALOP for Myrtle Rust.

		CONSEQUENCES OF ENTRY, ESTABLISHMENT & SPREAD					
		Negligible Impact	**Very Low**	**Low**	**Moderate**	**High**	**Extreme Impact**
LIKELIHOOD OF ENTRY, ESTABLISHMENT & SPREAD	**High Likelihood**	Negligible Risk	Very Low Risk	Low Risk	Moderate Risk	High Risk	Extreme Risk
	Moderate	Negligible Risk	Very Low Risk	Low Risk	Moderate Risk	High Risk	Extreme Risk
	Low	Negligible Risk	Negligible Risk	Very Low Risk	Low Risk	Moderate Risk	High Risk
	Very Low	Negligible Risk	Negligible Risk	Negligible Risk	Very Low Risk	Low Risk	Moderate Risk
	Extremely Low	Negligible Risk	Negligible Risk	Negligible Risk	Negligible Risk	Very Low Risk	Low Risk
	Negligible Likelihood	Negligible Risk	Negligible Risk	Negligible Risk	Negligible Risk	Negligible Risk	Very Low Risk

Whilst the import of myrtaceous species is prohibited the LHIB should investigate the feasibility of importing selected Myrtaceous species in accordance with ICA – 42 (Production Nursery Freedom, Inspection and Treatment of Myrtle Rust) and associated Plant Health Assurance Certification (PHAC).

This Strategy recommends the implementation of the following actions to prevent the introduction of pest plants and pathogens on LHI:

Actions:

- Continue to implement protocols to prevent the entry of myrtle rust, *Phytophthora cinnamomi* and other plant pathogens to LHI.
- Introduce minimum standards for importing plants and plant materials to LHI.
- Investigate the feasibility of applying ICA – 42 (Production Nursery Freedom, Inspection and Treatment of Myrtle Rust) and associated Plant Health Assurance Certification (PHAC) for the import of select Myrtaceace species such as Lemon Myrtle *Backhousia citridora* (for culinary purposes). ICA – 42 and PHAC reduces the risk from high to very low.
- Continue to implement the existing risk assessment framework which lists plants that are (i) permitted with approval; (ii) prohibited; or (iii) plants requiring a WRA to determine their suitability for introduction to the island.
- Undertake a review of the permitted and prohibited plant lists, based on risk.
- Maintain a database of all plant imports (approved, prohibited and illegal).

6.3 Potential Pathways for Weeds and Pathogens

The LHI Quarantine Strategy (2003) lists potential pathways for pests and pathogens to the Island, and includes risks associated with domestic and international movement of goods, people, vessels and aircraft. The Strategy also considers risks associated with postal items.

There are a number of risks associated with the movement of people (returning residents and tourists), luggage and freight and risks associated with the importation of livestock, contaminated vehicles, plant and equipment and small vessels. Of recent concern is the risk of introduction of myrtle rust. The risks have been assessed and incorporated into the Plant Importation Policy.

A variety of plant and plant materials are 'intentionally' imported to the island including seeds, bulbs, cuttings, seedlings or potted plants, cut flowers and bouquets, stock feed, jetty poles and mulch. The Policy aims to strengthen systems to manage risks associated with the importation of these materials.

Cooperation in adhering to plant importation restrictions and regulations will be sought from the community, suppliers and stevedores through education, increased compliance and enforcement.

To reduce the risk of incursions of undesirable plants, pest, disease and pathogens there are minimum standards (Section 7.1) and WRA (Section 7.2.3) that apply to plants proposed for importation into LHI.

Action:

- Identify other risk pathways and ensure that systems are in place to effectively control these risks.

7. Process and Procedures

The importation of plants and plant material to LHI (with the exception of approved vegetable and flower seeds) requires prior approval from the LHIB. This includes the submission of Intent to Import Forms and compliance with the Myrtle Rust Checklist (for the importation of nursery stock and bouquets).

Refer to Appendix 2 for the Lord Howe Island Plant Importation Application Process. This provides a schematic diagram of the plant importation process and what you are required to consider if intending to import plants and/or plant material.

7.1 Minimum Standards for the Importation of Approved Plants/Material

a) Approval from the LHIB is not required to import fruit and vegetables for consumption (except for plants from the Myrtaceae family which are prohibited); and clean and packaged 'permissible' flower and vegetable seeds, as per LHIB Plant Importation Policy;
b) Approval from the LHIB is required to import bulbs, cuttings, seedlings, potted plants, cut flowers/bouquets, mulch or fodder and requires submission of a **'Notice of Intention to Import Plants Form/s'** (to be completed by the importer);
c) Living plants (bulbs, cuttings, seedlings and potted plants) also require the completion of the **'LHI Plant Phytosanitary and Myrtle Rust Checklist'** (to be completed by the supplier);
d) The import of plants and plant material from the Myrtaceae family is prohibited;

e) Any import of cut flowers/bouquets containing plant material from the Myrtaceae family will be contained and destroyed. The risk of myrtaceous plant material in flower arrangements is very high. All imports of cut flowers/bouquets must be kept at the airport and inspected by the LHIB quarantine officer prior to release;
f) Myrtle rust has spread along the extent of the east coast of Australia. To reduce the risk of spread of myrtle rust to LHI, the import of nursery stock is only permitted from nurseries that hold NIASA accreditation (or equivalent per Nursery Growers Industry Australia - NGIA), a current Myrtle Rust Management Plan or operate under ICA - 42;
g) The import of soil is prohibited. Plants must be grown in soil-less media (per ICA – 29) or be bare rooted without visible soil around the root system;
h) All plant imports must be transported and contained in new and clean packaging;
i) All plant imports must have their boxes/containers labeled as 'live plants' or 'plant material';
j) All plants must be labeled showing Genus , species, cultivar name that refers to the botanical name on the 'Notice of Intention to Import Plants Form' or invoice;
k) All plant imports must be accompanied by a copy of the consignment order which lists the full botanical name of the imported plant to check against the Approval Letter; and
l) All plant imports must be held for inspection by LHIB Quarantine staff upon arrival and prior to release to the importer at an approved holding site. Approved holding compounds include the Quarantine room at the Jetty building, the hardstand at the Jetty (for large items such as pallets of fruit trees), the luggage hold on the western side of the aerodrome terminal building and the Post Office.

7.2 Approvals and Restrictions

All plants proposed for importation to LHI, with exception of permissible seeds, must be listed on the 'Notice of Intention to Import Plants form' (Appendix 3 - forms 1-3) which must be submitted to the LHIB for assessment prior to importing any plant or plant material. If importing a large number of plants, the species list must be attached to the Import form. The Import forms will help you ascertain whether your proposed importation is classed under one of the following:

a) Prohibited (see Section 7.2.1): This includes, but is not limited to 'Species List 1 and 2' (Appendix 4);
b) Permissible (see section 7.2.2): This includes and is limited to 'Species List 3' (Appendix 5);
c) Weeds Risk Assessment (see section 7.2.3): This includes species not listed as Permissible or Prohibited and requires further assessment. Section 10.1 provides information on fees to undertake a WRA for proposed new plant imports.

Plants can only be imported after the importer has received a letter of approval from the LHIB stating that the plant or plant material is approved for importation to LHI.

7.2.1 Prohibited from Importation

If the plant intended for import is listed as prohibited at Appendix 4 then the applicant is not permitted to import the plant/plant material. Penalties & measures for importing prohibited plants/plant material are discussed in Section 10 of this document. Also refer to the following weeds database www.weeds.org.au/ and www.weeds.org.au/docs/jumping_the_garden_fence.pdf

Plants prohibited from Importation to LHI are listed at Appendix 4 and include all:

Endemic Genera (Appendix 4 - Species List 1)
Plants in the same genus as LHI endemic plants.

Invasive Plants (Appendix 4 - Species List 2).
Any declared Noxious Plant within any Australian jurisdiction.

Plants which have escaped gardens on LHI and plants which are known to be invasive in similar climatic regimes elsewhere.

***Myrtaceae* Family**
Plant material and plants (cut flower, potted plants and mulch) belonging to the Myrtaceae family.

Tea Tree mulch is prohibited.

Palms, Grasses and Ferns
All species of palms (Family *Arecaceae*), Grasses (Family *Poaceae*) and Ferns (Class *Pteridiophyta*)

Fresh and Saltwater Marsh Plants
All species of fresh and saltwater marsh plants (Class *Najadales*)

Marine Plants
All marine algae and seagrasses, including aquarium plants and live plant food material for aquaculture.

7.2.2 Permissible Plants

Permissible Plants include plants that have been imported to LHI, and have not spread locally and are not recognised as weeds elsewhere (in similar climates to LHI) or have been assessed and approved under the WRA system for LHI.

If the plant intended for import is listed as permissible in Appendix 5, then one of two outcomes is possible:

a) If the plant material is seed of a permissible plant species then Board approval is not required and the applicant is not required to submit a Notice of Intention to Import Plants Form. Seeds are restricted to cleaned and packaged seed that are free from pests and diseases.
b) If the plant material is anything other than seed and listed on the permissible list, the applicant is required to submit the Notice of Intention to Import Plants form (Appendix 3 - forms 1-3). This requirement is to ensure that measures to prevent the introduction of pathogens, including myrtle rust and *Phytophthora cinnamomi*, Red Imported Fire Ant, other tramp ant species and other pests and pathogens have been adopted. Restrictions apply to a number of plants listed as permissible. These are listed in Table 2.

Table 2: Restrictions for Specific Plants Listed as Permissible

FRUIT TREES AND VEGETABLES	
Avocado	Avocado trees are susceptible to phytophthora. Avocado trees are only to be supplied by nurseries accredited under the Avocadoes Australia (07 3391 2344) ANVAS scheme as being free from phytophthora and virus tested for Sunblotch viroid. Appropriate documentation will be required prior to permit assessment.
Banana Propagation Material	Banana propagation material can only be supplied from the Macksville, Coffs Harbour District accompanied with a NSW Department of Primary Industries Phytosanitary Certificate declaring the material free of Bunchy Top and Banana Weevil Borer.
All Citrus Trees	Restrictions apply to all Citrus (Oranges, Lemons, Limes) from Queensland which cannot be imported into NSW including LHI.
ALL OTHER FRUIT TREES	
	Any other fruit tree not listed in (Species List 3) will require to be assessed in accordance with the LHI WRA system. Note: Fruit trees and vegetables may pose potential additional threats such as plant disease and requirements under state and federal legislation may need to be addressed.
POTTING MEDIUM, DISEASES AND PATHOGENS, POTTING MIX & COMPOST PRODUCTS	
Potting Medium	All plant material must be imported either bare rooted and/or in soil-less potting media.
Diseases & Pathogens	All plants contained in soil-less potting media must be treated with specified fungicides before transport to LHI as per ICA – 29 accreditation (including the treatment of above ground parts for pests and diseases). To reduce the risk of spread of myrtle rust, importation of nursery stock is prohibited unless the nursery holds NIASA accreditation (or equivalent through NGIA), a current Myrtle Rust Management Plan or ICA - 42.
Potting Mix & Compost Products (Including Mushroom Kits)	Commercially available potting mix and compost products (including mushroom kits) that are certified free of soil in accordance with Australian Standard ISO 5 ticks do not require approval for importation. Relevant Australian Standards are: AS 3743 for potting mixes and AS 4454 for composts and soil conditioners (including mushroom kits).
MULCH	
	Mulch is restricted to: • Dried sugar cane mulch that is hammer milled, packaged and shrink wrapped. Sugar cane mulch sourced from Qld must be certified free of Red Imported Fire Ant prior to importation into NSW. • Commercially produced composted, pine bark or pine chip that is sterilised, heat treated and packaged. • Mulch must be free of all pests such as insects, snakes and lizards, cane toads and frogs and seeds or green plant matter. On import, the product must be placed in the sun prior to opening to further desiccate potential pathogens. The product must be inspected by the importer on opening for the presence of insects or other suspected pests and if identified, immediately reported to the LHIB. • Tea tree mulch is prohibited from import as it in the Myrtaceae plant family. • Sugar cane mulch will be prohibited for import if it is found to contain soil material or seeds of weeds or pest species. which could include soil pathogens, seeds and eggs of pest species.
STOCK FEED & HAY	
	Stock feed is restricted to: • Clean and dried lucerne chaff, wheaten chaff and oats that are hammer milled and packaged. • Stock feed/hay must be free of soil and pests such as insects, snakes and lizards, cane toads and frogs and seeds or green plant matter. The product must be inspected by the importer on opening for the presence of foreign material and if identified, immediately reported to the LHIB.
RED IMPORTED FIRE ANT	
	Plants that are sourced from interstate QLD must be certified Free of Red Imported Fire Ants in accordance with ICA – 39 for plants.

