

A Guide for Gardeners in Queensland Sub Tropics







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2) Acknowledgements

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3) Introduction from the Ministers

The nursery and gardening industry has joined with the Australian Government in the fight against invasive garden plants. In championing this initiative, Nursery and Gardening Industry Australia (NGIA) is taking a significant step forward in tackling one of the nation's most serious environmental problems – the spread of weeds.

The Grow Me Instead campaign is a great industry-driven initiative providing relevant local information to nursery operators and gardeners about plants which are potential weeds in their area and less invasive plants for gardeners to use.

This cooperation between the horticulture and nursery industries, the Australian Government and weed management bodies will help ensure horticulturalists and gardeners receive the information they need to combat the spread of weeds.

It is estimated that weeds cost the Australian agricultural industry around \$4 billion a year. The real cost of weeds to the environment is difficult to calculate, however it is likely to be at least equal to the cost to agriculture.

Of the almost 3000 introduced plant species now known to be established in the Australian environment, 65% are 'escaped' garden plants. An important step in preventing the spread of weeds is public education to help change attitudes and behaviours that contribute to the weed problem.

The Government is committed to investing in initiatives that have real on-ground benefits for the environment and for industry. We commend this initiative to you.

The Hon Peter Garrett AM MP

Minister for the Environment, Water, Heritage and the Arts

The Hon Tony Burke MP

Minister for Agriculture, Fisheries and Forestry

4) Introduction

The Nursery and Garden Industry in Australia employs about 45,000 people in some 22,000 businesses across the country. For many years the Industry has been conscious of their environmental responsibilities and they have been proactive in furthering educational programs, including those concerning invasive garden plants. Garden escapes are not a new issue: weeds have been around since the first settlers brought along reminders of 'home' to help them settle into a new and strange land. How strange the Australian landscape must have seemed then, and how natural it would have been for the settlers to want only the tried and true familiar garden plants of the British Isles. Despite the difficulties of creating a garden in the Antipodes, it took many years for the average Australian to appreciate the native flora of this great land.

Then, there were the early 'acclimatisation societies' who thought it a good idea to introduce plants and animals from the old country and also to spread Australian native plants from state to state.

Although great damage to the environment has occurred as a result of these indiscriminate introductions, this has not been solely the fault of the horticultural industry: certainly other industries have contributed. Graziers have imported new grasses and fodder crops and there were 'accidental' imports that came about unwittingly through inappropriate packaging, movement of plant and machinery, as seed in fodder and in ships' ballast.

However, the weed issue and who is actually responsible should not become a 'blame game'. Together we must seek to repair what damage we can and to work together as a community to prevent similar damage occurring in the future.

The Nursery & Garden Industry is actively participating in lessening the availability of invasive plants in Australia by preventing their production and sale. The Industry has recently established a greater understanding and cooperation with both State and Federal Governments, culminating in this important 'Grow Me Instead' booklet.

Greater awareness and education of the home gardener is a major part of the answer to this problem. By using the information in the 'Grow Me Instead' booklet as a guide and consulting with your local garden centre or plant nursery, you can help to minimise garden escapes and create a better environmental future for following generations of gardeners.



5) What is Grow Me Instead?

The original 'Grow Me Instead' booklet developed by the Nursery & Garden Industry NSW & ACT (NGINA) has now been extended as a national program by the Nursery & Garden Industry Australia (NGIA), in partnership with the Federal Government, to reduce the numbers and impact of invasive plants in Australia.

'An environmentally invasive plant' is just another term for a weed. Quite simply, a weed is any plant that poses a threat to the environment, adversely impacts human or animal health, or causes crop or stock losses. For most gardeners, many of the characteristics we most desire in garden plants are the same as those that make them weedy: i.e. plants that are fast growing and disease resilient and those which reproduce easily by the distribution of seeds or plant parts.

A modern definition of a weed is "a plant that requires some form of action to reduce its effect on the economy, the environment, human health and amenity".

Many of the plants that are now considered to be 'environmental weeds' were introduced by early settlers, or by gardeners and farmers who had little or no knowledge of their future impact on the native environment. It is only in recent years that this threat has become apparent.

Weediness is not confined to introductions from overseas. Some Australian native plants introduced from other regions may impact adversely on the natural environment. Non-indigenous (i.e. not local) species may invade and displace species natural to that area or they may cross pollinate to produce new species which may in time alter regional biodiversity. Cootamundra Wattle (*Acacia baileyana*) is a good example of the former, while many eucalypts are known to interbreed.

Introduced species may sometimes be controlled in a foreign climate by various vectors such as small animals, insects, diseases or climatic conditions such as frost, thus reducing potential invasiveness.

To gardeners, farmers or botanists, the term 'weed' may mean different things. Pasture weeds reduce the productivity of agricultural land and may also have negative effects on human and animal health. Environmental weeds cause various problems in natural areas and ecosystems and the cost of control for both farmers and government is estimated at billions of dollars per annum.

The purpose of this Grow Me Instead booklet...

is to identify common garden plants that have now become environmental weeds in your local area, and to suggest better, alternative plants that benefit garden diversity while lessening their potential to become weeds of the future.

Apart from nurseries, garden centres or the resources of the local botanic gardens, valuable information may be provided by the Natural Resource Management Boards or you may wish to check out their websites. Here you will find lists of declared weeds for the local area and contact details should you need further information regarding invasive plant identification and approved methods of disposal.

It is important to reduce the spread of environmental weeds because...

better and more effective management of invasive plants will help to reduce the high cost of chemical control, and to reduce the amount of time and energy lost in management of weeds in productive land for food crops, grazing land, cut flowers and forestry. Weed management in public spaces and on natural heritage land is costly, laborious and at times seems overwhelming.

Invasive plants are defined and grouped as follows.

- 1. Noxious weeds are those legally declared as noxious plants by the various State or Territory Governments. The declaration of noxious weeds will vary from state to state and from region to region within a state. In general, most state legislation will say that declared noxious plants cannot be grown, sold or transported or transposed, and removal is required.
- 2. Weeds of National Significance ('WoNS') are some of the most significant weeds in Australia. All WoNS have been declared illegal for sale in each state of Australia.
- 3. Environmental weeds plants that are or have the potential to impact the natural environment by destroying habitat or over-running indigenous species and altering local biodiversity. Many of our worst environmental weeds are garden escapes.
- **4. Agricultural & Horticultural weeds -** are those plants that have a negative effect on crop or animal production. This may be through the infiltration of weed seed in grain crops, burrs in wool production or weeds which make animals sick or cause death. In the horticultural industry, weeds within cut flower, fruit and vegetable crops can harbour pests and diseases which reduce productivity.



6) Establishing the criteria for Grow Me Instead

It has been very important to establish a set of consistent criteria which could be adhered to across all regions and states.

A) The Invasive Plants

The Nursery & Garden Industry Queensland, in consultation with its members, State and Local Governments and a wide range of interested stakeholders has developed a list of 30 invasive garden plants. There are several weed lists in existence provided by a variety of environmental and conservation organisations that often include species which are problems only in their local area. As such, including all garden escapes in a national list was considered inappropriate. Therefore, the 'weediness' criteria for inclusion in 'Grow Me Instead' were determined as follows.

- 1. The plant must be shown to be invasive across more than one area or part of the bioregion.
- 2. It can be either an Australian native or imported (exotic) species.
- The plant must be shown to or have potential to damage the environment, human or animal health or create stock or crop losses.
- 4. The plant must be proven to have naturalised in bushland to the detriment of the natural environment.

This 'Grow Me Instead' list is not definitive for each area or region of Queensland. There may be other problem plants in your locality, most of these being included in lists prepared by your local government or other relevant organisation. In addition to the plants listed in 'Grow Me Instead', you should also be aware of your local problem plants.

B) The Alternatives

Not all of the alternatives would be suitable across the broad range of soils and climates of Queensland. Therefore, consideration of these differences and adaptation to your local area or region will be necessary.

For this booklet to be of benefit in helping you select 'good' garden plants, it should be used as a guide to plant selection. In addition to the listed alternatives, there will be many other plant selections available to you at your local nursery or garden centre. Together with their help, expertise and guidance, you needn't have any fear that your garden will become an environmental hazard in the future.

Selection criteria for the 'non-weedy plants' included:

- Must be recognised as non-invasive.
- Must be readily available to the gardening public.
- Must be reliable garden plants.

We have endeavoured to recommend at least one Australian native plant alternative for all of the invasive species listed in the booklet.

