

Myrtle Rust Planting Fact Sheet



What is Myrtle rust?

Myrtle rust is a serious fungal disease that affects plants in the Myrtaceae family, including natives such as bottle brush (*Callistemon* spp.), tea tree (*Melaleuca* spp.) and eucalypts (*Eucalyptus* spp.). Myrtle rust is distinctive in that it produces masses of powdery bright yellow or orange-yellow spores on infected plant parts.

As myrtle rust is a new disease to Australia, its full host range is unknown. Myrtle rust cannot be eradicated and will continue to spread as it produces thousands of spores which are highly mobile. Although we cannot eradicate the disease, we can limit its spread, manage its impact and carry out research to discover its full host range and seek long-term solutions.

How does myrtle rust spread?

Myrtle rust can spread rapidly because it produces thousands of spores that are easily spread by wind, human activity and animals. The disease can spread through the movement of:

- infected or contaminated plant material, nursery stock, plant cuttings, flowers and germ plasm;
- animals such as bees, birds, bats and possums that have been in contact with rust spores;
- contaminated plant waste, timber, wood packaging and dunnage;
- contaminated equipment and tools used on or around plants (e.g. chainsaws, secateurs); and
- contaminated clothing, shoes and other personal effects.

Myrtle rust is likely to infect plants in wet and humid conditions and rust pustules can mature to release spores in as little as 10–12 days. Spores can survive for up to three months in the environment.

What can I do if I suspect Myrtle rust?

Report any suspect detections to Biosecurity Queensland by calling 13 25 23 or visiting http://www.daff.qld.gov.au/4790_20842.htm

Further Information

Department of Agriculture, Fisheries and Forestry
http://www.daff.qld.gov.au/4790_19788.htm



Minor/early symptoms



Figure 1: Early Symptoms of myrtle rust infection (DEEDI 2011).



Severe symptoms



Figure 2: Severe Symptoms of myrtle rust infection (DEEDI 2011).

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What can I do to stop the spread of Myrtle rust?

If you are planting new trees or undertaking revegetation you can follow these planting recommendations for species selection and appropriate spacing's to minimise the spread of myrtle rust.

Small Scale Revegetation

If you are undertaking a small scale revegetation project, that is planting a small number of trees, it is recommended that you do not plant species that are highly susceptible or extremely susceptible (Table 1). Species that are classified as relatively tolerant and moderately susceptible are able to be planted.

Myrtle rust spreads easily by a number of different sources therefore, planting highly susceptible or extremely susceptible species in a small scale revegetation project places these plants at increased risk of being affected by myrtle rust.

Large Scale Revegetation

If you are undertaking a large scale revegetation project, that is planting a large number of trees, it is recommended that you predominately plant species that are relatively tolerant and moderately susceptible (Table 1).

If you wish to plant highly susceptible or extremely susceptible plant species it is recommend that you adopt the following planting strategies to reduce the potential of these species being affected by myrtle rust:

- plant extremely susceptible and highly susceptible species few and far between, mainly plant relatively tolerant and moderately susceptible species;
- buffer extremely susceptible and highly susceptible species with relatively tolerant species; and
- buffer extremely susceptible and highly susceptible species from prevailing winds of the season,
- increase the spacing between the plants to reduce humidity. No specific distance is recommended.