For information regarding industry certifications refer to Appendix 6.

7.2.3 Weed Risk Assessment (WRA)

If plants are not listed on the permissible list (Appendix 5) or the prohibited list (Appendix 4) the applicant will need to complete an 'Notice of Intention to Import Plants form' (Appendix 3 - forms 1 - 3) and a WRA will be undertaken for the plant species proposed for import by the LHIB.

A WRA is a methodology of calculating the possibility of a plant becoming a weed through a computer and question-based assessment of the plant species characteristics to become a weed risk to the specific geographic location (refer to Table 3 below). This system has been tested in multiple climates and geographies and, on average, correctly identifies 90% of the major plant invaders as having high invasion risk, and 70% of the non-invaders as having low risk.

The assessment of all new plants through the WRA process needs to consider that the plant under review may be shared or moved around the community over time. Plants will not be approved for import with conditions or restrictions for containment on a lease; or removal of fruits before they mature as this cannot be enforced.

The WRA for LHI is based on a three tiered screening system to assess weed potential of plant introductions (Pheloung, 1995). This system assesses potential imports based on the questions listed in Table 3. Part II of Pheloung (1995) provides a risk assessment manual that further discusses the questions. This WRA system methodology has been adopted by Hawaii and the Galapagos Islands.

Table 3: Weed Risk Assessment questions.

BIOGEOGRAPHY/HISTORICAL		
1	Domestication/ Cultivation	• Is the species highly domesticated? • Has the species become naturalised where grown? • Does the species have weedy races?
2	Climate and Distribution	• Species suited to Australian climates (0-low; 1-intermediate; 2-high) • Quality of climate match data (0-low; 1-intermediate; 2-high) • Broad climate suitability (environmental versatility) • Native or naturalised in regions with extended dry periods • Does the species have a history of repeated introductions outside its natural range?
3	Weed Elsewhere	• Naturalised beyond native range • Garden/amenity/disturbance weed • Weed of agriculture • Environmental weed • Congeneric weed
BIOLOGY/ECOLOGY		
4	Undesirable Traits	• Produces spines, thorns or burrs; Allelopathic; Parasitic • Unpalatable to grazing animals; Toxic to animals • Host for recognised pests and pathogens • Causes allergies or is otherwise toxic to humans • Creates a fire hazard in natural ecosystems • Is a shade tolerant plant at some stage of its life cycle • Grows on infertile soils • Climbing or smothering growth habit • Forms dense thickets
5	Plant Type	• Aquatic, Grass, Nitrogen fixing woody plant, Geophyte
6	Reproduction	• Evidence of substantial reproductive failure in native habitat • Produces viable seed. • Hybridises naturally • Self-compatible or apomictic • Requires specialist pollinators • Reproduction by vegetative fragmentation • Minimum generative time (years)
7	Dispersal Mechanisms	• Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas) • Propagules dispersed intentionally by people • Propagules likely to disperse as a produce contaminant • Propagules adapted to wind dispersal • Propagules buoyant • Propagules bird dispersed • Propagules dispersed by other animals (externally) • Propagules survive passage through the gut
8	Persistence Attributes	• Prolific seed production (>2000/m2) • Evidence that a persistent propagule bank is formed (>1 yr) • Well controlled by herbicides • Tolerates, or benefits from, mutilation or cultivation • Effective natural enemies present in Australia

8. Surveillance and Monitoring

The retention of imported plant material at designated hardstands and declaration of posted items is an important first step to enable inspection by a quarantine officer to intercept unwanted pests and pathogens before they establish. Effective surveillance programs allow the early detection of incursions of introduced pests and pathogens, which increase the chances that a species will not become established, that an eradication program will be successful and decrease the potential costs of any response treatment. The Board has recently run targeted and community surveillance programs for myrtle rust. It is essential that other programs of this type are conducted to increase the awareness of threats and involvement of the community in surveillance.

Monitoring of 'new plants' or 'new invasive plants' and plant pathogens is undertaken inadvertently through noxious weed inspections of leases or through systematic weed sweeps though the LHI Permanent Park Preserve and other crown lands.

Numerous plants have been imported to LHI prior to the WRA process and are recognised as sleeper weeds. The monitoring of previously approved plant imports will be reviewed and their status will be updated to 'Prohibited' if they are found to present a weed risk in the future.

If pre-existing introduced plants pose a high risk, intervention through education will be undertaken to remove the plant from leasehold land. Alternatively the plant will be proposed for listing as a noxious weed under the *NSW Noxious Weed Act* 1993 and categorised for removal.

Actions:

- Increase post entry evaluation to ensure early detection of new weed species; and plant diseases.
- Encourage the community to report introduced plants and diseases.
- Monitoring the invasiveness or spread of past plant imports not screened under a WRA process.
- Update prohibited and approved plant lists as required.
- LHIB to support the continuation of the LHI garden plant inventory (to gauge compliance).
- Update plant importation database.
- Continue compliance of the Policy.
- List new invasive weeds under the NSW Noxious Weed Act 1993 to enforce their removal.
- Offer an amnesty to collect data on illegal imported plants to determine their suitability or risk.
- Implement inspection programs for high risk sites, high risk pathways and perpetual and special leases.
- Seek gazettal of LHI as myrtle rust protected area under the NSW Plant Diseases Act 1924.

8.1 Emergency Preparedness and Response

Many introduced plants and diseases have the ability to establish rapidly in new areas and new incursions require a timely and rapid response.

Emergency response arrangements for introduced plants and plant diseases are currently being reviewed as part of the review of the LHI Weed Management Strategy 2006 and LHI Quarantine Strategy 2003. Procedures for isolation, containment and management of biosecurity risk material are provided in the LHIB Quarantine Strategy. A list of systemic and non systemic fungicides registered to treat plants for myrtle rust is located in Appendix 7.

Actions:

- Review emergency response arrangements for introduced plants, pests and plant diseases.
- Seek gazettal of LHI as a Myrtle Rust protected area under the Plant Diseases Act 1924.

9. Capacity

9.1 Shared Responsibility

The LHIB has a leadership role with the implementation of the LHI Plant Importation Strategy. However, effective biosecurity is a shared responsibility and requires a collaborative effort between the LHIB, Commonwealth and State government agencies, the broader community, visitors, importers, stevedores and transport agencies.

Action:

- Form closer partnerships between the community, industry and government.

9.2 Partnerships

9.2.1 Recommended Industry Accredited Suppliers

Plants and plant materials are best purchased from nurseries and suppliers that maintain a high level of cleanliness, pest management programs and relevant industry accreditation.

Nursery suppliers should address the following:

a) Complete the LHI Plant Phytosanitary and Myrtle Rust Checklist;
b) Be accredited through the Nursery Industry Accreditation Scheme Australia (NIASA) or equivalent to the Nursery & Garden Industry Australia (NGIA) certification programs;
c) Have a current Myrtle Rust Management Plan that addresses the criteria set out in the NGIA - Australian Nursery Industry Myrtle Rust Management Plan 2012;
d) Comply to ICA – 29 standards (which refers to Interstate Certificate of Assurance No. 29 standards for the treatment of potting media and above ground parts of a plant with fungicide and insecticide);
e) Plants that are sourced from interstate QLD must be certified Free of Red Imported Fire Ants in accordance with ICA – 39 for plants.

Actions:

- Suppliers and transport agencies will be contacted by the LHIB and informed of LHI importation restrictions to assist in developing procedures that will address importation requirements and improve customer service.
- Refer to the Nursery and Garden Industry Australia (NGIA) website for list of accredited suppliers: www.ngia.com.au.

9.3 Training and Education

It is essential to ensure appropriate training and awareness activities are provided to all involved. These range from skills-based training for specific roles and functions needed in the event of a

biosecurity emergency through to community understanding of biosecurity decision-making processes.

Actions:

- Improve the LHIB's capability and capacity to implement the Plant Importation Strategy through training.
- Train quarantine staff in the identification of Myrtaceae species, recognition and treatment of myrtle rust.

9.4 Communication

Communication programs are essential in raising awareness and understanding of biosecurity risks amongst stakeholders, the broader community and visitors to Lord Howe Island.

There is potential to build on existing programs and expand communications across all facets of biosecurity.

Information regarding LHI plant importation restrictions and standards will be sent to identified plant suppliers and transport agencies.

The plant importation approval process and relevant timeframes will be developed into a brochure and will be available for people seeking permission to import a plant or plant material.

Actions:

- The LHIB will develop and implement a communications program specifically designed to raise the awareness of the LHI Plant Importation Policy and its requirements. This may include information such as brochures, website content, displays and discussion.
- The LHIB will clarify plant importation pathways, assessment process and timeframes associated with decisions.
- Inform plant suppliers and transport companies of LHI plant importation restrictions.

10. Compliance

Plants and plant materials are subject to inspection and audit sampling on arrival to LHI to ensure compliance with Policy requirements, and to verify the absence of soil and plant pests and diseases. The importer is required to contact the LHIB and arrange for shipment inspection. The LHIB will determine whether any particular shipment will require inspection prior to release. All plant imports must be labelled as ''plants'' on the Manifest for the Island Trader to alert the LHIB Quarantine officer of any plant imports. Macquarie Air must notify the LHIB of any plant imports prior to their departure to alert the LHIB Quarantine officer of any plant imports.

The importation of plants and plant materials by post poses a risk to LHI as these items often remain undeclared. To address this risk the LHIB need to:

a) Develop education seeking that all plants imported to LHI through the post are voluntarily declared for inspection prior to release; and
b) Liaise with Australia Post to investigate what options are available to enable the formal declaration and/or inspection of plant imports (except for clean and packaged seeds and fresh food items of permissible species) prior to release from the post office.

Some packaging and plant preparation practices may enable more efficient inspection, sampling and verification activities associated with imported plants and plant products. The LHIB will work closely with suppliers to inform of importation requirements but also to assist in determining practical approaches for importing stock.
Due to the low number of plant imports, the inspection of each consignment can be achieved with the existing resources of the LHIB.

10.1 Illegal Importation of Plants without Approval

a) Plants imported to the island without prior approval or that fail to meet approval requirements may be seized and destroyed.
b) Failure to declare an import may incur a maximum penalty of 50 penalty units ($330) under Clause 61 of the LHI Regulation 2014.
c) Bouquets that arrive on LHI with Myrtaceae plant material will be completely quarantined and destroyed.

Actions:

- Inform stakeholders of penalties relating to non - compliance of the policy.
- Provide education on benefits of declaration of all plant imports.
- Liaise with Australia Post on options for declaration and/or inspection of plant imports through the post.
- Set up declaration of plant imports signs at Post Office, Jetty – hard stand, LHI and Qantas Link Airport terminals.

10.2 Sighting of Permits

Cooperation will be sought from freight carriers and mail order companies to sight a permit prior to transport or mailing of any plant material to the Island. Transporters of freight to LHI have an obligation to only import plant material that has approval from the LHIB.

Action:

- Educate the main transport operators to LHI on requirement to only transport approved plant material to LHI, including Macquarie Air, LHI Sea freight, Star Track Express, Qantaslink and Australia Post.