The role of the nursery industry

In more recent years, the Nursery & Garden Industry has been environmentally responsible by encouraging the production of non-invasive plants that do not require copious amounts of reticulated water, fertiliser or other chemicals to thrive in the garden.

The Nursery & Garden Industry in Australia instigates accreditation programs among its members, and it continually strives to establish standards of excellence in plant production in order to provide trustworthy products.

The Nursery & Garden Industry provides information not only through publications such as the 'Grow Me Instead' booklet, but also through its education programs. Many educational and self-help programs are also offered by local nursery or garden centres.

Your local nursery or garden centre can assist you by:

- · Helping with identification of suspected 'weedy' plants;
- · Providing information concerning local invasive plants;
- Offering alternatives and environmentally friendly plants;
- Providing information concerning good weed management, disposal of unwanted plant material, further preventing the spread in your garden and neighbourhood.

On a broader scale the Nursery & Garden Industry can assist by:

- · Increasing public awareness through education programs;
- Promoting the sale of superior, alternative plants thereby reducing the number of invasive plants grown and sold;
- Working with government, with research organisations, the media and other key stakeholders to help reduce the distribution and sale of undesirable plants.



7) What you can do!

By checking the plants in your garden with the help of the 'Grow Me Instead' booklet you may identify plants you should replace, while at the same time find others you may enjoy growing more!

Your **local** nursery or garden centre plant specialists will have additional suggestions of plants proven to be successful in your area. Plants purchased in another region, no matter how lovely they are, may not always prove hardy in yours. Furthermore, by purchasing plants from another region you may unwittingly introduce another environmental weed!

It is also a good idea to consider your garden setting and to then make a list of the plants to fill your specific house and garden needs. For example, aspects of the house exposed to hot western sun will benefit from a deciduous tree to provide summer shade and will allow penetration of winter sun, while privacy from neighbours can be provided by carefully chosen hedging plants. Or you may simply want to create beds or borders of colourful flowers and dramatic foliages to enhance your home décor. All of these wishes and needs are valid and they will vary between gardeners.

Garden plants provide many useful purposes, and in time they will become an integral part of your environment, chosen to suit the architecture of both your home and your personal lifestyle. Good garden cultivation is your contribution to establishing a special microclimate and will help to protect and preserve the local environment.

In recent times, many new plant varieties have been introduced through modern production methods and the work of plant breeders, resulting in plants which are attractive and hardy but which are non-invasive. These may be plants which are sterile or rarely produce seed. Many new varieties have low water needs or are tolerant of the air pollution found in the urban environment. In this way the Nursery Industry is contributing to the elimination of damaging or invasive species.

Purchasing plants from markets and other sources such as 'car boot sales', as well as plant swapping and trading between friends may also result in inadvertent movement of declared or noxious weeds.

Are you creating a weed problem in your area?

Are your garden plants 'jumping the fence'? Garden escapes are said to be one of the main sources of environmental weeds. Homeowners have a responsibility to protect natural resources.

Here are some simple ways to enjoy gardening without creating problems outside the garden fence.

- Recognise and remove plants known to be 'weedy' and destroy them responsibly, according to local Natural Resource Management Board or council.
- Replace problem plants with non-invasive alternatives, as suggested by the 'Grow Me Instead' booklet or by your local nursery or garden centre. They will help identify any suspect invasive plants.
- When purchasing new plants for the garden read labels to establish good characteristics such as drought tolerance and non-weedy habit.
- Good gardening practices include removal of spent flowers that can set seed within your garden or spread to bushland.
- Do not dump green garden waste in neighbouring or public space as many plants can regenerate to become a nuisance.
- Do not dump spent cut flowers into the garden or on to adjoining property. Florists often use seed heads, vines and other plant parts that may establish in your garden.
- Never tip the water or plants from your aquarium into ponds, rivers or waterways. There are numerous, serious aquatic plants threatening rivers and waterways because of the thoughtless actions of some people.
- There are many good sources of information in regard to weeds and their control. See the back cover for a list.
- Think global act local. Consider plants local to your area. Your local council or shire will be able to provide a list of indigenous plants for your garden.
- Encourage friends and neighbours to become involved as custodians of their environment by following the same guidelines.



Native plants or imported species?

One of the most commonly asked questions at nurseries and garden centres is whether one should use native or exotic plants in the garden. There has long been discussion about this in gardening circles, and more recently the topic of using only locally indigenous or local area natives has become topical. The primary concern of most horticulturists is that gardeners should know the difference so that they may make informed choices.

Natives are, as the name suggests, those plants that occur naturally within Australia. Quite properly, they should be referred to as Australian native plants. Grevilleas, Eucalypts and Acacias are all examples. Of course, Australia is a big continent, so what is native to one area or region, may be very different to those found in another. Think for example, of native plants from the dry soils of Western Australia and compare them to the tropical rainforest plants native to Queensland – all Australian natives – but very different plants, with different growing requirements.

In recent years, plant breeders have hybridised many or been able to choose better or 'select' forms that have been sourced from plants growing naturally in the wild. Both hybrids and select forms will have improved characteristics to the parent species. It may be they flower more often or earlier in the season, they may produce better fruit, be disease resistant or they may have a longer life span.

Imported or so called 'exotic' plants are those originating elsewhere, not necessarily the 'exotic tropics' as some people may think.

Indigenous plants are plants that grow naturally in your local area. They are naturally occurring plants of the region and can be seen in local parklands, as remnant plants on roadsides or riverbanks and in local bushland.

Some Australian native plants become 'naturalised' or take over in an area where they would not normally occur such as Cootamundra Wattle (*Acacia baileyana*), Bluebell Creeper (*Billardiera heterophylla*) and Sweet Pittosporum (*Pittosporum undulatum*).

Of concern to some conservationists and indigenous plant enthusiasts is the possibility that some introductions may interbreed with local or indigenous plants, thus impacting on the local gene pool.

Most invasive plants are imported or introduced plants. One needs to be informed about these plant species which are the basis of the 'Grow Me Instead' program. However, it is fact that there are a far greater number of well behaved, imported garden plants that are not invasive.

Working on the known statistic that 27,000 plants have been imported into Australia and some 2,700 of these are listed as environmental weeds, it is estimated that approximately 10% of the imported plants in our gardens are invasive.

In modern horticulture, plants are bred, developed or selected for desirable traits such as hardiness, drought tolerance, long flowering season, larger flowers or fruits, their disease resistance and general appeal.

Of primary importance in selecting plant material for your garden is sourcing accurate information about the plant. We suggest that you ask for advice at your local nursery or garden centre.

Consult your local council or Natural Resource Management Board if still in doubt!

Australian native plants have greater appeal today than in the past; they generally grow better because of the improvements made in their selection.

Indigenous species should be grown from seed sourced locally to be of best benefit in your locality.

Australian gardens today have become an eclectic mix of both native and imported plants, and can be complimentary to one another. Choosing one or the other is not the question; ultimately it is the gardeners choice!

Any plant should be acceptable to the Australian gardener so long as it is non-invasive and does not require copious amounts of water, fertilisers and other chemicals to survive.

8) Controlling weeds

Using herbicides

Many of the weed control techniques suggested on this and the following pages involve the use of herbicides. Herbicides are poisons, and should be handled with the greatest respect. They can be absorbed very easily through the skin, by breathing the vapours, and by ingestion (eating or drinking).

By law, herbicides must be used strictly in accordance with the manufacturer's label. They should be kept well out of the reach of children, preferably secured in a locked cabinet. They should always be stored in the original labelled container.

USE OF HERBICIDE: SAFETY PRECAUTIONS

- Read the label before opening the container and follow the instructions.
- Wear protective clothing: long sleeves, long pants, sturdy shoes, gloves, eye protection.
- Always wear waterproof gloves. A respirator is advised when mixing or pouring the liquid.
- Do not eat, drink or smoke while using herbicide. Keep children and pets away.
- Wash skin and equipment afterwards. Wash contaminated clothing separately.



Bushcare Officers take no risks

 Clean up any spills with large amounts of water; shovel up contaminated soil, dispose of it at the tip.

Types of herbicide

There are two widely used herbicides licensed for use at home: Glyphosate, sold under various trade names, including Roundup® and Zero® (which have different concentrations), and Triclopyr, sold as Tree, Blackberry and Woody Weed Killer (etc.).

How herbicides work

Glyphosate is a systemic, non-selective herbicide. It inhibits the action of an enzyme, preventing the production of an amino acid essential to plant life and growth. It must be applied to green leaves, or directly to the plant's sapwood, which lies under the bark.

