



Nursery & Garden Industry
NSW & ACT

*A Guide for Gardeners
in ACT & High Country*



grow me™



instead



**The Nursery Industry -
Protecting Our Environment**



**Nursery & Garden Industry
Australia**



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This edition of 'Grow Me Instead' has been produced by NGIA in conjunction with the Australian Government.

We sincerely thank all of the people who generously contributed their time and expertise and who provided a wealth of information towards the production of this booklet; with special thanks going to the members of the original NSW Grow Me Instead Committee.



Australian Government

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 - Peter Ollerenshaw, Bywong Nursery
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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



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 society' 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 the answer to this problem, by using the information the 'Grow Me Instead' booklet provides as a guide. By 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.

What is Grow me Instead?

The original GMI booklet developed by NGINA has now been extended as a National program by 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, including those introduced from other regions, may impact adversely on the natural environment of another region. Non-indigenous (that is, 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, reducing their 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 garden centres or the resources of the local botanic gardens, valuable information may be provided by the Bushcare section of your local council or you may wish to check out your local council website. Here you will find lists of noxious weeds for the local area, as well as contact details for council's environmental weeds officer, should you need further information regarding garden 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 council area to local council area within a state or territory. In general, most state legislation will say that declared noxious plants cannot be grown, sold or transported or transposed, and removal is desirable.
- 2. Weeds of National Significance ('WONS')** - are those plants which have been legally declared by the Federal government, with restrictions on their propagation, trade or sale applying to all States and territories.
- 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 crops can harbour pests and diseases which reduce productivity.

Establishing the criteria for Grow Me Instead:

It has been very important to establish a set of consistent 'weediness' criteria which could be adhered to across all Regions and States. Thus the original GMI Committee of NGINA established the following:

A) The Invasive Plants

NGINA, in consultation with its members, state and federal governments, and interested environmental groups has developed a list of 25 invasive garden plants. There are weed lists in existence provided by a variety of environmental and conservation organisations. Including all garden escapes in a National list was considered not to be appropriate. Therefore, the 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 State.
2. It can be either an Australian native or imported (exotic) species.
3. 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 ACT and NSW. There may be other problem plants in your locality; most of these being included in lists prepared by your council. 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 alternatives would be suitable across the broad range of soils and climates, so 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. There will be many other plant selections available to you at your local garden centre and together with their help, expertise and guidance you need have no fear that your garden will become an environmental hazard in the future.

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

- Must be recognised as non invasive by the GMI committee
- 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 and Garden Industry has been environmentally responsible by encouraging the production of plants that are non-invasive; that do not require copious amounts of reticulated water; or depend on excessive amounts of fertiliser or other chemicals to thrive in the garden.

The Nursery and 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 and 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 help you in the following ways:

- By helping with identification of suspected 'weedy' plants.
- By providing information concerning local invasive plants.
- By offering alternatives and naturally friendly plants.
- By 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 and Garden Industry can assist in:

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

What you can do!

By checking the plants in your garden with the help of the GMI booklet you may identify plants you should replace, while at the same time finding others you may enjoy growing more!

Your **local** 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, may not always prove hardy in yours, and in doing so, 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 foliage 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 dubious sources, as well as plant swapping and trading between friends may also result in inadvertent movement of environmental and/or 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. Home owners have a responsibility to protect natural resources.

Here are some simple ways to enjoy gardening without creating problems outside the garden fence, either for yourself or for others.

- Recognise and remove plants known to be 'weedy' and destroy them responsibly according to local council or shire regulations.
- Replace problem plants with non invasive alternatives, as suggested by the GMI booklet or by your local garden centre. Your local garden centre 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 be adventitious of the conditions 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 page for a list.
- Think global – act local. Consider plants local to your area. Your local council will be able to provide a list of indigenous plants for your garden.
- Encourage friends and neighbours to become involved in Bushcare, Landcare 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 (*Sollya 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. These are those you need to be informed about and are the basis of the GMI 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 statistics 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 garden centre.

Consult your local council or council weeds officer 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; a garden should be one where the owner enjoys growing plants the owner prefers!

Any plant should be acceptable to the Australian gardener so long as it is non invasive; does not require lots of water to thrive; and grows well without lavish use of fertilisers and other chemicals.



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



Bushcare Officers take no risks

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 20m of any kind of watercourse, even a drain that runs only when it is raining, you must seek advice and assistance from your local council's environmental management department.

Control of Woody Weeds

CUT AND PAINT

Suitable for small to medium sized woody shrubs up to 10cm 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 undiluted 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.

Clear ground and cut low: loppers & secateurs give the cleanest cut.



Apply the herbicide within seconds of cutting.



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, eg Japanese Honeysuckle, Blackberry, vines and rhizomatous plants.

STEM INJECTION

A method for weedy trees and large shrubs

- Use a cordless drill (9mm 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 5cm intervals.
- Make the holes about 40mm deep.
- Within a few seconds of drilling each hole, fill it with undiluted herbicide.
- Use this method only when falling branches, as the tree dies, will not be a safety hazard.