10.3 Fees, Charges and Assessment Timeframe

The following fees and timeframes will apply:

10.3.1 Permissible Plant Species (Including live plants, bouquets, mulch, stock feed and mushroom kits)

a) No charges apply for the processing of 'Notice of Intention to Import Plant forms' for 'Permissible' plants and associated Approval Letters.
b) No charges to assist an applicant determine if their proposed plant import is listed as prohibited.
c) The approval process will take no longer than 15 days or less if all the correct information is provided (i.e. details of importer, suppliers details, myrtle rust checklist, full botanical name and number of plant species, transport company and intended date of import are supplied);

10.3.2 Plants requiring a Weed Risk Assessment (WRA)

a) A fee of $50 will be charged per plant for which a weed risk assessment is undertaken (this is a nominal fee and is not intended for full cost recovery);
b) Assessment process may take up to 20 business days, or as notified by the LHIB;
c) No more than 3 plants will be assessed under the WRA at any time within a period of 2 months per importer; and
d) Approval is not guaranteed as the plant may be scored as unacceptable.

Action:

- Introduce a cost recovery process for undertaking WRA within the LHIB's Schedule of Fees and Charges.

11. Increased Local Plant Production

The production and sale of plants on LHI will significantly reduce the risks and costs associated with the importation of live plants. Lord Howe Island's flora has a many 'ornamental looking' plant species that are suitable for the garden situation including vines, sedges, grasses, ferns, shrub and tree species. There are also many non-invasive ornamental plants are present in gardens which could be propagated and sold locally.

The LHIB should also investigate options for the supply and sale of screened and composted mulch produced on island to reduce risk of pest incursions from imports.

Actions:

- Promote the production of native and non-invasive ornamental plants on the island for local sale and use.
- Investigate options for providing screened and composted mulch on island to the public at cost recovery.
- Promote gardens that use local native plants in gardens.
- Implement the LHI Revegetation Plan, which recommends the use of local native plant species for identified sites.

12. Review and Evaluation

The Strategy will be subject to review every five (5) years or in response to significant changes in the Policy setting.

The methodology for assessing the appropriate level of protection outlined in the risk evaluation matrix in Table 1 of this document will be subject to ongoing review in response to scientific advances in the field.

Actions:

- Seek feedback from stakeholders (community, importers, suppliers and transport agencies).
- Review the Strategy every 5 years, or in response to changes in legislation, government policy, or improved knowledge.
- Remain adaptive to address new alerts of invasive weed or pathogens from mainland Australia or other pacific islands.

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www.environment.nsw.gov.au/determinations/exoticrustfungiFD.htm

www.ngia.com.au

www.weeds.org.au/docs/jumping_the_garden_fence.pdf

www.weeds.org.au/

Appendix 1 Plant Importation Policy

LORD HOWE ISLAND BOARD POLICY

TITLE	**Plant Importation Policy**		
DATE ADOPTED	March 2004	**AGENDA ITEM**	12
CURRENT VERSION	May 2013	**AGENDA ITEM**	8 (iii)
REVIEW	5 years	**FILE REFERENCE**	PO0008
ASSOCIATED LEGISLATION	*Lord Howe Island Regulation 2014* *Noxious Weeds Act 1993* *Plant Diseases Act 1924* *Environment Protection and Biodiversity Conservation Act 1999* *Quarantine Act 1908*		
ASSOCIATED POLICIES	LHI Quarantine Strategy 2015 LHI Phytosanitary Protocols for Myrtle Rust and Phytophthora LHI Biodiversity Management Plan 2007 LHI Weed Management Strategy 2006		

1. Introduction

The introduction, establishment and spread of introduced plants and plant diseases present a major threat to the environment and economy of Lord Howe Island.

1.1 Objective

The policy objective is "to minimise the risk on the economy and environment of Lord Howe Island from the introduction of non-native plants, plant material, exotic plant pests and pathogens."

1.2 Scope/Application

The policy relates specifically to the importation of plants, plant material, plant diseases and pathogens. Under this policy 'plants' refer to:

- Potted plants;
- Plant material that is intended for the use of growing e.g. seeds, bulbs, cuttings and root stock (bare-rooted);
- Cut flowers and foliage, including bouquets;
- Stock feed/hay; and
- Mulch.

The Policy and Strategy does not apply to the importation of:

- Fruit and vegetables (except prohibited species, including all Myrtaceae) for consumption;
- Wood products such as timber, crates and furniture; or
- Compost and potting mix products certified free of soil in accordance with Australian Standard ISO 5 ticks.

Relevant Australian Standards for potting mix is AS 3743 and for composts and soil conditioners (including mushroom kits) AS 4454.

"Plant" can be defined as "the whole or any part of any tree, shrub, fern, creeper, vine, palm, plant, flower, seed, root, herbage or other vegetative cover" as described in the *Lord Howe Island Regulation, 2014.*

2. Policy

The policy objective is to be achieved through the adoption of the following eight policy elements:

2.1 Appropriate Level of Protection (ALOP)

This policy adopts an appropriate level of protection (ALOP) of 'Low' aimed at reducing risk to very low levels, while not based on a zero risk approach. To reduce the risk of introduction of myrtle rust from import of non myrtaceous nursery stock to LHI, an ALOP of 'Moderate' has been adopted. This is consistent with the Australian Government's ALOP, and is based on careful consideration of the consequences of pest introduction, and the implications of these restrictions on the community and trade on the Island.

It is recognised that Lord Howe Island is relatively free from pests, weeds and pathogens. The consequence of incursions is considered greater than that of other areas in NSW due to the geological isolation and high levels of endemism on the Lord Howe Island Group.

2.2 Effective Legislation, Policy and Procedures to Control Identified Risks

A consistent and integrated approach to managing plant biosecurity risks requires a legislative framework that is easily understood and consistently applied. The effectiveness of the plant biosecurity system is underpinned by the quality of its regulation and compliance programs.

It is recognised that the biosecurity risks are, in some cases, a result of domestic and interstate travel, and that existing legislation and policies do not effectively manage this risk.

2.3 Least Restrictive Phytosanitary Requirements

The Lord Howe Island Board applies a range of phytosanitary measures in order to achieve our appropriate level of protection. Mitigating measures are designed to minimise the risk on the economy and environment of Lord Howe Island while allowing trade to occur in the least trade restrictive manner.

Import requirements are outlined in the Lord Howe Island Plant Importation Strategy.

2.4 Science-Based Risk Analysis

Threat identification and risk analysis are significant components of the Board's approach to plant biosecurity. Risk analysis is undertaken using a pre-border Weed Risk Assessment (for proposed imports of new plants that are not listed as permitted or prohibited) and a risk evaluation matrix for other plant products (Table 1). The Weed Risk Assessment is a question based screening system to assess the weed potential of plant introductions (Pheloung, 1995). The risk evaluation matrix

enables consistent, semi-quantitative and a repeatable processes to establish minimum requirements for the importation of a commodity/plant product.

In accordance with the ALOP, a commodity/plant product will not be permitted until an assessment of the potential entry of a pathogen or pest against one of three criteria is determined:

1. The material/commodity is assessed as not containing a potential pathogen/pest of concern; or
2. The risk of the material/commodity as containing a pest plant is assessed as a "low risk" (acceptable without additional risk management) or lower on the risk evaluation matrix and for the pathogen myrtle rust is assessed as a "moderate risk"; or
3. "Risk management measures" are implemented to reduce the risk estimate for the disease/pest associated with a particular commodity so that it results in a "very low risk" for plants and "moderate" for myrtle rust or lower on the risk evaluation matrix.

Table 1: Risk Estimation Matrix
Used by Biosecurity Australia (Department of Primary Industries, Parks, Water and Environment, 2001). Risk level of below 'Low' satisfies Lord Howe Island's Appropriate Level of Protection (ALOP) for plants and "Moderate" satisfies Lord Howe Island's ALOP for Myrtle Rust.

		CONSEQUENCES OF ENTRY, ESTABLISHMENT & SPREAD					
		Negligible Impact	**Very Low**	**Low**	**Moderate**	**High**	**Extreme Impact**
LIKELIHOOD OF ENTRY, ESTABLISHMENT & SPREAD	**High Likelihood**	Negligible Risk	Very Low Risk	Low Risk	Moderate Risk	High Risk	Extreme Risk
	Moderate	Negligible Risk	Very Low Risk	Low Risk	Moderate Risk	High Risk	Extreme Risk
	Low	Negligible Risk	Negligible Risk	Very Low Risk	Low Risk	Moderate Risk	High Risk
	Very Low	Negligible Risk	Negligible Risk	Negligible Risk	Very Low Risk	Low Risk	Moderate Risk
	Extremely Low	Negligible Risk	Negligible Risk	Negligible Risk	Negligible Risk	Very Low Risk	Low Risk
	Negligible Likelihood	Negligible Risk	Negligible Risk	Negligible Risk	Negligible Risk	Negligible Risk	Very Low Risk

2.5 Allocation of Resources Based on Risk, Cost and Benefit to the Island

The policy recognizes the resource limitations of the Board. In assessing, and responding to plant biosecurity risks, resources should be allocated according to risk, cost and benefit to the Island and its community.

2.6 Improved Communication of Plant Biosecurity Risks and Management Systems

Communication programs are essential in raising awareness and understanding of the Plant Importation Policy and Strategy amongst stakeholders, the broader community and visitors to Lord Howe Island.

2.7 Shared responsibility

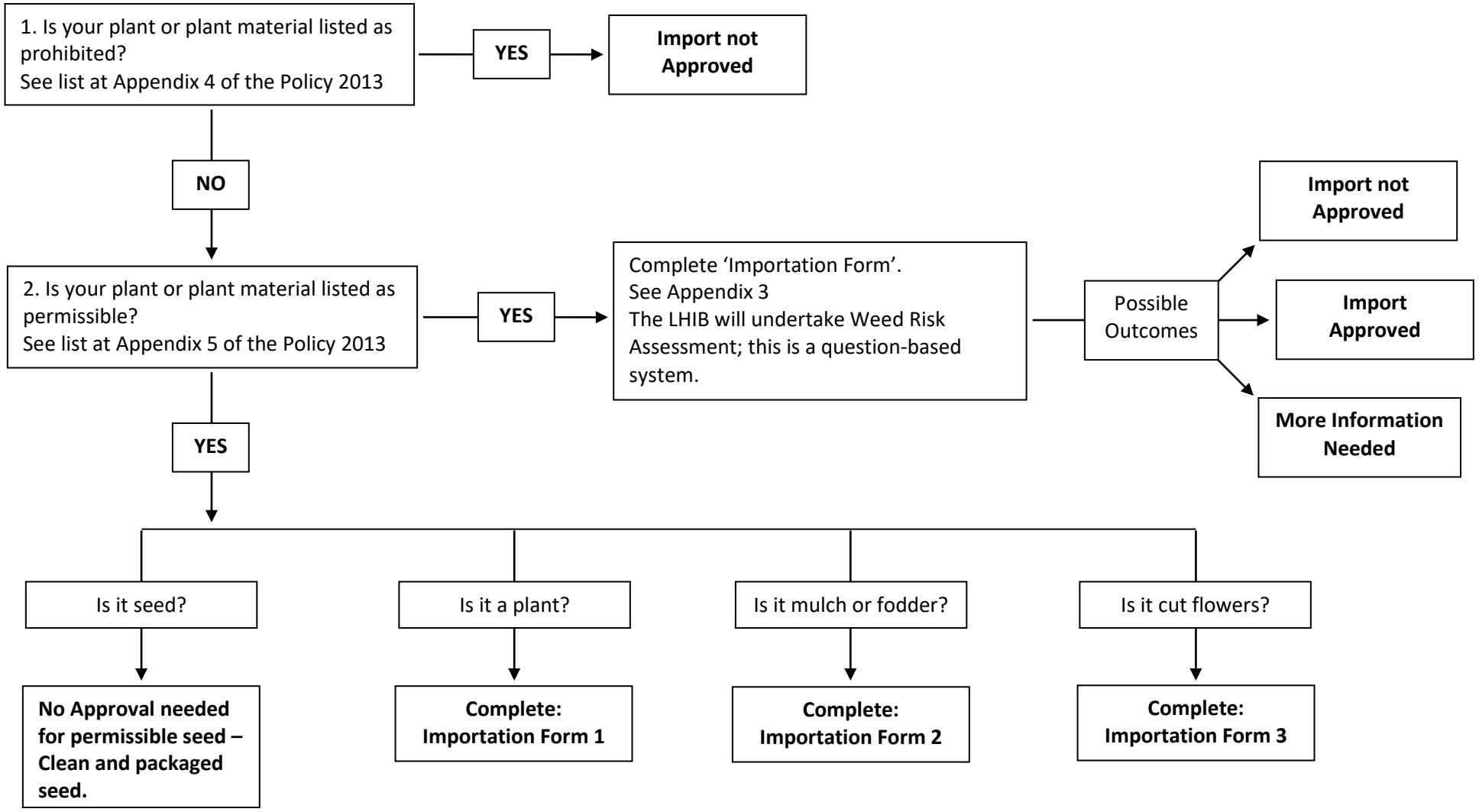
The Lord Howe Island Board has a leadership role with the implementation of the LHI Plant Importation Policy and Strategy. However, it is recognized that strong biosecurity systems are a shared responsibility and require a collaborative effort between the Board, Commonwealth and State government agencies, the broader community, visitors, importers, and transport agencies.