Triclopyr is a selective systemic herbicide for woody and broadleaf plants. It is a growth inhibitor which moves to the plant's roots, stops growth, and eventually leads to the death of the plant. Triclopyr can be applied to green leaves and to bark.

Herbicides, waterways and steep land

Some of the chemicals which are added to herbicides are not safe to use near waterways. They have the potential to seriously affect the quality of aquatic ecosystems. If you need to remove weeds, particularly trees, within 20 m of any kind of watercourse, even a drain that runs only when it is raining, you should seek advice and assistance from your local council's environmental management department or Natural Resource Management Board.

Control of woody weeds

CUT AND PAINT

Suitable for small to medium sized woody shrubs up to 10 cm in diameter (or larger if using a chain saw). See below for trees.

- Clear around the base of the plant.
- Cut the stem horizontally as close to the ground as possible, using secateurs, loppers, or a saw. Make sure there is no soil on the cut.
- Apply herbicide to the cut stem immediately. Squeeze, not squirt if using an applicator.
- Ensure there is no runoff of poison.
- Use as little herbicide as possible.



TIPS

- Make cuts horizontal to prevent herbicide from running off the stump. Sharp angled cuts are hazardous.
- Apply herbicide immediately after cutting within a few seconds, before plant cells close and translocation of herbicide ceases.
- If plants resprout, cut and paint the shoots after sufficient regrowth has occurred.
- Stem scraping can be very effective on certain woody weeds, e.g. Japanese Honeysuckle, Blackberry, vines and rhizomatous plants.

STEM INJECTION

A method for weedy trees and large shrubs

- Use a cordless drill (9 mm bit), hammer and chisel, or brace and bit.
- Below any branches, drill or chisel holes round the base of the tree, into the sapwood, angled down at 45°, and at 5 cm intervals.
- Make the holes about 40 mm deep.
- Within a few seconds of drilling each hole, fill it with herbicide.
- Use this method only when falling branches, as the tree dies, will not be a safety hazard.





HAND REMOVAL OF WEEDS

Suitable for seedlings, herbaceous weeds, many grass species.

- Before starting work, remove and bag seeds and fruit, and place in bin.
- If the weed has a tap root, push a narrow trowel or long knife deep into the ground beside the root. Loosen the soil. Work round the root and then work the plant out gently.
- Many plants which will not regrow from their roots (e.g. many grasses) can be crowned: see diagram to the right. Hold leaves and stems together, and use a knife to cut through all the roots below the 'crown'.



crowning

 Plants with bulbs, corms or tubers (e.g. Watsonia) may need deep digging to ensure complete removal. Bag bulbs, corms and tubers and send to the tip; do not compost.

STFM & I FAF WIPING

This method is suitable for plants with bulbs, tubers, corms or rhizomes, e.g. Watsonia.

- · Remove and bag any seed or fruit.
- Using a weed wiper, start at the base and wipe all the stems and/or leaves with a dilute mix of herbicide.
- If leaves have soil on them, wipers must be regularly washed out.



leaf wiping

Take great care when wiping: do not allow the herbicide to touch your skin or to run off into the soil, or to get on a non-target plant.

There are many control methods which are specific to certain weeds – e.g. large infestations where spraying, or covering to exclude light may be options. Contact your local nursery for up to date techniques.

WHEN TO TREAT WITH HERBICIDE

- Apply herbicide when the plant is actively growing.
- Do not apply herbicide when the plant is under stress: extreme heat or cold, drought, waterlogging, or disease.
- Choose early morning or late afternoon in summer.
- Do not apply when wet or windy weather is anticipated.
- Treat deciduous plants in late spring or summer, when in full leaf.

Control of ground covers, vines & scramblers

SCRAPE AND PAINT

This method is suitable for vines and scramblers with woody stems.

- Using a knife, and starting from the base, scrape 20 to 100 cm of leafy stem to expose the sapwood below the bark.
- Within seconds, apply herbicide to the scraped area.



TIPS

- Do not ringbark the stem: scrape about one third of the diameter.
- Stems larger than 1 cm in diameter can be scraped on both sides.
- Vine curtains can be cut at chest level, then again at about 30 cm. Scrape or cut and paint these stumps.
- Blackberry can be cut back to 1 m if there are plenty of leaves; then scrape and paint the cut stems.
- Pulling vines (especially twiners) out of trees and shrubs may do a lot of damage. They can be left hanging to die.

By Law

Herbicides must be used according to the label, or according to Australian Pesticides and Veterinary Medicines Authority (APVMA) permits. If the plant on which you wish to use the herbicide is not named on the label, contact APVMA for permit information (www.apvma.gov.au).

THE DIG OPTION

On previous pages you will find advice on using herbicides to control weedy plants: often this causes minimal disturbance and less germination of seedlings.

However, if you have the energy and want to minimise herbicide use, you can often take the dig option, making absolutely sure that you remove all the parts of the plant from which it can regrow.

TIPS

- Seedlings and small plants may be pulled by hand when the soil is moist.
- Try to stager weed removal. Large areas of exposed soil are an open invitation to weed invasion and erosion, carrying weed seed into the bush.
- Mulch bare soil, and stabilise it by planting bush-friendly plants into it as soon as possible.



Trees & Shrubs



Shrubby perennial growing to 60cm with dark green smooth edged foliage. Masses of rose pink flowers with dark red centre cover the plant throughout the warmer months. The plant produces an abundance of seeds which germinate readily. Can tolerate a wide range of growing conditions.

Photo: Sheldon Navie

HOW IT SPREADS

- The seeds can be spread by water (and wind over short distances). The seedlings can germinate along edges of gardens and even cracks in concrete.
- The plant can also be spread by the dumping of garden waste.





A spectacular array of flower colours including vivid orange, yellow, pink and red cover this hardy succulent plant in the warmer months. It has a variable growth habit, from small rounded shrubs to creeping ground covers.

Photo: Macbird Floraprint

9) The invasive plants and their alternatives'



A popular and generally hardy groundcover plant. Violet-Lilac pea shaped flowers cover the plant in winter and spring. Many new cultivars have been developed with white and pink flowers as well as different growth habits, some forming neat, rounded, low growing bushes.



Many new selections of this ever popular garden favourite are now available. There are cultivars with a range of growth habits, from low border shrubs to 0.5m through to taller selections growing 1-2m in height. With a wide range of flower colours, including pink, orange, yellow and even white, there is sure to be one to suit every situation.

Other superior selections include;

- Evolvulus pilosus 'Blue Sapphire'
- Hibbertia scandens Snake Vine
- Austromyrtus dulcis Midyim





This Australian native from the rainforest fringes of far north Queensland has become invasive outside its original range. Growing to a height of 30m in the wild but normally to 10m in cultivation, it has rounded foliage and a smooth green trunk with grey scaly bark at the base. Flowers in masses of scented cream balls held in terminal clusters.

Photo: Sheldon Navie

HOW IT SPREADS

- A profusion of seeds are spread by wind from rounded woody capsules.
- The large number of ornamental plantings has created a large 'seed bank' that enables this plant to invade natural bushland.
- Seeds and gum are spread by native bees.



Beautiful specimen tree growing to 25m in height. Smooth bark except for bottom portion which is cloaked in bumpy grey brown bark. Leaves are narrow and the tree has a pendulous habit. A truly graceful tree.

Photo: Sheldon Navie



Large rainforest tree growing to 30m in height. It has thick glossy green pinnate leaves that are up to 20cm long on young trees and a strong straight trunk. It makes an excellent street or specimen shade tree.

Photo: Norwood



Tall tree that can reach 35m but is usually less in cultivation. It has shiny mid green foliage that provides a thick canopy. The trunk has smooth pinkish tan bark which peels to reveal greenish cream new bark. It is fast growing and makes an excellent shade or specimen tree.

Photo: Macbird Floraprin

Other superior selections include;

- Eucalyptus curtisii Plunkett Mallee
- Corymbia tereticornis Forest Red Gum
- Flindersia schottiana Silver Ash / Bumpy Ash





Evergreen tropical tree to 8m with dark green glossy leaves and reddish new growth. Small scented white flowers in Spring are followed by sweet ribbed orange-red fruit about 2cm in size. The fruit is used in cooking in some cultures.

Photo: Sheldon Navie

HOW IT SPREADS

- The fruit is extremely popular with birds which enable wide distribution in natural bushland.
- Seeds can also be spread by water and other small mammals.