Table 1. Plant species and their susceptibility to myrtle rust

Relatively Tolerant	
Scientific Name	Common Name
<i>Acmena hemilampra</i> (syn. <i>Syzygium hemilamprum</i>)	Blush satinash
<i>Acmenaingens</i>	Red apple
<i>Asteromyrtus brassii</i>	Brass's Asteromyrtus
<i>Austromyrtus tenuifolia</i>	Narrow leaf myrtle
<i>Backhousia angustifolia</i>	Curry myrtle or narrow-leaved myrtle
<i>Backhousia oligantha</i> (endangered)	No common name
<i>Backhousia sciadophora</i>	Shatterwood
<i>Backhousia</i> sp. 'Prince Regent'	No common name
<i>Choricarpia subargentea</i> (near threatened)	Giant ironwood
<i>Corymbia henryi</i>	Large leaved spotted gum
<i>Corymbia torelliana</i>	Cadagi
<i>Corymbia citriodora</i> subsp. <i>variegata</i>	Spotted gum
<i>Eucalyptus</i> sp.	Red gum
<i>Eucalyptus cloeziana</i>	Gympie messmate
<i>Eucalyptus planchoniana</i>	Bastard tallow wood
<i>Eucalyptustereticornis</i>	Blue gum, forest red gum
<i>Gossia bidwillii</i> (syn. <i>Austromyrtus bidwillii</i>)	Scrub python tree
<i>Gossia floribunda</i>	Cape ironwood
<i>Gossia myrsinocarpa</i>	Malanada ironwood, small flowered lignum
<i>Lenwebbia lasioclada</i>	Velvet myrtle
<i>Lenwebbia</i> sp. 'Blackall Range' (endangered)	Blackall Range myrtle
<i>Leptospermum liversidgei</i>	Blackall Range myrtle
<i>Leptospermum petersonii</i>	Lemon-scented tea tree
<i>Leptospermum semibaccatum</i>	No common name

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<i>Lindsayomyrtus racemoides</i>	Daintree Penda
<i>Lophostemon suaveolens</i>	Swamp box, swamp mahogany
<i>Melaleuca formosa</i> (syn. <i>Callistemon formosus</i>)	Kingaroy Bottlebrush, cliff bottlebrush
<i>Melaleuca nesophila</i>	Showy honey myrtle
<i>Melaleuca pachyphylla</i>	Wallum bottlebrush
<i>Metrosideros collina</i>	Fiji Christmas bush
<i>Metrosideros collina x villosa</i>	Fiji Christmas bush
<i>Metrosideros kermadecensis</i>	Kermadec pohutukawa
<i>Metrosideros thomasii</i>	New Zealand Christmas bush
<i>Myrciaria cauliflora</i>	No common name
<i>Myrtus communis</i>	Common myrtle
<i>Pilidostigma glabrum</i>	Plum myrtle
<i>Rhodamnia acuminata</i>	Cooloola ironwood
<i>Ristantia waterhousei</i> (vulnerable)	No common name
<i>Syzygium argyropedicum</i>	Silver satinash
<i>Syzygium armstrongii</i>	White bush apple
<i>Syzygium australe</i>	Scrub cherry
<i>Syzygium canicortex</i>	Yellow satinash
<i>Syzygium corynanthum</i>	Sour cherry
<i>Syzygium forte</i> subsp. <i>forte</i>	Watergum, brown satinash
<i>Syzygium forte</i> subsp. <i>potamophilum</i>	Flaky barked satinash, white apple
<i>Syzygium luehmannii</i>	Small-leaved lillypilly, riberry
<i>Syzygium moorei</i>	Rose apple
<i>Syzygium nervosum</i>	No common name
<i>Syzygium paniculatum</i>	Magenta Cherry
<i>Syzygium rubrimolle</i>	Laura apple
<i>Syzygium tierneyanum</i>	River Cherry, Bamaga satinash
<i>Syzygium wilsonii</i>	Powderpuff lilly pilly
<i>Syzygium wilsonii x luehmannii</i>	Cascade lilly pilly
<i>Tristaniopsis laurina</i>	Water gum, kanooka
<i>Uromyrtus tenella</i>	No common name
<i>Waterhousea floribunda</i> (syn. <i>Syzygium floribundum</i>)	Gully satinash
<i>Waterhousea mulgraveana</i>	No common name
Moderately Susceptible	
Scientific Name	Common Name
<i>Acmenosperma claviflorum</i>	Grey satinash
<i>Backhousia myrtifolia</i>	Grey myrtle, ironwood
<i>Eucalyptus carnea</i>	Broad-leaved white mahogany
<i>Eucalyptus curtisii</i>	Plunkett mallee
<i>Eucalyptus grandis</i>	Flooded gum, rose gum
<i>Eucalyptus tindaliae</i>	Tindale's stringybark
<i>Eugenia zeyheri</i>	No common name
<i>Gossia fragrantissima</i> (endangered)	Sweet myrtle
<i>Gossia macilwraithensis</i> (near threatened)	No common name
<i>Gossia punctata</i>	Dotted myrtle
<i>Leptospermum luehmannii</i>	Lemon-scented tea tree, olive tea tree
<i>Melaleuca saligna</i>	Willow bottlebrush, white bottlebrush
<i>Melaleuca viminalis</i> (syn. <i>Callistemon viminalis</i>)	Willow bottlebrush
<i>Rhodamnia arenaria</i>	Cape York malletwood
<i>Rhodamnia argentea</i>	Silver myrtle or malletwood
<i>Rhodamnia glabrescens</i> (near threatened)	Smooth malletwood
<i>Rhodamnia pauciovulata</i> (near threatened)	Small-leaved malletwood
<i>Rhodamnia spongiosa</i> (syn. <i>R. glauca</i>)	Northern malletwood
<i>Rhodomyrtus canescens</i>	Crater ironwood
<i>Rhodomyrtus pervagata</i>	Rusty rhodomyrtus, rusty ironwood