2.8 Remain adaptive to new invasive weeds and diseases

Post-entry monitoring of imported plants species is essential to ensure early detection of new weed species and plant diseases. The Board will reserve the right to vary or revoke previous plant imports based on risk.

The policy objectives will be achieved through implementation of the LHIB Plant Importation Strategy.

Appendix 2 Pathway for Plant Importation to Lord Howe Island



Pathway for Plant Importation to Lord Howe Island
Frequently Asked Questions

FORM LODGEMENT
Submit your form to the Lord Howe Island Board prior to purchase and importation arrangements being made.

HOW LONG WILL YOUR APPLICATION TAKE
Assessment of your application may take up to two weeks. Weed Risk Assessments may take up to three weeks. Lord Howe Island Board will advise at time of lodgement.

IF YOUR PLANTS ARE APPROVED
You will receive a letter of approval and then you can order your plants, other conditions still apply.

CONDITIONS OF IMPORT
All plants and plant materials approved for importation to LHI must be:

a) Grown in an approved soil-less media or be bare rooted;
b) Address and submit the LHI Plant Phytosanitary and Myrtle Rust Checklist;
c) Transported and contained in new and clean packaging to reduce the potential for transmission of plant pathogens and pests during transit to Lord Howe Island;
d) Clearly labeled showing Genus, species, cultivar name to enable clear identification and checking against the consignment invoice;
e) Labeled on the box as 'Live Plants' or 'Plant Material';
f) Accompanied by a copy of the consignment order to check against the approval letter;
g) Inspected by LHIB Quarantine staff upon arrival prior to release. The plants will need to be held at one of the following sites: Quarantine room at the Jetty building, the hardstand at the Jetty (for large items such as pallets of fruit trees), the luggage hold on the western side of the aerodrome terminal building or the Post Office
h) Seed includes seed of approved flowers and vegetables that are cleaned and packaged. Seed of species not listed on the permissible list require approval; and
i) Cut flowers to be free of Myrtaceae plant species.

PENALTIES FOR FAILURE TO DECLARE INTENT TO IMPORT:
a) Incur a maximum penalty of 50 penalty units ($330) under Clause 82 of the LHI Regulation 2014;
b) The plants may be seized, destroyed or disposed by the Lord Howe Island Board.

Appendix 3 Application Forms

Form 1: Notice of Intention to Import Plants. Includes Plant Phytosanitary/Myrtle Rust Checklist

Form 2: Notice of Intention to Import Mulch or Fodder

Form 3: Notice of Intention to Import Cut Flowers or Bouquets

LORD HOWE ISLAND BOARD

Notice of Intention to Import Plants (Form 1)

Plants: Bulbs, cuttings, rhizomes and potted plants.

- Plants listed as permissible;
- Plants not listed as permissible (A Weed Risk Assessment must be undertaken by Lord Howe Island Board);
- No soil allowed – only soil-less potting medium permitted;
- Myrtacae species not allowed.

Please return to the Lord Howe Island Board for processing.
Email: administration@lhib.nsw.gov.au Phone: 02 65632066 Fax: 02 6563 2127

APPLICANT DETAILS

Name: .....

Address: .....

Phone: ..... Email: .....

Lease where plant/s will be kept: .....

PLANT/PLANT MATERIAL DETAILS

☐ Plants Listed as Permissible ☐ Plants not Listed as Permissible (Weed Risk Assessment to be undertaken)

Part of plant (please circle): Seedlings/Potted Plants Cuttings Bulbs/Rhizomes

Plant/Plant Material to be imported (attach a list for larger consignment orders):

Common/Trade Name	Scientific Name – Must be Provided (Genus, species, variety)	Quantity

Mode of transport (please circle): Post Qantaslink Island Trader Port Macquarie Air

Other: ..... Intended Arrival Date and Time: .....

SUPPLIER DETAILS

Business Name: .....

Address: .....

Phone: ..... Email: .....

LORD HOWE ISLAND BOARD

Plant Phytosanitary/Myrtle Rust Checklist

Ask your plant supplier/nursery to fill out this form. This checklist must be completed and returned to the Lord Howe Island Board to determine whether an import permit will be granted.

Importation Requirements for Lord Howe Island

	Y/N
No soil allowed, only soil-less potting medium is permitted.	
Pots must be new, clean and free of soil.	
The consignment enclosed in new and clean packaging.	
Plants must be free of pests and diseases.	
Plants sourced from interstate QLD must be certified free of Red Fire Ants per ICA 39.	
The nursery or supplier NIASA accredited.	
The nursery or supplier ICA 29 accredited.	

Please note that Lord Howe Island is free of Myrtle Rust – *Puccinia psidii.*
The import of Non-Myrtaceae species is permissible; however we require information on nursery hygiene and standards for monitoring purposes.

Myrtle Rust Checklist

	Y/N
Import of Myrtaceae plants or plant material is prohibited	
Does the nursery grow or stock plants from the Myrtaceae family?	
Is the nursery located in a Myrtle Rust infected area and with infected plants in nursery and surrounding environment?	
Does the nursery have a myrtle rust management plan as outlined in the Australian Nursery Industry Myrtle Rust Management Plan. Note: this is preferred but not essential.	
Is the nursery ICA – 42 accredited? Note: this is preferred but not essential.	

Declaration

Name: .....

Signature: ..... Date: .....

Please forward this form to the Lord Howe Island Board for processing.
Email: administration@lhib.nsw.gov.au Phone: 02 6563 2066 Fax: 02 6563 2127

Giving false or misleading information is an offence.
Information contained on this form will be used for monitoring purposes in the event of an incursion of an unwanted pest or pathogen. This is important to enable the LHIB to develop rapid response protocols and treatment measures.

LORD HOWE ISLAND BOARD

Notice of Intention to Import Mulch or Fodder (Form 2)

- Tea Tree mulch is not allowed.

Please return to the Lord Howe Island Board for processing.
Email: administration@lhib.nsw.gov.au Phone: 02 65632066 Fax: 02 6563 2127

APPLICANT DETAILS

Name: .....

Address: .....

Phone: ..... Email: .....

Lease where material will be kept: .....

MULCH OR FODDER DETAILS

Name of Product	Quantity

Mode of transport (please circle): Post Qantaslink Island Trader Port Macquarie Air

Other: ..... Intended Arrival Date and Time: .....

SUPPLIER'S DETAILS

Business Name: .....

Address: .....

Phone: ..... Email: .....

The following restrictions apply; please check this list:

Mulch is restricted to dried sugar cane mulch (hammer milled and shrink wrapped) and commercial composted pine bark or pine chip (sterilised, heat treated and packaged).	
Fodder is restricted to hammer milled lucerne chaff, wheaten chaff or hammer milled clean oats (packaged).	
Plants coming from interstate QLD must be certified free of Red Fire Ants.	
Free of insects, cane toads and weed seeds.	
On import the product must be placed in the sun before opening to desiccate potential diseases.	
The product must be inspected by the importer on opening and any presence of insects or pests immediately reported to the Lord Howe Island Board.	

LORD HOWE ISLAND BOARD

Notice of Intention to Import Cut Flowers or Bouquets (Form 3)

- Plants listed as permissible;
- Plants not listed as permissible (A Weed Risk Assessment must be undertaken by Lord Howe Island Board);
- Myrtacae species not allowed.

Please return to the Lord Howe Island Board for processing.
Email: administration@lhib.nsw.gov.au Phone: 02 65632066 Fax: 02 6563 2127

APPLICANT DETAILS

Name: .....

Address: .....

Phone: ..... Email: .....

CUT FLOWERS OR BOUQUET DETAILS

Please list all species in your bouquet/cut flowers intended for importation:

Common/Trade Name

Mode of transport (please circle): Post Qantaslink Island Trader Port Macquarie Air

Other: ..... Intended Arrival Date and Time: .....

SUPPLIER DETAILS

Business Name: .....

Address: .....

Phone: ..... Email: .....

CHECKLIST FOR ITEMS NOT PERMISSIBLE

Restrictions on species composition apply. The following products are not permitted. Please tick this checklist to ensure you meet importation requirements. If yes to any, then import will not be approved.

	Y/N
Foliage of flowers or seeds from the Myrtaceae family. These include but are not limited to: Baeckea, Eucalyptus, Geraldton Wax, Kunzea, Lilipilly, Teatree.	
Grass, palm or fern species.	
Invasive species, see prohibited list (e.g. privet, gorse, glory lily, asparagus species).	
Plants with fruits or seed.	
Soil	

Appendix 4 Plants Prohibited from Import to Lord Howe Island

Plants on species list 1 & 2 are prohibited from import. Species list 1 includes all plants from Genera containing Lord Howe Island endemic species. Plants from the following Genera may hybridise with endemic species and are recognised as a weed risk.

Species List 1: Plants Prohibited From Import

Genera of endemic plants from Lord Howe Island that are prohibited from import.

Note: List may be amended to adopt taxonomic review of species.

Flowering Plants - Dicots			
Family	**Genus**	**Family**	**Genus**
Apiaceae	*Apium*	Moraceae	*Trophis*
Apocynaceae	*Alyxia*	Myrsinaceae	*Rapanea*
Apocynaceae	*Parsonsia*	Myrtaceae	*Cleistocalyx or Syzygium*
Asclepiadaceae	*Marsdenia*	Myrtaceae	*Leptospermum*
Asteraceae	*Brachyscome*	Myrtaceae	*Melaleuca*
Asteraceae	*Cassinia*	Myrtaceae	*Metrosideros*
Asteraceae	*Olearia*	Oleaceae	*Chionanthus*
Asteraceae	*Senecio*	Passifloraceae	*Passiflora*
Brassiaceae	*Lepidium*	Piperaceae	*Macropiper*
Campanulaceae	*Wahlenbergia*	Pittosporaceae	*Pittosporum*
Convolvulaceae	*Calystegia*	Plantaginaceae	*Plantago*
Elaeocarpaceae	*Elaeocarpus*	Rubiaceae	*Atractocarpus*
Epacridaceae	*Dracophyllum*	Rubiaceae	*Coprosma*
Euphorbiaceae	*Drypetes*	Rubiaceae	*Psychotria*
Fabaceae	*Carmichaelia*	Rutaceae	*Melicope*
Fabaceae	*Sophora*	Santalaceae	*Exocarpus*
Flacourtiaceae	*Xylosma*	Sapindaceae	*Guioa*
Gesneriaceae	*Negria*	Symplocaceae	*Symplocos*
Grossulariaceae	*Corokia*	Thymelaeaceae	*Pimelea*
Lamiaceae	*Westringia*	Ulmaceae	*Celtis*
Lauraceae	*Cryptocarya*	Urticaceae	*Boehmeria*
Loganiaceae	*Geniostoma*	Urticaceae	*Elatostema*
Malvaceae	*Lagunaria*	Violaceae	*Melicytus*
Meliaceae	*Dysoxylum*	Viscaceae	*Korthalsella*
Moraceae	*Ficus*	Winteraceae	*Zygogynum*

Orchids, Lillies, Sedges - Monocots			
Family	**Genus**	**Family**	**Genus**
Cyperaceae	*Machaerina*	*Orchidaceae*	*Dendrobium*
Cyperaceae	*Uncinia*	*Orchidaceae*	*Plectorrhiza*
Iridaceae	*Dietes*	*Pandanaceae*	*Pandanus*
Juncaceae	*Luzula*	*Poaceae*	*Chionochloa*
Liliaceae	*Dianella*		

Ferns - Pteridophyta			
Family	**Genus**	**Family**	**Genus**
Aspleniaceae	*Asplenium*	*Dryopteridaceae*	*Lastreopsis*
Athyriaceae	*Diplazium*	*Dryopteridaceae*	*Polystichum*
Blechnaceae	*Blechnum*	*Grammitidaceae*	*Grammitis*
Cyatheaceae	*Cyathea*		

Species List 2: Plants Prohibited From Import: Trees, Shrubs, Flowers, Herbs etc.