This superb Australian native rainforest plant has glossy green foliage, a profusion of fluffy white flowers and small colourful berries. There are many different cultivars of this plant with a wide range of growth habits, foliage types and berry colours. Many make highly desirable hedges and screens. 'Elite', 'Bush Christmas' and 'Hinterland Gold' are three of many suitable selections.

Photo: Macbird Floraprint



This excellent new Lilly Pilly forms a thick screen 3-5m in height and new growth is spectacular red and pink. Large pink powder puff flowers are prominent in warmer months followed by whitish pink berries. Used as a specimen plant or a hedge, this is star performer.

Photo: Macbird Floraprin





Beautiful new Lilly Pilly with dense foliage forming a thick natural hedge, growing to 3m in height. It has pink new growth that matures through yellow gold to mid green providing an excellent foliage contrast.

Photo: Macbird Floraprint

Other superior selections include;

- Syzygium luehmannii Small-leafed Lilly Pilly
- Eugenia reinwardtiana Cedar Bay Cherry





A once popular evergreen garden or street tree growing to a height of 8m. The leaves are glossy green and the bark is light grey in colour. The tree produces abundant creamy white flowers followed by masses of winged seeds that germinate readily.

Photo: Norwood

HOW IT SPREADS

- The abundant seeds are spread by wind and water.
- These seeds have a high rate of germination and the tree quickly colonises native bushland

Superb Agrowing Interesting foliage wowith 20c blooms absolutely bloom ar specimen

Superb Australian native tree growing to 6m in cultivation. Interesting greenish yellow foliage with red tips is covered with 20cm long cream white blooms in summer. It is absolutely spectacular in full bloom and makes an excellent specimen tree.

Photo: Norwood

Golden PendaXanthostemon chrysanthus



Popular Australian native tree growing to 6m in cultivation. It naturally forms a dense screen of dark green glossy foliage and is covered with a profusion of large yellow flower heads in Spring and Autumn. This tree is bird attracting and is effective as either a specimen or screen tree.

Photo: Macbird Floraprin



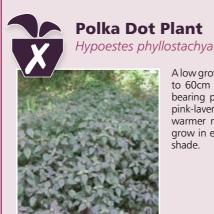
Large shrub to small tree with dark green foliage forming a thick screen. The tree is covered with dainty pinkish-white flowers in spring-summer and these are followed by bluish black berries. 'Prima Donna' has a more compact habit and has pink flowers.

Photo: Macbird Floraprin

Other superior selections include;

- Lepiderema pulchella Fine-leaved Tuckeroo
- Pararchidendron pruinosum Snow-wood
- Flindersia australis Crow's Ash





A low growing herbaceous shrub to 60cm with soft green leaves bearing pink spots. Flowers are pink-lavender and are borne in warmer months. The plant will grow in either full sun or partial shade.

Photo: Sheldon Navie

HOW IT SPREADS

- This plant is spread through the dumping of garden waste.
- This plant will regenerate from small pieces of stem so effective disposal is recommended



This Australian native groundcover has grey green to shiny green leaves and a profusion of purple, mauve or white fan shaped flowers over many months. There are many new cultivars of this popular garden favourite.

Photo: Ramm Botanicals



This groundcover plant has green and white foliage with pink new growth. Slow growing at first, it soon establishes a thick colourful mat which looks great all year. It is extremely hardy and bears fragrant white star flowers in Spring-Summer.



Rounded glossy leaves form a thick mat of foliage to 15cm high. Beautiful lilac and white violet flowers form on short stalks and cover the plant in the warmer months. This plant performs best with some protection from full sun.

Other superior selections include;

- Myoporum boninense subsp. australe Coastal Boobialla
- Dianella species Flax Lilies
- Solenostemon scutellarioides Coleus





A quick growing herbaceous perennial growing to 30-60cm in height. Thick succulent stems with fresh green leaves bear brightly coloured flowers in Spring ranging from white through pink and red to purple. Some plants produce viable seeds.

Photo: Sheldon Navie

HOW IT SPREADS

- Seeds produced by non sterile hybrids quickly germinate and populate natural areas.
- Plants are spread through the dumping of garden waste. They can regrow from small pieces of stem.





Specially bred to form tight bushes to 45cm with leaves from glossy green to bronze and even variegated. A vast array of flower shapes and colours from white to pinks, coral and reds cover the plant in warmer months. These hybrid Impatiens produce little if any viable seed and are considered a more superior selection than old style Impatiens.

Photo: Macbird Floraprin



Free branching succulent leaves of varying colours from glossy green to bronze and burgundy. Flowers in profusion throughout the warmer months in a rainbow of colours from white through pink to red.

Photo: Macbird Floraprin



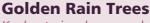
Rounded glossy leaves form a thick mat of foliage to 15cm high. Beautiful lilac and white violet flowers form on short stalks and cover the plant in the warmer months. This plant performs best with some protection from full sun.

Photo: Macbird Floraprint

Other superior selections include;

- Brachyscome multifida Hawkesbury River Daisy
- Xerochrysum bracteatum Everlasting Daisy
- Scaevola aemula Fan Flower





Koelreuteria elegans subsp. formosana Koelreuteria paniculata



These fast growing trees have mid-green ferny compound foliage. The trunk is grey and clean. In late Summer the tree is covered in panicles of clear yellow flowers. The flowers sometimes go un-noticed, but not the pink, papery bladder-like pods that form afterwards. Seed is produced in abundance with many new plants emerging adjacent to the original each season.

Photo: Sheldon Navie

HOW THEY SPREAD

- Seed is both abundant and easily dispersed, either by wind or water.
- These seeds have a high rate of germination enabling fast establishment of colonies in natural bushland.



Spectacular Australian native tree growing to a height of 10m. Flowers are yellow and red and pea shaped. They occur in profuse pendant heads and cover the tree making it difficult to see the foliage.

Photo: Norwood

Golden Penda Xanthostemon chrysanthus



growing to 6m in cultivation. It naturally forms a dense screen of dark green glossy foliage and is covered with a profusion of large yellow flower heads in Spring and Autumn. This tree is bird attracting and is effective as either a specimen or screen tree.

Popular Australian native tree

Photo: Macbird Floraprin



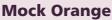
Superb Australian native tree growing to 6m in cultivation. Interesting greenish yellow foliage with red tips is covered with 20cm long cream white blooms in summer. It is absolutely spectacular in full bloom and makes as excellent specimen tree.

Photo: Norwood

Other superior selections include;

- Peltophorum pterocarpum Yellow Flame Tree
- Harpullia pendula Tulipwood
- Colvillea racemosa Colville's Glory





Murraya paniculata (seedling grown form)



This compact rounded shrub with glossy green foliage grows to a height of 3-5m. The plant produces highly perfumed white flowers in terminal clusters in Spring, through to Autumn. The flowers are followed by small oval bright orange red berries which are highly attractive to birds.

This very popular garden plant has several forms. The seedling grown form, popular in the 1970's, is to be avoided as it is invasive. Gardens in older suburbs are likely to have this undesirable form and removal is recommended

HOW IT SPREADS

- The orange-red berries are highly desirable to birds whose droppings ensure this plant is widespread in bushland. Large colonies and thickets are created smothering natural vegetation and affecting ecosystems.
- Do not purchase Murraya from non-reputable suppliers as they are likely to be seedling grown forms.





Professional nursery growers and retailers now promote the use of a superior cutting grown selection which produces few or no berries. The growth habit is more naturally compact than the inferior and invasive seedling form. Ask your professional retailer for this cutting grown cultivar.





This superb Australian native rainforest plant has alossy green foliage, a profusion of fluffy white flowers and small colourful berries. There are many different cultivars of this plant with a wide range of growth habits, foliage types and berry colours. Many make highly desirable hedges and screens. 'Elite', 'Bush Christmas' and 'Hinterland Gold' are some three of many suitable selections.



Gardenia jasminoides 'Florida'

A stunning evergreen shrub with glossy green foliage growing to 1.2m. Flowers are exquisite, highly fragrant double blooms from late spring to early summer. Spot flowering will continue to occur until Autumn. Whilst naturally compact. prunina after flowering will maintain the hedge shape.

Other superior selections include;

- Backhousia citriodora Lemon Scented Myrtle
- Camellia sasangua Sasangua Camellia
- Murraya ovatifoliolata Native Mock Orange





Golden Bamboo

Phyllostachys aurea

Black Bamboo

Phyllostachys nigra



Growing to a height of 6m, with long slender canes and dense graceful foliage. These types of bamboo have a spreading habit and send their rhizomes (roots) underground, often sprouting some distance from the original plant.