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<i>Rhodomyrtus sericea</i>	Grey rhodomyrtus
<i>Rhodomyrtus trineura</i> subsp. <i>capensis</i>	No common name
<i>Sphaerantia discolor</i>	Tully Penda
<i>Syzygium angophoroides</i>	Yarrabah satinash
<i>Syzygium cumini</i>	Java plum
<i>Syzygium eucalyptoides</i> subsp. <i>eucalyptoides</i>	White apple
<i>Syzygium xerampelinum</i>	Mulgrave satinash
<i>Waterhousea Unipunctata</i>	Rolypoly satinash
<i>Xanthostemon youngii</i>	Crimson penda

Highly Susceptible

Scientific Name	Common Name
<i>Anetholea anisata</i> (syn. <i>Backhousia anisata</i> , <i>Syzygium anisatum</i>)	Aniseed myrtle
<i>Austromyrtus dulcis</i>	Midgen berry or midyim
<i>Backhousia citriodora</i>	Lemon-scented myrtle
<i>Choricarpia leptopetala</i>	Brown myrtle, rusty turpentine
<i>Gossia acmenoides</i>	Scrub ironwood
<i>Gossia gonoclada</i> (endangered)	Angle-stemmed myrtle
<i>Gossia hillii</i>	Scaly myrtle
<i>Lenwebbia prominens</i> (near threatened)	Southern velvet myrtle
<i>Melaleuca fluviatilis</i>	Weeping tea tree
<i>Melaleuca leucadendra</i>	Broad-leaved paperbark
<i>Melaleuca nodosa</i>	Prickly-leaved paperbark
<i>Melaleuca polandii</i>	No common name
<i>Melaleuca viridiflora</i>	Broad-leaved paperbark
<i>Rhodamnia costata</i>	Malletwood
<i>Rhodamnia dumicola</i>	Rib-fruited malletwood
<i>Rhodamnia sessiliflora</i>	Iron malletwood
<i>Rhodomyrtus psidioides</i>	Native guava
<i>Rhodomyrtus tomentosa</i>	Downy rose myrtle, Ceylon hill gooseberry
<i>Syzygium oleosum</i>	Blue lillypilly
<i>Tristania neriifolia</i>	Water gum
<i>Xanthostemon oppositifolius</i> (vulnerable)	Southern penda

Extremely Susceptible

Scientific Name	Common Name
<i>Agonis flexuosa</i>	Willow myrtle
<i>Chamelaucium uncinatum</i>	Geraldton wax
<i>Eugenia reinwardtiana</i>	Beach cherry
<i>Gossia inophloia</i> (syn. <i>Austromyrtus inophloia</i>) (near threatened)	Thready barked myrtle
<i>Melaleuca quinquenervia</i>	Broad-leaved paperbark
<i>Rhodamnia angustifolia</i> (endangered)	Narrow-leaved malletwood
<i>Rhodamnia maideniana</i>	Smooth scrub turpentine
<i>Rhodamnia rubescens</i>	Scrub turpentine
<i>Syzygium jambos</i>	Rose apple

Images from: Department of Employment, Economic Development and Innovation (DEEDI) 2011, Myrtle rust presentation package.