Plants listed on Species List 2 are prohibited from import. This list includes:

- Ornamental plants that spread from gardens on Lord Howe Island into the Permanent Park Preserve;
- Plants that are known as weeds in places similar to Lord Howe Island or elsewhere in Australia;
- Plants that have been assessed and rejected under Weed Risk Assessment.

Species prohibited from import are not restricted to this list. Other plants prohibited from import include declared noxious weeds under the NSW Noxious Weeds Act 1993 and plants listed on the Australian Weeds Committee Database. This list may be amended following assessment and review of species.

PLANTS PROHIBITED FROM IMPORT TO LORD HOWE ISLAND					
COMMON NAME	**FAMILY**	**GENUS**	**SPECIES**	**NOTES**	**PPP**
Abutilon	Malvaceae	*Abutilon*	*X suntense, indicum*	Global Compendium of Weeds	
Aerial Yam	Dioscoreaceae	*Dioscorea*	*bulbifera*	Environmental Weed - most Dioscoreaceae species are invasive.	
African Boxthorn*	Solanaceae	*Lycium*	*ferocissimum*	Weed of National Significance	Yes
African or Kaffir Plum	Anarcardiaceae	*Harpephyllum*	*caffrum*	Localised spread.	
African Tulip Tree	Bignoniaceae	*Spathodea*	*campanulata*	Weeds Australia Database	
Agapanthus	Liliaceae	*Agapanthus*	*praecox subsp. orientalis*	Found near Grey face on Mt Lidgbird – showing weediness.	
Allamanda	Apocynaceae	*Allamanda*	*cathartica*	Csurches & Edwards, 1998	
Aloe	Aloaceae	*Aloe*	*maculata*		
Aniseed Myrtle	Myrtaceae	*Backhousia*	*anisata*	Also known as *Anetholea anisata* & *Syzygium anisata*.	
Aralia/ Rice Paper Plant*	Araliaceae	*Tetrapanax*	*papyrifer*	Global Compendium of Weeds	Yes
Ardisia	Myrsiniaceae	*Ardisia*	*crenulata*	Major Environmental Weed	
Arum lily	Araceae	*Zantedeschia*	*aethiopica*	*Var. elliotiana.* WRA = Not approved	
Autumn Daffodil	Amaryllidaceae	*Sternbergia*	*lutea*	WRA = Not approved	
Baby's Breath	Caryophyllaceae	*Gypsophila*	*muralis*	WRA = Not approved	
Balsam	Balsaminaceae	*Impatiens*	*walleriana*	All species prohibited. Batianoff & Butler (2002). Global Weed Compendium	
Bamboo*	Poaceae	*Arundinaria*	*simonii f. variegata*		Yes
Banana Passionfruit	Passifloraceae	*Passiflora*	*mollissima*	Known weed, Global Compendium of Weeds	
Begonia	Begoniaceae	*Begonia*	*spp. cucullata, semperflorens, heracleiifolia,hirtella , convolvulacea, nelumbiifolia.*	Global Weed Compendium	Yes
Bitou Bush*	Asteraceae	*Chrysanthemoides*	*monilifera subsp. rotundata*	Major environmental weed in eastern Australia	Yes
Blue Passionfruit*	Passifloraceae	*Passiflora*	*cairica*	Often used as root stock for edible passionfruit; will outgrow graft.	Yes
Blue Periwinkle*	Apocynaceae	*Vinca*	*major*	Major environmental weed in eastern Australia	
Blue-eyed Daisy	Asteraceae	*Osteospermum*	*ecklonis*	Most species listed on Global Compendium of Weeds. WRA = Not Approved	
Blue Billy Goat	Asteraceae	*Ageratina*	*houstonianum*	Major Environmental Weed	Yes

PLANTS PROHIBITED FROM IMPORT TO LORD HOWE ISLAND					
COMMON NAME	**FAMILY**	**GENUS**	**SPECIES**	**NOTES**	**PPP**
Weed					
Blue Passionfruit*	*Passifloraceae*	*Passiflora*	*caerula*	*Passiflora edulis* grafted to *P. caerula** is prohibited.	Yes
Bower Vine*	Bignoniaceae	*Pandorea*	*jasminoides*	Seed is wind dispersed. WRA = Not approved	
Brazilian Cherry	Myrtaceae	*Eugenia*	*uniflora*	Weeds Australia Database	Yes
Bridal Creeper*	Asparagaceae	*Asparagus*	*asparagoides*	Major Environmental Weed	Yes
Bromeliads	Bromeliaceae	*Billbergia*	*pyramidalis*		
Buddleja, Summer lilac	Buddlejaceae	*Buddleja*	*asiatica, davidii, dysophylla, madagascarensis*	Blood, 2001; Cooperative Research Centre weeds.	
Bunya Pine	Arauricarceae	*Araucaria*	*bidwillii*	Localised spread – showing weediness	
Bushmans Poison	Apocynaceae	*Acokanthera*	*oblongifolia*	Edges of PPP – showing weediness	
Buttercup, crowsfoot	Ranunculaceae	*Ranunculus*	*parviflorus*	Reported in *Fl. Aust*. 1994	
Californian poppy	Papaveraceae	*Eschscholzia*	*californica*	WRA = Not approved; Global Weed Compendium	
Callibracholoa	Convolvulaceae	*Callibracholoa*	*parviflora spp. superbell*	Can spread by seed; WRA = Not approved	
Canna lily	Cannaceae	*Canna*	*X indica*	Reported in *Fl. Aust*. 1994. All Canna species prohibited.	Yes
Cape Ivy	Asteraceae	*Delairea*	*odorata*	Major Environmental Weed	
Casuarina, Swamp Sheoak	Casuarinaceae	*Casuarina*	*glauca*	All Casuarina species are prohibited from import.	
Century Plant	Agavaceae	*Agave*	*americana*		
Chain Plant	Commeliniaceae	*Callisia*	*fragrans*		
Cherry Guava*	Myrtaceae	*Psidium*	*cattleianum*	Major Environmental Weed	Yes
Chinese Mastic	Anarcardiaceae	*Pistachia*	*chinensis*	Found on Transit Hill	Yes
Christmas Lily	Liliaceae	*Alstroemeria*	*pulchella*		
Climbing Aloe	Aloaceae	*Aloe*	*ciliaris*		
Climbing Asparagus	Asparagaceae	*Asparagus*	*africanus*	Major Environmental Weed	
Climbing Asparagus	Asparagaceae	*Asparagus*	*plumosus*	Major Environmental Weed	Yes
Climbing Asparagus	Asparagaceae	*Asparagus*	*scandens*	Major Environmental Weed	Yes
Climbing Nightshade*	Solanaceae	*Solanum*	*seaforthianum*	Weed of dry & littoral rainforest	
Cocks Comb Coral	Fabaceae	*Erythrina*	*crista-galli*	Major Environmental Weed of floodplain – viable seed.	
Coffee	Rubiaceae	*Coffea*	*arabica*	Form dense thickets in shade, spread by birds; WRA = not approved.	Yes
Coral Tree	Fabaceae	*Erythrina*	*X sykseii*	Localised weed	Yes
Cordyline	Araceae	*Cordyline*	*fruticosa syn. terminalis*	WRA = not approved; Seedlings found on island; weed in NZ.	
Cotoneaster*	Rosaceae	*Cotoneaster*	*glaucophyllus*	Major environmental weed	Yes
Crofton Weed	Asteraceae	*Ageratiina*	*adenophora*	Major environmental weed	Yes
Cunjevoi	*Araceae*	*Alocasia*	*brisbanensis*	Native to eastern Australia; seedlings found in gardens down south – spread by birds, showing	

PLANTS PROHIBITED FROM IMPORT TO LORD HOWE ISLAND					
COMMON NAME	**FAMILY**	**GENUS**	**SPECIES**	**NOTES**	**PPP**
				weediness.	
Daisy	*Asteraceae*	*Gaillardia*	*X grandiflora*	Reported in *Fl. Aust*. 1994	
Dieffenbachia	*Arecaceae*	*Dieffenbachia*	*seguine*	Toxic sap	
Dragon Tree	*Asparagaceae*	*Dracaena*	*Draco*	Seeding on island; Global Weed Compendium.	
Duranta	*Verbenaceae*	*Duranta*	*repens*	Seed can be spread by birds; WRA = not approved.	
English Ivy	*Araliaceae*	*Hedera*	*helix*	Spread by seed, (Randall,R., 2001)	
Evening Primrose	*Onagraceae*	*Oenothera*	*drummondii*	WRA = not approved	Yes
Everlasting pea	*Fabaceae*	*Lathyrus*	*latifolius*	Blinky Beach/Transit Hill growing into forest edge; WRA = not approved.	Yes
Flame Tree*	*Sterculiaceae*	*Brachychiton*	*acerifolius*	Reported in *Fl. Aust.* 1994 as being naturalised on Lord Howe Island.	Yes
Flame Vine	*Bignoniaceae*	*Pyrostegia*	*venusta*	Global Weed Compendium	
Foxtail Asparagus (Sprengeri habit)	*Asparagaceae*	*Asparagus*	*densiflorus*	Naturalised in Hawaii; WRA = not approved.	
Freesia	*Iridaceae*	*Freesia x alba*	*Freesia x leichtlinii*	Weeds Australia, Blood (2001)	
French Lavender	*Lamiaceae*	*Lavendula*	*stoechas*	Weeds Australia Database	
Geranium	*Pelagoniaceae*	*Pelagonium*	*X peltatum, hortoryum*	WRA = Not approved	
Ginger lily	*Zingiberaceae*	*Alpinia*	*All species*		
Gladioli	*Iridaceae*	*Gladiolus*	*X hortulanus*		
Gladioli	*Iridaceae*	*Gladiolus*	*alatus*		Yes
Glory Lily*	*Colchiaceae*	*Gloriosa*	*superba*	Footslopes Mt Lidgbird; Major Environmental weed.	Yes
Golden wreath wattle	*Fabaceae*	*Acacia*	*saligna*	Blood (2001)	
Ground Asparagus*	*Asparagaceae*	*Asparagus*	*densiflorus syn aethiopicus*	Major Environmental weed	Yes
Grumichama	*Myrtaceae*	*Eugenia*	*dombeyi*	Weeds Australia Database	
Gum trees	*Myrtaceae*	*Eucalyptus*	*All species*	Imported for timber, potential risk of Myrtle Rust.	
Heavenly Blue Morning Glory	*Convolvulaceae*	*Ipomoea*	*tricolor*	Major environmental weed	
Hibiscus	*Malvaceae*	*Hibiscus*	*mutabilis*		
Hippeastrum	*Amaryllidaceae*	*Hippeastrum*	*puniceum*		
Holly	*Aquifoliaceeeeae*	*Ilex*	*All species*	Weeds Australia	
Holly Fern*	*Dryopteridaceae*	*Phanerophleba*	*falcata*	Ornamental fern; no ferns permitted for import	Yes
Honey flower	*Melianthaceae*	*Melianthus*	*major*	Blood (2001)	
Jaboticaba	*Myrtaceae*	*Myrciaria*	*cauliflora*	Seed spread by birds; WRA = not approved.	
Jacaranda	*Bignoniaceae*	*Jacaranda*	*mimosifolia*	Weed of dry rainforest eastern Australia; WRA = not approved.	
Kahili Ginger*	*Zingiberaceae*	*Hedychium*	*gardnerianum*	In creek on western side of Intermediate Hill showing weediness. Major weed in NZ.	Yes
Kudzu Vine	*Fabaceae*	*Pueraria*	*lobata*	Major Environmental Weed	
Lady of the	*Solanaceae*	*Cestrum*	*nocturnum*	High potential for major	Yes