HOW THEY SPREAD

- Both of these 'running bamboos' send their invasive rhizomes considerable distances from the original plant.
- They are incredibly difficult to control and are a serious invasive threat.



Growing to a height of 6m this upright clumping bamboo has small leaves and an erect nature. Individual canes can get to 25mm in diameter; it is suitable for containers and will also tolerate wet soils. A truly graceful clumping bamboo.



Fantastic clumping perennial grass that forms an impenetrable screen. Growing to a height of 3.5m with arching stems and narrow leaves this is an excellent substitute for running bamboo as it is a clump forming plant.

Photo: Barry Naylor



Many people use bamboo for narrow screens. This local rainforest plant has a naturally columnar shape when left unpruned and grows to a height of 6-8m in cultivation. Beautiful red new growth is an added feature of this stunning tropical plant.

Photo: Norwood

Other superior selections include;

- Bambusa lako Timor Black Bamboo
- Cordyline stricta Slender Palm Lily
- Bambusa chungii Chungi Bamboo





Evergreen tropical tree growing to 9m in height. Leaves are 15cm long and leathery with downy undersides and form a thick canopy. Clusters of white flowers are formed in Spring and are followed by large (10cm) yellow pear shaped fruit. The fruit is edible and often used to make jams.

Photo: Sheldon Navie

HOW IT SPREADS

- Birds ingest the seeds while feasting on the fleshy fruit enabling wide distribution
- These seeds are also moved by water



Large evergreen shrub to small tree growing to 10m in height. This Australian native produces white to pink flowers and small yellowish fruit to 3cm. The fruits edible but must not be confused with that of Rhodomyrtus macrocarpa, which is reportedly poisonous.

Photo: Karen Shaw



Large shrub to small tree growing to 4m but can be pruned into a hedge. Flowers are very showy, with red petals, white undersides and prominent dark red stamens. Small elongated fruit can be eaten raw but are often made into jams.

Photo: Macbird Floraprint

Lemon Scented Myrtle *Backhousia citriodora*



with grey green foliage to 10cm in length. A key feature is that leaves are strongly lemon scented when crushed. A profusion of white-cream flowers appear in summer. An underused Australian native rainforest tree.

Medium sized tree to 12m

Photo: Macbird Floraprin

Other superior selections include;

- Myrciaria cauliflora Jaboticaba
- Syzygium species Lilly Pillies
- Xanthostemon chrysanthus 'Fairhill Gold' Golden Penda





An evergreen native shrub from southern China growing 3-5m in height. It is extremely tough and has shiny, leathery leaves. White Spring flowers are profuse, held in terminal clusters and are mildly perfumed. An abundance of bluish black berries follow in Summer.

HOW IT SPREADS

- The berries are highly desirable to birds and their distribution into bushland is widespread.
- The seeds can also be spread by water.

Indian Hawthorn Rhaphiolepis indica 'Intermedia'



Thick dark green leathery leaves forming a thick robust bush. This plant is a sight to behold when in flower with clusters of vibrant white flowers completely covering the bush. This plant produces little to no viable fruit and is not considered an invasive threat. There are many improved non-invasive cultivars to choose from.



This excellent new Lilly Pilly forms a thick screen 3-5m in height and new growth is spectacular red and pink. Large pink powder puff flowers are prominent in warmer months followed by whitish pink berries. Used as a specimen plant or a hedge, this is star performer.

Photo: Macbird Floraprin

Sasanqua Camellia Camellia sasanqua This fantasti more widely Tropics. The varied flowe from white t red. Most with growth situation. Ma pruned into

This fantastic plant should be more widely used in the Sub-Tropics. There are many and varied flower colours, ranging from white through to pink and red. Most will tolerate full sun with growth habits to suit every situation. Many cultivars can be pruned into effective hedges.

Photo: Lorna Rose

Other superior selections include;

- Magnolia figo (Syn. Michelia figo) Port Wine Magnolia
- Xanthostemon verticillatus Little Penda
- Gardenia species Gardenia



Queensland Umbrella Tree

Schefflera actinophylla



Native to Far North Queensland and New Guinea, this rainforest species reaches a height of 10m. The glossy palmate leaves resemble an umbrella and are held on multiple, thick erect trunks. The ruby red flowers are borne on radiating erect spikes above the plant and are filled with nectar.

Photo: Sheldon Navie

HOW IT SPREADS

- Birds are attracted to the abundant red fleshy berries that follow the flowers.
- Seed is also spread by bats and through dumped garden waste.



Lovely Australian native tree growing to 10m in cultivation. The trunk is erect and clean, leaves are large, up to 1m and fern like, forming an umbrella like canopy. The small flowers occur in large compound sprays. It performs at its best in a sheltered position

Photo: Norwood



Large tree that can reach over 20m high and 5m wide in cultivation. The leaves are large, glossy green bronze, pinnate to 60cm in length. Flowers are cream and form in axillary heads; fruits are yellow and edible, sometimes used in jam making.

Photo: Norwood



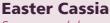
Beautiful small tree growing 6-8m. Large glossy green leaves form on naturally well shaped branches. Bears terminal clusters of fragrant white flowers which are followed by greenish brown berries. This tree should be more widely used in the Sub-Tropics.

Photo: Macbird Floraprin

Other superior selections include;

- Buckinghamia celsissima Ivory Curl Flower
- Harpullia pendula Tulipwood
- Elaeocarpus reticulatus Blueberry Ash





Senna pendula var. glabrata



A showy evergreen scrambling shrub that can reach 3m in height. The compound leaves are mid green and rounded at the tip. The flowers are bright yellow and form a spectacular show as they completely cover the foliage in Autumn. Cylindrical green pods follow with abundance of seeds.

Photo: Sheldon Navie

HOW IT SPREADS

- Seeds are spread by birds, insects, water and gravity.
- The plentiful seed ensures that even those that fall close to the bush maintain the invasive population

Dwarf Fringed WattleAcacia fimbriata 'Nana'



A spectacular new cultivar of this local favourite. With dense fine foliage this plant can be used as an effective screen or equally well as a feature. It is covered in masses of yellow flowers in winter-spring but has all round appeal due to the attractive foliage and growth habit.

Photo: Macbird Floraprint



Pretty Australian native shrub with fine foliage on pendulous branches. It is covered in dainty yellow and red pea flowers in spring and again in autumn. There are several different selections of this plant available, ask at your local retail outlet for the best choice.

Photo: Macbird Floraprin



Grown for a combination of its interesting foliage and flowers. There are no visible leaves on the wiry angular branches that are often weeping. Yellow pea shaped flowers appear in the summer months making an eye catching display.

Photo: Sheldon Navie

Other superior selections include;

- · Grevillea 'Honey Gem'
- Dodonaea triguetra Native Hop Bush
- Hovea acutifolia Purple Pea Bush







This fast growing palm with smooth grey trunk can reach 20m in height. It has a crown of arching fronds with plume like dark green leaves. This palm does not 'self clean' and retains spent fronds against the trunk for many months. Flowers are inconspicuous however the fruit are bright orange-red and 25mm in diameter.

Photo: Macbird Floraprint

HOW IT SPREADS

- Birds, bats, rats and flying foxes are drawn to the attractive fruit and assist in seed dispersal.
- Garden dumping is also responsible for the wider distribution of this plant.

Bangalow Palm Archontophoenix cunninghamiana



Tall slender and graceful palm growing to 15m. Large green fern like fronds emerge from the straight trunk. It has small shell pink to violet flowers in clusters followed by an abundance of red berries. Spent fronds are shed by this 'self cleaning' palm.

Photo: Lorna Rose



Spectacular palm from North Queensland and worldwide best seller. Large 2.5m long plumose fronds of dark green emerge from the slightly bottle shaped clean trunk. The fruit are reddish orange, plentiful and large (6cm). This is a self cleaning palm that sheds old foliage.

Photo: Norwood



This local palm has large divided fan shaped fronds that emerge from the apex of the slender brown trunk. It can reach up to 25m in height. Can be slower growing than other palms but make an excellent feature due to their distinctive foliage.

Photo: Norwood

Other superior selections include;

- Roystonea regia Cuban Royal Palm
- Livistona australis Cabbage Tree Palm





This large fast growing attractive tree grows to 20m with a similar spread. Dark green pinnate leaves attach to somewhat arching branches. Terminal clusters of yellow Cassia-like flowers appear in Spring. Winged seed pods follow holding several seeds in each. The tree is used widely as it provides excellent shade.

Photo: Sheldon Navie

HOW IT SPREADS

- Seeds are plentiful and are spread by water, wind and gravity.
- These seeds have a high rate of germination.







Fast growing evergreen tree growing to 15m. It has deep green fern like foliage that has a bronze edge to the new growth. It is covered in terminal sprays of perfumed bright yellow flowers with crinkled petals that emerge from rust red buds. It is a very effective shade tree for the Sub-Tropics.

Photo: Macbird Floraprint



Small evergreen tree growing to 6-8m. It forms a thick crown of dull green heart shaped leaves that are 10cm in length. It bears terminal clusters of cream flowers in spring and summer and is particularly fast growing.

Photo: Sheldon Navie



A deciduous tree that can get to 30m in height. It has large bipinnate glossy green leaves on spreading pendant branches. Flowers are white and mauve and form in large sprays in spring. This tree is fast growing and can be variable in size depending on growing conditions.

Photo: Macbird Floraprin

Other superior selections include;

- Rhodosphaera rhodanthema Deep Yellow Wood
- Hymenosporum flavum Native Frangipani
- Harpullia pendula Tulipwood



Climbing & Ground Cover Plants

This very useful group of plants was often used to cover unsightly objects and provide green barriers. Unfortunately we now know that the attributes that make them useful can also provide them with a means to grow outside their given area and invade nearby bushland. There are many alternative less invasive plants available. Please consider from the list opposite or ask your local garden centre for other alternatives.



Vigorous spreading groundcover growing 60-70cm high and 1m wide. Small rounded soft glossy leaves on stems which easily take root where they touch the ground. Flowers are tubular, fuchsia to coral pink in colour and cover the plant in the warmer months. Seeds are formed and are propelled explosively from club shaped capsules.

Photo: Sheldon Navie

HOW IT SPREADS

- The stems easily root when they make contact with the soil. Be careful when disposing of garden waste.
- These seeds are released by the explosive nature of the opening of the seed capsule and have a high rate of germination.

Grevillea Groundcovers Grevillea species



Photo: Macbird Floraprint

There is an abundance of excellent Grevillea groundcovers with an array of foliage types and colours. They also come in a wide range of flower colours; including white, yellow, pink and red. Ask your retailer about the best selection of Grevillea groundcover for your location.

Native Sarsaparillas Hardenbergia violacea cultivars



Photo: Machird Floraprint

A popular and generally hardy groundcover plant. Violet-Lilac pea shaped flowers cover the plant in winter and spring. Many new cultivars have been developed with white and pink flowers as well as different growth habits, some forming neat, rounded, low growing bushes.



This Australian native groundcover has grey green to shiny green leaves and a profusion of purple, mauve or white fan shaped flowers over many months. There are many new cultivars of this garden favourite.

Photo: Ramm Botanical

Other superior selections include;

- Calliandra tweedii 'Red Flash' Red Tassel Flower
- Melastoma malabathricum Native Pink Lasiandra



This scrambling or climbing shrub can grow up to 8m high. It has glossy dark green leaves and fragrant nectar filled white flowers that age to yellow. Summer flowers are followed by small shiny black berries in Autumn.

Photo: Macbird Floraprin

HOW IT SPREADS

- The seeds are dispersed by water and birds. The stems take root where they touch the ground.
- The plant is also often dumped on roadside and bushland edges.
- Whilst a once common garden plant this Honeysuckle is now a seriously invasive plant in many moist native bushland areas.



Evergreen climbing plant or groundcover with dark green glossy foliage. Profuse sweetly scented white star shaped flowers appear in late spring to completely cover the plant. The plant can be slow at first but is vigorous once established.





Vigorous climber to spreading shrub with dark green glossy pinnate leaves. Flowers are borne in terminal clusters in the warmer months and are pink with a dark carmine throat. There are several cultivars including 'Lady Di' that has cream flowers.

Photo: Macbird Floraprin

Wonga Wonga Vine Pandorea pandorana



Vigorous Australian native twining plant. Flowers are tubular and creamy-white with purple or brownish markings and appear in spring and summer. Several new cultivars have been developed including 'Snowbells' with pure white flowers and 'Golden Showers' with yellow-bronze flowers.

Photo: Lorna Rose

Other superior selections include;

- Hibbertia scandens Snake Vine
- Tecomanthe hillii Fraser Island Creeper
- Tecomanthe species 'Roaring Meg'





Generally regarded as an Australian native, this fern has become invasive outside its original range. Extremely tough fern spreading rapidly by underground rhizomes with erect slightly arched fishbone shaped fronds to 75cm. Tolerates dry conditions but prefers a warm position with moist soil.

Photo: Anthony Kachenko

HOW IT SPREADS

- Spores can be carried by either wind or water.
- Dumping of garden waste is a common method of spreading this plant. It only takes a small piece of this plant to regenerate, so ensure complete and effective disposal.



Fantastic native fern with attractive foliage, new fronds being bright pinkish red. Forms a great groundcover but prefers some protection from full sun. It is surprisingly drought tolerant and generally quite hardy.

Photo: Barry Naylor



Extremely hardy native fern tolerant of both frost and drought conditions. It prefers some protection from the full sun, foliage is mid green but new fronds are pink, providing an attractive contrast.

Photo: Norwood



Glossy green fan shaped fronds emerge from dark brown stems to 30cm high forming a tuft. New foliage is pink. This fern prefers a moist situation and protection from full sun for best results

Other superior selections include;

- Asplenium australasicum Bird's Nest Fern
- Rumohra adiantiformis Leather Fern





Vigorous herbaceous perennial climber that can reach 3-4m. Deep green triangular leaves to 7cm form a thick cover. Flowers are borne in warmer months on single stalks, varying from fellow to bright orange, with a dark black throat. These are followed by small hairy seed capsule holding a few small seeds.

Photo: Lorna Rose

HOW IT SPREADS

- Whilst the plant does produce seeds the major source of spread is through the dumping of garden waste.
- The plant also spreads by virtue of its vigorous vegetative habit.



Vigorous climber to spreading shrub with dark green glossy pinnate leaves. Flowers are borne in terminal clusters in the warmer months and are pink with a dark carmine throat. There are several cultivars including 'Lady Di' that has cream flowers.

Photo: Macbird Floraprint



Vigourous twining Australian native climber with dark green glossy foliage. It has the most spectacular reddish magenta bell shaped flowers that occur in sprays several times a year. This plant can be hard to locate but is underused and well worth trying in your garden.

Photo: Macbird Floraprint



Slender twining climber or trailing groundcover plant. It has dark green leaves and plentiful large buttercup yellow flowers in the warmer months. This plant is drought and frost resistant and tolerant of salt sprav.

Other superior selections include;

- Eustrephus latifolius Wombat Berry
- Hardenbergia violacea Native Sarsaparilla
- Pandorea pandorana Wonga Wonga Vine



This succulent evergreen groundcover with blue-green leaves, two silvery-white stripes on the upside and purplish undersides. Small pink-purple flowers are borne in Spring and Summer. This resilient spreader forms a dense mat and grows to a height of 15cm.

Photo: Sheldon Navie

HOW IT SPREADS

- The most common way this plant is spread is through the dumping of garden waste.
- Tradescantias can regenerate from the smallest piece of stem.
 Effective disposal is necessary if you are trying to eradicate this plant.



Rounded glossy leaves form a thick mat of foliage to 15cm high. Beautiful lilac and white violet flowers form on short stalks and cover the plant in the warmer months. This plant performs best with some protection from full sun.

Photo: Macbird Floraprint



green and white foliage with pink new growth. Slow growing at first, it soon establishes a thick colourful mat, which looks great all year. It is extremely hardy and bears fragrant white star flowers in Spring-Summer.



A popular and generally hardy groundcover plant. Violet-lilac pea shaped flowers cover the plant in winter and spring. Many new cultivars have been developed with white and pink flowers as well as different growth habits, some forming neat,rounded, low growing bushes.

Other superior selections include;

- Cissus rhombifolia Grape Ivy
- Myoporum parvifolium Creeping Boobialla
- Myoporum boninense subsp. australe Coastal Boobialla



Berried Plants

Gardeners often choose trees and shrubs with showy persistent berries for winter colour in their gardens when flowers are scarce. Unfortunately these berries often attract birds and small mammals that unwittingly aid the spread of these unwanted plants into bushland and open spaces.



Compact thick shrub growing to 1m with dark green thick glossy leaves with attractive wavy margins. Lateral sprays of small white-pink flowers emerge in warmer months followed by abundant green berries that mature to bright red in Autumn and Winter.