PLANTS PROHIBITED FROM IMPORT TO LORD HOWE ISLAND					
COMMON NAME	**FAMILY**	**GENUS**	**SPECIES**	**NOTES**	**PPP**
Night*				environmental weed.	
Lantana*	*Verbenaceae*	*Lantana*	*camara*	Declared Noxious. All Lantana species prohibited.	Yes
Large-leaved Privet*	*Oleaceae*	*Ligustrum*	*lucidum*	Major environmental weed	Yes
Leaf Cactus*	*Cactaceae*	*Pereskia*	*aculeata*	National Alert List, Weeds Australia	
Lemon	*Rutaceae*	*Citrus*	*jambhiri*	Present in bushland on island – showing weediness (other citrus species approved).	Yes
Lemon grass	*Poaceae*	*Cymbopogon*	*citratus*	Seed has been sold from local stores; plants on island observed with mature seed heads – likely to spread.	
Lesser periwinkle	*Apocynaceae*	*Vinca*	*minor*	Global Weed Compendium	
Lilac flower	*Acanthaceae*	*Eranthemum*	*pulchellum*		
Loquat	*Rosaceae*	*Eriobotrya*	*japonica*		
Low Baby's Breath	*Caryophyllaceae*	*Gypsophila*	*paniculata*	WRA = not approved	
Madagascar periwinkle	*Apocynaceae*	*Catharanthus*	*roseus*		Yes
Madeira Vine*	*Basellaceae*	*Anredera*	*cordifolia*	Major Environmental Weed	
Magenta Lilly Pilly*	*Myrtaceae*	*Syzygium*	*paniculatum*	Foothills Mt Lidgbird. All Myrtaceae prohibited.	Yes
Mandevilla	*Apocynaceae*	*Mandevilla*	*spp. laxa or amabilis*	Global Weed Compendium	
Mat Rush	*Lomandraceae*	*Lomandra*	*All species*	Readily spreads by seed, WRA = not approved, Global Weed Compendium.	
Mauritius Hemp	*Agavaceae*	*Furcraea*	*foetida*	Global Weed Compendium	
Mickey Mouse Plant*	*Ochnaceae*	*Ochna*	*serrulata*	Major Environmental Weed	Yes
Mirror Bush*	*Rubiaceae*	*Comprosa*	*repens*	Known weed, may hybridise with endemic species.	
Mistweed	*Asteraceae*	*Ageratina*	*riparia*	Major Environmental Weed	
Monbretia	*Iridaceae*	*Crocosmia*	*X crocosmiiflora*		
Mondo Grass	*Asparagaceae*	*Ophiopogon*	*japonicus*	Fleshy fruits; WRA = not approved.	
Monkeys Comb	*Bignoniaceae*	*Pithecoctenium*	*crucigerum*	Weed elsewhere	
Moon Flower	*Convolvulaceae*	*Ipomoea*	*alba*	Major Environmental Weed	
Morning Glory*	*Convolvulaceae*	*Ipomoea*	*Indica & purpurea*	Major Environmental Weed	Yes
Moss Rose	*Portulaceae*	*Portulaca syn Purslane*	*grandiflora*	WRA = Not approved	
Mother in Law Tongue	*Agavaceae*	*Sanseviera*	*trifasciata*		
Mother of Millions*	*Crassulaceae*	*Bryophyllum*	*delagoense*		
Nasturtium	*Tropaeolaceae*	*Tropaeolum*	*majus*	Spreads by seed and runners; WRA = not approved.	
Native Flax	*Xanthorrhoeaceae*	*Dianella*	*All species*	*D. intermedia* endemic to LHI/Norfolk Island.	
New Zealand Christmas Bush	*Myrtaceae*	*Metrosideros*	*kermadecensis*	Removed from PPP in bushland and on slips. All species prohibited. Threat to endemic species.	Yes

PLANTS PROHIBITED FROM IMPORT TO LORD HOWE ISLAND					
COMMON NAME	**FAMILY**	**GENUS**	**SPECIES**	**NOTES**	**PPP**
New Zealand Flax	*Xanthorrhoeaceae*	*Phormium*	*tenax*	WRA = not approved	
Norfolk Pine	*Araucariaceae*	*Araucaria*	*heterophylla*	Major Environmental Weed	Yes
Old Mans Beard*	*Bromeliaceae*	*Tillandsia*	*All species*	Global Weed Compendium	
Olive (ornamental/edible)	*Oleaceae*	*Olea*	*Europaea. All species*	Major Environmental Weed. Weeds Australia and including Norfolk Island.	
Ombui Tree	*Euphorbiaceae*	*Phytolaccaceee*	*dioica*	Fast growing, can spread by seed; needs monitoring.	
Orange Jessamine*	*Rutaceae*	*Murraya*	*paniculata*	High potential for major environmental weed, fruiting plants found on LHI; WRA = not approved.	Yes
Oyster Plant	*Acanthaceae*	*Acanthus*	*mollis*	WRA = not approved	
Painted leaf, Annual poinsettia	*Euphorbiaceae*	*Euphorbia*	*cyathophora*	On foredunes; WRS = not approved	Yes
Pampas Grass*	*Poaceae*	*Cortaderia*	*All species*	Found in Northern Hills; plant removed from Garden down south.	Yes
Pennyroyal	*Lamiaceae*	*Mentha*	*pulegium*	WRA = Not approved, GWC	
Petunia	*Solanaceae*	*Petunia*	*X hybrida*	Reported in *Fl. Aust*. 1994, (*P. parviflora*, *P. axillaris*)	Yes
Pink Centaury	*Gentianaceae*	*Centaurium*	*tenuifolium*	Minor Environmental Weed	Yes
Pink spider shrub	*Acanthaceae*	*Justicia*	*carnea*		
Poinciana	*Caesalpiniaceae*	*Delonix*	*regia*	Global Weed Compendium	
Poppy, Opium	*Papaveraceae*	*Papaver*	*somniferum*	Reported in *Fl. Aust*. 1994, Noxious	
Potato Vine	*Solanaceae*	*Solanum*	*wendlandii*	Spread by birds; – WRA = not approved	
Purple groundsel	*Asteraceae*	*Senecio*	*elegans*	Purple daisy on LHI foredunes; major environmental weed.	Yes
Red leaf	*Euphorbiaceae*	*Acalypha*	*wilkesiana*		
Red Sage	*Lamiaceae*	*Salvia*	*coccinea*	Naturalised Weed	
	Acanthaceae	*Odontonema*	*tubaeforme*		
Resurrection Plant	*Crassulaceae*	*Bryophyllum*	*pinnatum*	Minor Environmental Weed	
Rhoeo/Moses in a boat	*Commelinaceae*	*Rhoeo*	*spathacea*	Spreads vegetatively and by seed; – WRA = not approved.	
Robinia	*Mimosaceae*	*Robinia*	*All species*	Potential to be grafted on *R.pseudoacacia** Black Locust.	
Roldana	*Asteraceae*	*Roldana*	*petasitis*	In gardens on LHI. Removed from PPP - Intermediate Hill and Middle Cave Mt Lidgbird.	Yes
Rose Apple	*Myrtaceae*	*Syzygium*	*jambos*		Yes
Shasta Daisy	*Asteraceae*	*Leucanthemum*	*X maximum*	Syn. Vulgare & x superbum	
Silky Oak*	*Protaceae*	*Grevillea*	*robusta*	Removed from PPP, likelihood for major environmental weed; WRA = not approved.	Yes
Singapore Daisy*	*Asteraceae*	*Sphagneticola sy. Wedelia*	*trilobata*	One of the world's top 50 invasive plants species, Global Compendium of Weeds.	
Small-leaved Privet*	*Oleaceae*	*Ligustrum*	*sinense*	Major Environmental Weed	Yes
Smooth Cassia*	*Fabaceae*	*Senna*	*septemtrionalis*	Environmental weed	
Snowbush	*Euphorbiaceae*	*Breynia*	*distcha syn. nivosa*	Seedling regeneration under garden	

PLANTS PROHIBITED FROM IMPORT TO LORD HOWE ISLAND					
COMMON NAME	**FAMILY**	**GENUS**	**SPECIES**	**NOTES**	**PPP**
				plants observed on island – showing weediness.	
Spearmint	*Lamiaceae*	*Mentha*	*spicata*		
Spider Plant	*Liliaceae*	*Chlorphytum*	*comosum*		
Stone Crop	*Crassulaceae*	*Sedum*	*spectabile*	WRA = Not approved	
Striped Wandering Jew	*Commeliniaceae*	*Tradescantia*	*zebrina*	Weeds Australia	
Sweet Alyssum	*Brassiaceae*	*Lobularia*	*maritima*	Beach dunes; WRA = not approved	Yes
Sweet Pittosporum*	*Pittosporaceae*	*Pittosporum*	*undulatum*	Major Environmental Weed on LHI. Variegated	Yes
Tamarillo	*Solanaceae*	*Solanum*	*betaceum*	Seed spread by birds; WRS = not approved	
Taro	*Araceae*	*Colocasia*	*esculenta*	Batianoff & Butler (2002)	
Tiger Lily	*Liliaceae*	*Lilium*	*formasanum*	Major environmental weed	Yes
Tung Oil Tree	*Euphorbiaceae*	*Vernicia*	*fordii*	Spreads by seed; WRA = not approved	Yes
Umbrella Tree*	*Araliaceae*	*Schefflera*	*actinopylla*	LHI Regulations/ Noxious – not approved	Yes
Valerian	*Valnerianceae*	*Centranthus*	*ruber*	Minor Environmental Weed	
Solandra	*Solanaceae*	*Solandra*	*maxima*	All Solandra species not permitted	
Vitex	*Verbenaceae*	*Vitex*	*Agnus-castus var. latifolia*	Removed from prior approved list; Showing weediness	
Wandering Jew	*Commeliniaceae*	*Tradescantia*	*flumenensis*	Weeds Australia Database	
White & Black mulberry	*Moraceae*	*Morus*	*All species*	Spread by birds; WRA = not approved	
White Cedar*	*Meliaceae*	*Melia*	*azederach*	LHI Regulations/ Noxious – not approved	Yes
White flowered ginger	*Zingiberaceae*	*Hedychium*	*roxburghii*	Removed from creek on western side of Intermediate Hill – showing weediness	Yes
Wild Iris/African Iris	*Iridaceae*	*Dietes*	*grandiflora*	Risk to endemic species. *Dietes* species prohibited	Yes
Wild Strawberry	*Rosaceae*	*Duchnesia*	*indica*	Very extensive in PPP, proven weed	Yes
Winter Senna*	*Fabaceae*	*Senna*	*glabrata var. pendula*	Environmental weed	
Yellow Bells	*Bignoniaceae*	*Tecoma*	*stans*	Batianoff & Butler (2002)	
Yellow Guava	*Myrtaceae*	*Psidium*	*guajava*	Minor Environmental Weed	Yes
Yellow Oleander	*Apocynaceae*	*Thevetia*	*peruviana*	WRA = not approved.	
Yucca	*Agavaceae*	*Yucca*	*aloifolia*		
Zwartkop	*Crassulaceae*	*Aeonium*	*arboreum*	Randall,R. (2001)	
Juncus	*Juncaceae*			All sedges/rushes.	
Myrtles	*Myrtaceae*			All species.	
Sapindaceae	*Sapindaceae*			All Sapindaceous species – except Lychee (*Lychee chinesis)*.	
Figs	*Moraceae*	*Ficus*		All species	
Fuschia	*Onagraceae*	*Fuchsia*	*All species*	Spread by birds; WRA = not approved.	
Ginger	*Zingiberaceae*	*Hedychium*		All species that set seed prohibited	
Ipomoea	*Convolvulaceae*	*Ipomoea*	All *Ipomoea* species – except Sweet	Many invasive species in this family	Yes