Photo: Sheldon Navie

HOW IT SPREADS

- The bright red berries of this plant are highly attractive to birds which aid in its dispersal.
- These seeds have a high rate of germination and the plant quickly forms dense thickets.



Many new selections of this ever popular garden favourite are now available. There are cultivars with a range of growth habits, from low border shrubs to 0.5m through to taller selections growing 1-2m in height. With a wide range of flower colours, including pink, orange, yellow and even white, there is sure to be one to suit every situation.

Photo: Macbird Floraprint





is what you are after then this plant is absolute must. There is a myriad of colours and growth habits available through the many cultivars of this all time favourite. Flowers are less spectacular however for year round colour it is hard to go past these beauties.

Photo: Macbird Floraprin



Providing year round colour with a wide array of leaf shapes and growth habits this plant is equally at home in full sun or semi shaded position. There is now an abundance of new cultivars of this garden favourite. An absolute must for the subtropical garden.

Photo: Macbird Floraprint

Other superior selections include;

- Graptophyllum ilicifolium Holly Fuchsia
- Cordyline rubra Red Palm Lily



Photo: Macbird Floraprint

A dense shrub usually growing to 4-5m with pendulous branches bearing blue, white or purple flowers, followed by

orange berries.

This very popular garden plant has had a renaissance in popularity with the introduction of several new forms in recent years. Whilst many are kept well pruned into effective hedges, particularly in local government areas and commercial premises others are left unkempt and form berries

HOW IT SPREADS

- The berries are highly attractive to birds. If a plant is allowed to form berries, birds ingest them and distribute the plants widely in native bushland, creating thickets and upsetting the ecosystem.
- Do not allow existing plants to form berries. Either prune immediately after flowering or remove the plant entirely if regular maintenance is not practical.

Note: This plant is also considered poisonous.



This superb Australian native rainforest plant has glossy green foliage, a profusion of fluffy white flowers and small colourful berries. There are many different cultivars of this plant with a wide range of growth habits, foliage types and berry colours. Many make highly desirable hedges and screens. 'Elite', 'Bush Christmas' and Hinterland Gold' are three of many suitable selections.

Photo: Macbird Floraprint

Sasanqua Camellias

Camellia sasanqua



This fantastic plant should be more widely used in the Sub-Tropics. There are many and varied flower colours, ranging from white through to pink and red. Most will tolerate full sun with growth habits to suit every situation. Many cultivars can be pruned into effective hedges.

Photo: Lorna Rose





A highly desirable Australian native plant forming a thick screen to 2m when pruned but can reach 6-8m if left untouched. A profusion of cream white flowers bloom in summer and the greenish cream sepals persist for many months.

Photo: Macbird Floraprint

Other superior selections include;

- Graptophyllum excelsum Native Fuchsia
- Backhousia citriodora Lemon Scented Myrtle
- Hovea acutifolia Purple Pea Plant



Grasses

Mainly chosen because of their various architecturally interesting forms and drought hardiness, yet many of them are considered invasive. Mislabelling with incorrect species names has been an occasional problem. To reduce further spread of invasive grasses, seek professional advice at your local garden centre, read all labels carefully and avoid purchasing from any other source. There are many native grasses commercially available from your local garden centre providing a safe alternative.



Pennisetum alopecuroides



A perennial grass with narrow mid to dark green leaves forming a dense clump 60 to 90cm in height. Attractive flower spikes appear above the foliage in the warmer months, showing yellow, green and the distinctive purple colours.

This plants 'Australian native' origin is questioned by many and the natural range of the plant has been confused by extensive use in urban landscape plantings in recent years.

Photo: André Karwath

HOW IT SPREADS

 The seeds are not plentiful and viability is low however as there is conjecture regarding the natural distribution of this plant, in Asia and Australia, it is recommended we promote sterile hybrids or other well established native grasses.

Purple Fountain Grass Pennisetum advena 'Rubrum'



This sterile hybrid is a showy and popular perennial ornamental grass. It grows rapidly forming dense clumps of burgundy coloured foliage up to 1.5m in height. Arching purple pink flower spikes appear above the foliage in summer.



An Australian native grass that has glaucous blue grey leaves and forms a dense mat like tuft. During warmer months the leaves turn maroon adding an interesting contrast. In summer, wiry flower spikes laden with seed often lay down on top of the foliage. This plant is effective as a weed suppressant or for erosion control.



Cymbopogon refractus

Tufted perennial grass growing to 1m in height. Interesting tall flower heads appear in summer; inflorescence is green and red and resembles barbed wire. The foliage has a strong scent of ginger when crushed. Makes an interesting feature grass.

Other superior selections include;

- Lomandra longifolia and cultivars Mat Rushes
- Isolepis nodosa Knobby Club Rush
- Gahnia sieberiana Swamp Gahnia



Bulbous Plants

There are a number of bulbous plants that have become invasive, largely through the dumping of garden waste. Some of these plants are behaving aggressively whilst others are adventitiously taking advantage of the growing conditions to naturalise.

Many bulbous plants are becoming invasive in Queensland, with Glory Lily (Gloriosa superba) and Taiwan Lily (Lilium formosanum) amongst the worst. Seek sound advice before planting bulbs and similar plants. Whilst most have spectacular flowers consideration must be given to assessing their invasive potential.



Bulbous plant producing bayonet shaped leaves followed by bright orange red gladiolus like flowers on arching spikes in Spring and Summer. Seeds set along the stem and the spike is sometimes used in floral work.

Photo: Lorna Rose

HOW IT SPREADS

- Each bulb reproduces at least a dozen 'bulb-lets'. Each one makes a new plant and it spreads rapidly
- The movement of stormwater and soil can distribute bulbs along the banks of rivers and streams.
- Infestations replace native plant life and upset the ecosystem.



Spectacular Australian native plant with bird attracting tubular claw shaped flowers in a wide range of colours including yellow, orange and red. Many new cultivars have been developed that perform in a range of growing conditions and are to varying degrees, resistant to ink spot.

Day Lilies Hemerocallis species and hybrids



Showy strap leaved perennial forming dense clumps, with the most dazzling array of flower colours. Whilst flowers are short lived their prolific production ensures a constant cover of cream, yellow, pink, orange, red and even burgundy blooms. There are many new cultivars to choose from, bearing single or double flowers.



Photo: Macbird Floraprint

Dianella species and cultivars

Excellent Australian native selection with mid-dark green arching foliage and sprays of blue flowers followed by bright blue berries. There has been a proliferation of Dianella cultivars with a wide range of foliage colours and growth habits in recent years. Ask your retailer for the most reliable local selections.

Other superior selections include;

- Crinum pedunculatum Swamp Lily
- Lomandra confertifolia Mat Rush
- Thysanotus tuberosus Fringed Lily





Herbaceous tropical perennial produces stems to 3m from underground tubers. Leaves are produced directly from the stem and form tendrils at the tip. The flowers form in the warmer months and are bright orangered with fellow edges. The plant dies down during winter and regenerates in Spring.

Photo: Sheldon Navie

HOW IT SPREADS

- This plant produces viable seed which either spreads nearby or becomes more widespread with the assistance of birds.
- It also has underground tubers and is spread by the dumping of soil and garden waste.



Vigorous climber to spreading shrub with dark green glossy pinnate leaves. Flowers are borne in terminal clusters in the warmer months and are pink with a dark carmine throat. There are several cultivars including 'Lady Di' that has cream flowers.

Photo: Macbird Floraprint



Slender twining climber or trailing groundcover plant. It has dark green leaves and plentiful large buttercup yellow flowers in the warmer months. This plant is drought and frost resistant and tolerant of salt spray.

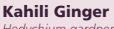


A popular and generally hardy groundcover plant. Violet-lilac pea shaped flowers cover the plant in winter and spring. Many new cultivars have been developed with white and pink flowers as well as different growth habits, some forming neat, rounded, low growing bushes.

Other superior selections include;

- Pararistolochia praevenosa Richmond Birdwing Vine
- Dianella congesta Blue Flax Lily





Hedychium gardnerianum



Bright green leaves clasp 2m tall stems that emerge from underground rhizomes. The plant bears beautiful fragrant yellow and red flowers in dense spikes in late Summer-early Autumn. Red berries follow which hold black seeds that germinate freely.

Photo: Sheldon Navie

HOW IT SPREADS

- Many related Ginger like plants reproduce by rhizome spread only. This Ginger produces abundant seeds that are spread by birds and water.
- It quickly colonises the edge of rainforest and woodlands displacing native species.





that emerge from the central rhizome. The plant has beautiful white and red 'ginger type' flowers in clusters on the tips of branches. There is a selection with purple undersides to the leaves which makes a superb foliage contrast.

Excellent native plant with mid green leaves on erect stems

Photo: Macbird Floraprint

Variegated Shell Ginger Alpinia zerumbet 'Variegata'

Clumping evergreen with vivid green and yellow striped foliage growing to 1.5m. Drooping sprays of waxy flowers are white at first but open to reveal yellow and red/ pink throats. This plant provides excellent foliage contrast in any sub-tropical garden.





Other superior selections include;

- Costus species Spiral Gingers
- Cordyline stricta Slender Palm Lily
- Cordyline petiolaris Broad-leafed Palm Lily





Growing up to 1m in height this invasive bulbous plant has long slender stems covered with long narrow mid-green leaves. The trumpet shaped flowers are fragrant and appear in early Summer followed by seed pods holding many thousands of winged seeds.

Photo: Lorna Rose

HOW IT SPREADS

- The plant seeds readily and these are scattered easily by the long willowy stems as they move on the breeze.
- Seeds germinate readily and bulb-lets also spread through soil movement and water.



Fleshy strap like leaves emerge from underground bulbs to form thick clumps. Spectacular white scented flowers emerge in clusters from 75cm high flower stalks. The flowers have six spider like petals that surround a white inner corona. This plant is particularly showy and can spot flower several times in the warmer months.

Photo: Norwood



This free flowering Lily grows to 70cm, producing large white flowers that are trumpet shaped and sweetly scented. It prefers moist soils and will grow in either part shade or full sun.

Photo: Lorna Rose



Robust clumping plant with thick leathery leaves which will grow in heavy water laden soils, saline situations and even the seashore. In spring and summer it produces several stout flowering stems with large clusters of thinly petalled white lily type flowers.

Photo: Lorna Rose

Other superior selections include;

- Hemerocallis species and hybrids Day Lilies
- Curcuma australasica Cape York Lily
- Dianella caerulea Blue Flax Lily



Succulent Plants

These have become very popular due to their drought hardy status and architectural appeal. Most succulents are non-invasive, however there are a number of succulents that can rapidly spread from dislodged plant parts, leaves or by seed. Be sure to read the plant label carefully and ask for advice about the non-invasive succulents at your local garden centre.



Dense clumping plant with succulent sword-like foliage to 1m in height. Mottled upright grey green leaves with occasional pale cream flowers on spikes in Spring. Effective spreading habit, preferring moist and shaded areas

HOW IT SPREADS

- Often spread through the dumping of garden waste, this plant is difficult to eradicate once established.
- The variegated form of Sansevieria is a popular indoor plant. This use is acceptable; however it should not be planted in the garden or disposed of in dumped garden waste.



Glossy grey green paddle shaped foliage forming a dense clump 1.5m x 1.5m. Spectacular orange and blue flowers shaped like a birds head form on erect stems in warmer months. It is worth trying to obtain Strelitzia juncea for its rush like cylindrical foliage emerging without a leaf blade.



An extremely popular 'accent' plant used for its unusual emerald green foliage and striking appearance. Deep green leaves that are so glossy they appear to have been 'shined' emerge from an underground tuber. This is a most versatile indoor or shade tolerant plant.



Cordylines Cordyline fruticosa cultivars Syn. Cordyline terminalis

If sub-tropical colour and form is what you are after then this plant is an absolute must. There is an absolute myriad of colours and growth habits available through the many cultivars of this all time favourite. Flowers are less spectacular but for all round colour it is hard to go past these beauties.

Other superior selections include;

- Dianella species and cultivars Flax Lilies
- Lomandra species and cultivars Mat Rushes
- Zamia furfuracea Cardboard Palm

Ask your local retailer for more superior selections



Aquatic Plants

In recent years aquatic plants have become a major invader. The cost of removal and control runs into many millions of dollars. These aquatic plants include Salvinia (Salvinia molesta), Water Hyacinth (Eichornia crassipes) and Cabomba (Cabomba caroliniana). There are many alternative plants which are more suitable for home aquariums and garden ponds.

Purple Stemmed Taro

Colocasia esculenta



Large mid-dark green heart shaped leaves emerge on purplish stalks from underground tubers, to an eventual height of 2m. The plant has slender runners that enable the plant to spread and colonise an area. Flowers are small, yellow and mildly fragrant, similar to a miniature calla lily.

Photo: Sheldon Navie

HOW IT SPREADS

- This plant invades waterways and quickly dominates native vegetation.
- Tubers can be moved with soil



Photo: Paul Donatiu

Large green elephant ear leaves emerge from a thick base to a height of 1.5m. Greenish white Spathiphyllum style flowers appear on stalks in the warmer months followed by red berries. Please note: all parts of this plant are considered poisonous if ingested.



Robust clumping plant with thick leathery leaves which will grow in heavy water laden soils, saline situations and even the seashore. In spring and summer it produces several stout flowering stems with large clusters of thinly petalled white lily type flowers.

Photo: Lorna Rose



Excellent native plant with mid green leaves on erect stems that emerge from the central rhizome. The plant has beautiful white and red 'ginger type' flowers in clusters on the tips of branches. There is a selection with purple undersides to the leaves which makes a superb foliage contrast.

Photo: Macbird Floraprint

Other superior selections include;

- Alpinia zerumbet 'Variegata' Variegated Shell Ginger
- Philodendron 'Xanadu'

Ask your local retailer for more superior selections





A feathery leaved, perennial aquatic plant with stems that grow up to 2m in length. The tips of the stems frequently protrude up to 30cm from the water. Seeds that are produced in Australia are infertile as only female plants are recorded here.

Photo: Terry Inkson

HOW IT SPREADS

- Parrot feather reproduces by fragments of stem breaking from the parent plant and is moved by water currents.
- Once also commonly found in home aquaria as the plant was once sold as an attractive fish tank plant. Inappropriate disposal of aquatic plants leads to choking of waterways, excluding all native flora and fauna.



A vigorous native milfoil with foxtail like stems held above the water. Provides shelter and spawning areas for fish. Suitable for full sun to light shade situations. Submerge up to 60cm.

Photo: Glenfield Nursery

Upright Water Milfoil *Myriophyllum crispatum*



This native aquatic plant has delicately divided plumes which grow out and float on the water surface. Submerged up to 60cm deep, it provides excellent spawning environment for fish. Adaptable to either full sun or semi-shade.

Photo: Glenfield Nursen



This aquatic fern has interesting foliage resembling a four leafed clover. The long rhizomes trail under the surface with the leaves floating on the surface. This plant provides an excellent cover for fish and other aquatic life as well as suppressing algal growth.

Photo: Norwood

Other superior selections include;

- Myriophyllum papillosum 'Red Dragonfly'
- Nymphaea hybrids Hybrid Water Lilies
- Juncus kraussii Sea Rush

Ask your local retailer for more superior selections



Gardeners' notes and checklists

Use this page to make notes, plant lists or questions to ask gardening experts.









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11) Further information and additional resources

There are many areas of information regarding invasive plants and it can become overwhelming! Here are some useful sources of information to help you learn more about invasive plants.

1. Your local nursery or garden centre -

Most employ trained nursery professionals or qualified horticulturists who are knowledgeable in regard to all aspects of plant selection.

2. Your local council or shire -

Have information about plants considered invasive in your local area and some good indigenous alternatives.

3. State Government -

Queensland Primary Industries and Fisheries have useful information about invasive plants.

Visit www.dpi.gld.gov.au for more information.

4. Australian Government -

Weeds in Australia Website. An excellent website with a good range of information, references, lists, databases and pictures and other resources. Visit www.weeds.gov.au for more information.

5. Weeds Australia via the Australian Weeds Committee -

A national website resource created by the Australian Weeds Committee to promote access to key weed policies, regulations, current issues, national initiatives, research, extension, training and personnel. Visit www.weeds.org.au for more information.

6. Nursery & Garden Industry Queensland (NGIQ) -

PO Box 345 Salisbury Qld 4107 Australia Ph. +61 7 32777900 Fax. + 61 7 32777109 email: info@ngiq.asn.au web: www.ngiq.asn.au

7. Nursery & Garden Industry Australia -

The Nursery & Garden Industry Australia is the national peak body for the nursery and garden industries in Australia. Their website provides useful information on invasive plants. Visit www.ngia.com.au and www.lifeisagarden.com.au for more information.







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A Guide for Gardeners in Queensland Sub Tropics