PLANTS PROHIBITED FROM IMPORT TO LORD HOWE ISLAND					
COMMON NAME	**FAMILY**	**GENUS**	**SPECIES**	**NOTES**	**PPP**
			Potato (*Ipomoea batatas)*		
Privet spp	*Oleaceae*	*Ligustrum*	*All genus*	Known invasive species; WRA = not approved	
All *Pandorea* species	*Bignoniaceae*	*Pandorea*	*All species*	Same genus as LHI species.	
Pines	*Pinus*	*Pinus*	*All species*	Genus contains many weed species.	
Pines	*Pinophyta*	*Pinus*	*All species*	Randall,R. (2001)	
Guava	*Myrtaceae*	*Psidium*	*All guava species*	Minor to Major Environmental Weeds.	
Sparaxis	*Iridaceae*	*Sparaxis*	*All species*		
Thunbergia	*Acanthaceae*	*Thunbergia*	*All species*	Genus comprises a number of weed species(Black-eyed Susan/Sky Flower).	
Ginger	*Zingiberaceae*	*Zingiber*		All species except Edible Ginger (*Zingiber officinale*).	
Marine and Freshwater plants				All Marine and Freshwater plants.	
Wattles	*Fabaceae*	*Acacia*	*All species*	Potential to be spread by birds; WRA = not approved.	
Palms	*Arecaceae*		*All species*		
Ferns – all ferns prohibited					
Grass	*Poaceae*		*All species*	All species including bamboo.	
Cyperus/sedge	*Cyperaceae*		*All species*		

* Declared Noxious on LHI – NSW DPI Noxious Weeds (Weed Control) Order 2014 WRA =Weed Risk Assessment

Resources:

- Batianoff & Butler 2002. Global Weed Compendium
- Csurches, S. and Edwards, R., (1998). *Potential Environmental Weeds in Australia.* Biodiversity Group, Environment Australia.
- *Fl. Aust*. 1994
- Randall,R. (2001). *Garden thugs, a national list of invasive and potentially invasive garden plants. Plant protection quarterly* Vo,16 (4) 2001 . Research Reports. Dept Agriculture WA and CRC for Australian Weed Mgt.
- Randall, R.P (Rod) 2002. A Global Compendium of Weeds. RG & FJ Richardson, Victoria.
- Species listed as Noxious for Lord Howe Island and NSW http://www.legislation.nsw.gov.au/epub?bulletin=20140302
- Weeds Australia. *Weeds listed in the Australian Weeds Committee Database.* Australian Weeds Committee Weeds Significant weeds known to occur, or with the potential to occur, in the region you have selected include the following 342 plants. www.weeds.org.au/
- Weeds-Control-Australia. I. Hosking,J.R.(john Robert).II. Cooperative Research Centre for Weed Management Systems (Australia). III. (Series: CRC for Weed Management systems technical Series: No.3)

Appendix 5 Plants Permissible for Import to Lord Howe Island

Species List 3: List of Permissible Garden Plants

Vegetables; Herbs, Spices & Medicinals; Fruit Trees and Vines; Ornamental Plants.

COMMON NAME	FAMILY	GENUS	SPECIES	NOTES
VEGETABLES				
Beans	Fabaceae	*Phaseolus*	*vulgaris*	
Beetroot	Amaranthaceae	*Beta*	*vulgaris ssp vulgaris*	
Broad beans	Fabaceae	*Vicia*	*faba* var *major*	
Broccoli, Chinese Broccoli	Brassiaceae	*Brassica*	*oleracea* var *italica*	
Brussels sprouts	Brassiaceae	*Brassica*	*oleracea* var *gemmifera*	
Cabbage	Brassiaceae	*Brassica*	*oleracea* var *capitata*	
Cabbage, various cultivars	Brassiaceae	*Brassica*	*chinensis, pekinensis*	
Capsicum, chillies, peppers	Solanaceae	*Capsicum*	*annuum*	
Carrots	Apiaceae	*Daucus*	*carota*	
Cauliflower	Brassiaceae	*Brassica*	*oleracea* var *botrytis*	
Celery	Apiaceae	*Apium*	*graveolens*	
Chard	Amaranthaceae	*Beta*	*vulgaris*	
Chicory	Asteraceae	*Chichorium*	*intybus*	
Corn, many cultivars	Poaceae	*Zea*	*mays*	
Cucumber, various cultivars	Cucurbitaceae	*Cucumus*	*sativa*	
Eggplant	Solanaceae	*Solanum*	*melongena*	
Green endives	Asteraceae	*Chichorium*	*endivia*	
Kohl rabi	Brassiaceae	*Brassica*	*oleracea* var *gongylodes*	
Honeydew Melon	Cucurbitaceae	*Cucumis*	*melo*	
Leek	Amaryllidaceae	*Allium*	*ampeloprasum* var. *porrum*	
Lettuce, various cultivars	Asteraceae	*Lactuca*	*sativa*	
Mushrooms (edible)	Fungi			certified to AS 4454
Ochra	Malvaceae	*Abelmoschus*	*esculentus*	
Parsley	Apiaceae	*Petroselinum*	*crispum*	
Parsnip	Apiaceae	*Pastinaca*	*sativa*	
Peas	Fabaceae	*Pisum*	*sativum*	
Potatoe	Solanaceae	*Solanum*	*tuberosum*	
Pumpkin, various cultivars	Cucurbitaceae			
Radish	Brassiaceae	*Raphanus*	*sativus*	
Rockmelon	Cucurbitaceae	*Cucumis*	*melo*	
Rocket	Brassiaceae	*Eruca*	*sativa*	

COMMON NAME	FAMILY	GENUS	SPECIES	NOTES
Salad cress	Brassiaceae	*Lepidium*	*sativum*	
Silverbeet	Amaranthaceae	*Beta*	*vulgaris* ssp cicla	
Spinach	Amaranthaceae	*Spinacia*	*oleracea*	
Spring onion	*Allium ×wakegi*	*Allium*	*×wakegi*	
Strawberries	Rosaceae	*Fragaria*	*monatserdbeeren*	
Sweet Potato	Convolvulaceae	*Ipomoea*	*batatas*	Note: some species/ varieties not permitted
Tomatoes, various cultivars	Solanaceae	*Lycopersicon*	*esculentum*	
Turnip	Brassiaceae	*Brassica*	*rapa* var *rapa*	
Turnips and swedes	Brassiaceae	*Brassica*	*napus* var *napobrassica*	
Watermelon	Cucurbitaceae	*Citrullus*	*lanatus*	
Watermelon	Cucurbitaceae	*Cucumus*	*melo*	
Yellow Squash	Cucurbitaceae			
Zucchini, Marrow	Cucurbitaceae	*Cucurbita*	*pepo*	
HERBS SPICES & MEDICINALS				
Agave	Agavaceae	*Aloe*	*vera syn. barbadensis*	
Basil	Lamiaceae	*Ocimum*	*basilicum*	
Bay Leaf	Lauraceae	*Laurus*	*nobilis*	
Chamomile	Asteraceae	*Chamaemelum*	*nobile*	
Chives	Amaryllidaceae	*Allium*	*schoenoprasum*	
Comfrey	Boraginaceae	*Symphytum*	*X uplandicum*	
Coriander	Apiaceae	*Coriandrum*	*sativum*	
Dill	Apiaceae	*Anethum*	*graveolens*	
Echinacea	Asteraceae	*Echinaceae*	*purpurea*	
Edible Ginger	Zingiberaceae	Zingiber	*officinale*	
Fennel	Apiaceae	*Foeniculum*	*Vulgare var. vulgare*	*F.vulgare* not permitted
Garlic	Amaryllidaceae	*Allium*	*sativum*	
Garlic Chives	Amaryllidaceae	*Allium*	*tuberosum*	
Lemon Balm	Lamiaceae	*Melissa*	*officinalis*	
Marjoram	Lamiaceae	*Origanum*	*majorana*	
Mint	Lamiaceae	*Mentha*	*piperita*	
Mustard	Brassiaceae	*Brassica*	*alba*	
Oregano	Lamiaceae	*Origanum*	*vulgare*	
Parsley	Apiaceae	*Petroselinum*	*P. crispum*	
Rhubarb	Polygonaceae	*Rheum*	*rhabarbarum*	

COMMON NAME	FAMILY	GENUS	SPECIES	NOTES
Rosemary	Lamiaceae	*Rosmarinus*	*officinalis*	
Sage	Lamiaceae	*Salvia*	*officinalis*	
Shallots, Onions	Amaryllidaceae	*Allium*	*cepa*	
Tarragon	Asteraceae	*Artemisia*	*dracunculus*	
Thyme	Lamiaceae	*Thymus*	*vulgaris*	
Tumeric	Zingiberaceae	*Curcuma*	*longa*	Does not produce seed
FRUIT TREES & VINES				
Avocado	Lauraceae ***	*Persea*	*americana (varities)*	*DPI Restrictions apply*
Banana (Cavendish, Lady Finger)	Musaceae ***	*Musa*	*sapientum, acuminata*	*DPI Restrictions apply*
Cherimoya	Annonaceae	*Annona*	*cherimoya*	
Cumquat	Rutaceae	*Citrus*	*japonica*	
Custard Apple	Annonaceae	*Annona*	*atemoya*	
Grapes	*Vitaceae*	*Vitis*	*vinifera*	seedless non fertile hybrid only
Grapefruit	Rutaceae	*Citrus*	*paradisi*	
Kaffir Lime	Rutaceae ***	*Citrus*	*hystrix*	*DPI Restrictions apply*
Kiwi Fruit	Actinidaceae	*Actinida*	*deliciosa var isai*	
Lime	Rutaceae	*Citrus*	*aurantifolia*	
Lemon	Rutaceae	*Citrus*	*limon*	
Lemonade	Rutaceae	*Citrus*	*Limon x reticulata*	
Lychee	Sapindaceae	*Lychee*	*chinesis*	
Macadamia	Proteaceae	*Macadamia*	*integrifolia*	
Mandarin	Rutaceae	*Citrus*	*reticulata*	
Mango	Anacardiaceae	*Mangifera*	*indica*	
Nashi Pear	Rosaceae	*Pyrus*	*pyrifolia*	
Nectarine	Rosaceae	*Prunus*	Persica var. *nucipersica*	
Orange	Rutaceae	*Citrus*	*sinensis*	
Passionfruit #	Passifloraceae	*Passiflora*	*edulis*	Note: grafts to *Passiflora cairica* rootstock prohibited
Pawpaw	Caricaceae***	*Carica*	*papaya*	*DPI Restrictions apply*
Peach	Rosaceae	Prunus	persica	
Persimmon	Ebenaceae	*Diospyros*	*kaki*	
Pommegranite	Lythraceae	*Punica*	*granatum*	
Quince	Rosaceae	*Cydonia*	*oblonga*	
Starfruit	Oxalidaceae	*Averroa*	*carambola*	
Strawberry	Rosaceae	*Fragaria*	*virginiana, ananassa*	
Tahitian Lime	Rutaceae	*Citrus*	*aurantifolia*	
Tangello	Rutaceae	*Citrus*	*tengelo*	
ORNAMENTAL PLANTS				

COMMON NAME	FAMILY	GENUS	SPECIES	NOTES
African violet (many cultivars)	Gesneriaceae	*Saintpaulia*	*ionantha*	
Aster	Asteraceae	*Aster*	*X frikarti*	
Azalea	Ericaceae	*Rhododendron*	*Hybrids of 'formosa, indica, kurume, mollis'*	Plants traded as Azalea only. Note: Invasive species in this plant family
Begonia	Begoniaceae	*Begonia*	*tuberhybrida*	Note: Invasive species in this plant family
Bird of Paradise	Strelitziaceae	*Strelitzia*	*reginae*	
Bougainvillea	Nyctaginaceae	*Bougainvillea*	*species*	
Calibrachoa	Convolvulaceae	*Calibrachoa*	*Minifamous', 'Noa' and 'Callie'*	Note: Invasive species in this plant family
Camellia (many cultivars)	Theaceae	*Camellia*	*species*	
Carnations (many cultivars)	Caryophyllaceae	*Dianthus*	*species*	
Chrysthanemum	Asteraceae	*Chrysthanemum*	*grandiflorum*	Note: Invasive species in this plant family
Coleus	Lamiaceae	*Solenostemon*	*scutellarioides*	
Croton	Euphorbiaceae	*Codiaeum*	*variegatum var pictum*	Note: Invasive species in this plant family
Dahlia (many cultivars)	Asteraceae	*Dahlia*	*species*	
Day Lily	Xanthorrhoeaceae	*Hemerocallis*	*X hybrid (not H.fulva or liliosphodelus)*	Note: Invasive species in this plant family
Delphinium (many cultivars)	Ranunculaceae	*Delphinium*	*species*	
Dracaena	Araceae	*Dracaena*	*Marginate "tricolor"*	
English Marigold	Asteraceae	*Calendula*	*officinalis*	
Flamingo flower	Araceae	*Anthurium*	*acaule*	Note: Invasive species in this plant family
Flanders Poppy	Papaveraceae	*Papavar*	*rhoeas*	
Flowering maple	Malvaceae	*Abutilon*	*pictum; x suntense*	Note: Invasive species in this plant family
Frangipanni	Apocynaceae	*Plumeria*	*alba, rubra*	Plants observed setting seed on island – monitoring being undertaken
Gardenia	Rubiaceae	*Gardenia*	*Augusta"veitchii"*	
Gerbera	Asteraceae	*Gerbera*	*jamesonii*	
Hibiscus (many cultivars)	Malvaceae	*Hibiscus*	*species*	Some rootstock prohibited (e.g. *H. mutabilis*)
Hybrids only	Crassulaceae	*Echeveria*	*Small succulents*	Prior approved
Hydrangea (many cultivars)	Hydrangeaceae	*Hydrangea*	*species*	
Ixora	Rubiaceae	*Ixora*	*chinensis*	Prior approved
Lavender	Lamiaceae	*Lavandula*	*angustifolia*	Not L. stoechas

COMMON NAME	FAMILY	GENUS	SPECIES	NOTES
Lobelia	Lobeliaceae	*Lobelia*	*erinus*	Note: Invasive species in this plant family
Mandevilla	Apocynaceae	*Mandevilla*	*splendins cv 'Aloha & Red Riding Hood'*	Note: Invasive species in this plant family. Monitor current plants
Marigolds (many cultivars)	Asteraceae	*Tagetes*	*patula*	Note: Invasive species in this plant family
Pansies	Violaceae	*Viola*	*X wittrockiana*	
Pelargonium/Geranium (many cultivars)	Geraniaceae	*Pelargonium*	*species*	Note: Some species not permitted
Petunia	Solanaceae	*Petunia*	*X hybrid*	Hyrbids only, non seed producing
Phlox (several cultivars)	Polemoniaceae	*Phlox*	*drummondii*	
Pineapple Sage	Lamiaceae	*Salvia*	*rutilans*	
Poincettia	Euphorbiaceae	*Euphorbia*	*pulcherrima*	
Primula	Primulaceae	*Primula*	*vulgaris*	Note: Invasive species in this plant family
Rock Rose	Cistaceae	*Helianthemum*	*apenninium*	
Rondeletia	Rubiaceae	*Rondeletia*	*amoena*	
Roses (many cultivars)	Rosaceae	*Rosa*	*Shrub species only*	
Sage (scarlet)	Lamiaceae	*Salvia*	*splendens*	
Sage (mealy)	Lamiaceae	*Salvia*	*farinaceae*	
Shrimp bush	Acanthaceae	*Justicia*	*brandegeeana*	
Moonstone (small succulent)	Crassulaceae	*Pachyphtum*	*kimnachii*	
Snapdragon	Scrophulariaceae	*Antirrhinum*	*majus*	
Stock	Brassiaceae	*Matthiola*	*incana*	
Sunflower	Asteraceae	*Helianthus*	*annuus*	
Sweet Pea	Fabaceae	*Lathyrus*	*odoratus*	
Texan Bluebell	Gentianaceae	*Eustoma*	*grandiflorum*	WRA = approved
Vitex	Verbenaceae	*Vitex*	*Agnus-castus var. latifolia*	
Yellow Dancer	Heliconiacece	*Heliconia*	*bihai*	Some species not permitted
Zinnia	Asteraceae	*Zinnia*	*liniaris*	Not all species approved.

NB: *** NSW DPI provisions apply to the source stock from areas that are disease free.

Appendix 6 Plant Health Industry Standards and Certification

The Interstate Certification Assurance (ICA) Scheme is a national scheme of plant health certification that is accepted by all Australian states and the Northern Territory.

The national ICA Scheme provides a harmonised approach to the audit and accreditation of businesses throughout Australia, and the mutual recognition of Plant Health Assurance Certificates accompanying consignments of produce moving within Queensland or interstate.

Interstate Certification Assurance (ICA) is a system of plant health certification based on quality management principles. Under ICA, a business can be accredited to issue plant health assurance certificates for its produce. To be accredited, a business must be able to demonstrate it has effective in-house procedures that ensure that produce consigned to intra- or interstate markets meets specified quarantine requirements.

ICA standards are mostly relevant for the interstate movement of plants and plant products. A number of ICA standards however are relevant to LHI particularly where plant material is being imported from locations with pests, diseases or pathogens that are not known on Lord Howe Island. Refer to the following ICA standards).

a) ICA-29 Treatment of Nursery Stock and Soil-less Media
b) ICA-39 Inspection and Treatment of Plants for Red Imported Fire Ant
c) ICA-40 Property Freedom of Plants for Red Imported Fire Ant
d) ICA-42 Nursery Freedom, Treatment and Inspection for myrtle rust

NSW Department of Primary Industries

NSW Department of Primary Industries has a lead role in preventing, responding to, and overseeing the recovery from invasion or spread of plant pests and diseases. NSW DPI works closely with plant industries, other jurisdictions and the general public to put sound biosecurity policies in place. A number of NSW DPI Policies and Orders are relevant to the import of plants to Lord Howe Island.
http://www.dpi.nsw.gov.au/

Appendix 7 Fungicide Treatment

Australian Nursery Industry Myrtle Rust Management Plan (Version 2) 2012

For the treatment of plants (Myrtaceae family) the industry has access to an Emergency Permit (PER12156) that allows a range of fungicides to be applied for the management of myrtle rust. Therefore if you intend to treat plants with a fungicide you must have a copy of this permit on-site and you must use the application rates as outlined in the permit. You can download the permit by going to the APVMA website (www.apvma.gov.au) and click on 'Permits' and follow the prompts.

The permit is a legal document and all directions/rates/intervals must be followed as described in the document. Furthermore all relevant directions as detailed on each individual product label must also be followed by those handling and applying the fungicide/s. NGIA recommends only appropriately trained staff in pesticide handling use and application should be applying the myrtle rust fungicide program.

The table below (Table 7.1) identifies the various fungicides on the permit plus others with existing registrations and lists the 'Fungicide activity' that will assist in selecting the appropriate product. The 'Chemical group' is to ensure that an effective rotation program (see table 7.2 & 7.3 with examples below) can be applied on-farm if a business intends to have a standard fungicide strategy for the management of myrtle rust.

Note: Table 7.3 is based on medium to low risk seasonal disease pressures moving the rotation interval to 4 weeks (1 month).

7.1 Fungicide Table

FUNGICIDE TRADE NAME	ACTIVE CONSTITUENT	FUNGICIDE ACTIVITY	CHEMICAL GROUP (MODE OF ACTION)	MINIMUM RE-TREATMENT INTERVAL BETWEEN CONSECUTIVE APPLICATIONS
BAYFIDAN 250 EC FUNGICIDE (PER12156)	TRIADIMENOL	Systemic, curative and protectant	3	14-21 days
SAPROL FUNGICIDE (PER12156)	TRIFORINE	Systemic, slightly curative and protectant	3	7 days
IMTRADE MANCOZEB 750 DF FUNGICIDE (PER12156)	MANCOZEB	Non-systemic protectant	M3	7 days
AMISTAR 250 SC FUNGICIDE (PER12156)	AZOXYSTROBIN	Systemic, slightly curative and protectant	11	14-21 days
COPPER OXYCHLORIDE (PER12156)	COPPER OXYCHLORIDE	Non-systemic protectant	M1	7-14 days
PLANTVAX 750 WP FUNGICIDE (PER12156)	OXYCARBOXIN	Systemic, curative and protectant	7	14 days
TILT 250 EC FUNGICIDE (PER12156	PROPICONAZOLE	Sytemic, curative and protectant	3	7 days
BRAVO (Registered)	CHLOROTHALONIL	Non-systemic, slightly curative and proctectant	M5	7-14 days

7.2 Myrtle Rust Fungicide Treatment Rotation Program (Production/Propagation)
High Risk Season (External environmental conditions suitable for spore production)

CROP SITUATION	FUNGICIDE (FORTNIGHT 1)	FUNGICIDE (FORTNIGHT 2)	FUNGICIDE (FORTNIGHT 3)	FUNGICIDE (FORTNIGHT 4)
Stock Receival	Bayfidan	Plantvax	Bayfidan	Plantvax
Propagation	Bayfidan/Tilt	Mancozeb	Plantvax	Amistar
Growing On (Low level risk)	Bayfidan/Tilt/ Plantvax	Mancozeb/Bravo	Copper/Bravo (Use Bravo only if not used in preceding month)	Bravo/Amistar (Use Bravo only if not used in preceding month)
Growing On (Medium Level Risk)	Bayfidan/Tilt/Saprol	Mancozeb/Copper	Plantvax	Bravo/Amistar
Growing On (High Level Risk)	Bayfidan + Mancozeb	Copper/Bravo	Plantvax + Mancozeb	Amistar + Mancozeb

7.3 Myrtle Rust Fungicide Treatment Rotation Program (Production/Propagation)
Medium/Low Risk Season (External environmental conditions suitable for spore production)

CROP SITUATION	FUNGICIDE (FORTNIGHT 1)	FUNGICIDE (FORTNIGHT 2)	FUNGICIDE (FORTNIGHT 3)	FUNGICIDE (FORTNIGHT 4)
Stock Receival	Bayfidan	Plantvax	Bayfidan	Plantvax
Propagation	Bayfidan/Tilt	Mancozeb/Copper	Plantvax	Amistar
Growing On (Low level risk)	Bayfidan/Tilt or Plantvax	Mancozeb/Bravo	Bravo/Amistar (Use Bravo only if not used in preceding month)	Copper/Bravo (Use Bravo only if not used in preceding month)
Growing On (Medium Level Risk)	Bayfidan/Tilt/Saprol	Mancozeb/Copper	Plantvax	Bravo/Amistar
Growing On (High Level Risk)	Bayfidan + Mancozeb	Copper/Bravo	Plantvax + Mancozeb	Amistar + Mancozeb

Note: Test fungicide/s on a sample of the crop to ensure the product is not phytotoxic to your plant species before initial batch treatment.

Note: Other APVMA Permits are available for:

- Native plant food crops _PER12746
- Home Gardener – PER12828