VIRGINIA BEAR



HAND REMOVAL OF WEEDS

Suitable for seedlings, herbaceous weeds, many grasses:

- 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, then work the plant out gently.
- Many plants which will not regrow from their roots (eg many grasses) can be crowned: see diagram right. Hold leaves and stems together, and use a knife to cut through all the roots below the 'crown'.
- Plants with bulbs, corms or tubers (eg Montbretia, Madeira Vine) may need deep digging to ensure complete removal. Bag bulbs, corms and tubers and send to the tip; do not compost.
- See Guard against erosion on next page.



STEM & LEAF WIPING

This method is suitable for plants with bulbs, tubers, corms or rhizomes, eg Montbretia.

- 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.



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 - eg, large infestations where spraying, or covering to exclude light may be options.

Contact BMCC Bushcare (02) 4780 5528 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.
- For many plants, especially bulbous plants and those which sucker, the best time is from summer to autumn.
- Treat deciduous plants in late spring or summer, when in full leaf.

Control of Groundcovers, 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 100cm of leafy stem to expose the sapwood below the bark.
- Within seconds, apply herbicide to the scraped area (but also see By Law, below).



scrape and paint

TIPS

- Do not ringbark the stem: scrape about one third of the diameter.
- Stems larger than 1cm in diameter can be scraped on both sides.
- Vine curtains can be cut at chest level, then again at about 30cm. Scrape or cut and paint these stumps.
- Blackberry can be cut back to 1m 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 National Registration Authority Permits.

If the plant on which you wish to use the herbicide is not named on the label, contact your council for permit information.

THE DIG OPTION

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

Seedlings and small plants may be pulled by hand when the soil is moist.

And if you have the energy and the space in your garden, you can often take the dig option, making absolutely sure that you remove all the parts of the plant from which it can regrow.

Guard against erosion

Try to stage weed removal. Large areas of exposed soil are an open invitation to weed invasion. They may also cause soils to erode, carrying weed seed into the bush. Mulch bare soil, and stabilise it by planting bush-friendly plants into it as soon as possible.



Cootamundra Wattle

Acacia baileyana

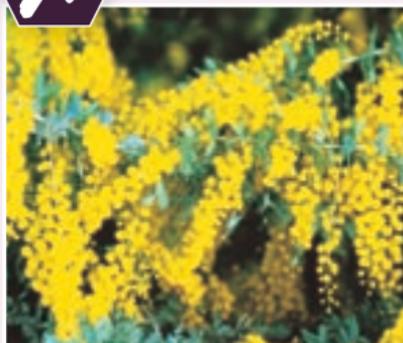


Photo: Lorna Rose

This very popular Australian native garden wattle has fine silvery grey feathery foliage and soft balls of golden yellow flowers. This plant is invasive outside its natural region. This wattle will cross pollinate with the *Acacia dealbata*, which is widespread on the southern tablelands

HOW IT SPREADS

- The seeds are carried by ants, small mammals and humans and are very long lived in the soil and they have a high rate of germination especially after a bush fire or soil disturbance.

Avoid growing the invasive varieties of wattles, visit your garden centre or native plant nursery to seek advice about other superior alternatives.



Blue Bush

Acacia coventyi



Photo: Lorna Rose

Native to the South Coast of NSW, this wattle grows to about the same size as the Cootamundra wattle. Mostly found in specialist native plant nurseries.

The weeds and their alternatives



Willow Leaf Wattle

Acacia iteaphylla



Photo: Macbird Floraprint

Versatile in its habit growing to a height of 2-4 m some forms upright, others are pendulous and bushy. A profuse flowering of perfumed golden-yellow blooms in spring following by intermittent blooms through the year.



River Tea Tree

Melaleuca bracteata 'Revolution Green'



Photo: Lorna Rose

This large Australian native shrub to 3m high has profuse numbers of creamy-white flowers in spring. The new spring growth is fine and bright green.



Queensland Silver Wattle

Acacia podalyriifolia



Photo: Lorna Rose

This Australian native plant is natural to the north coast of NSW and QLD. A small 5m tree, it has become invasive outside its region. The silvery grey foliage and masses of golden yellow blooms are the main attraction as a garden plant.

HOW IT SPREADS

- Both of the listed acacia varieties produces masses of seed pods that ripen on the tree and disperse with the help of birds, ants and small native mammals.
- These seeds have a high rate of germination especially after a bush fire.

Avoid growing these weedy varieties. Visit your local Garden Centre or a specialist native plant nursery for advice about other wattle alternatives.



Forsythia

Forsythia X intermedia and 'Suspensa'



Photo: Lorna Rose

An extremely hardy, vase shaped, frost resistant, deciduous shrub to 4 m high. Bare stems burst forth in spring with masses of golden yellow bells. The selected form 'Suspensa' has a weeping habit.

Bare stems cut in bud will open and flower indoors.



Clay Wattle

Acacia pravissima nana 'Golden Glow'

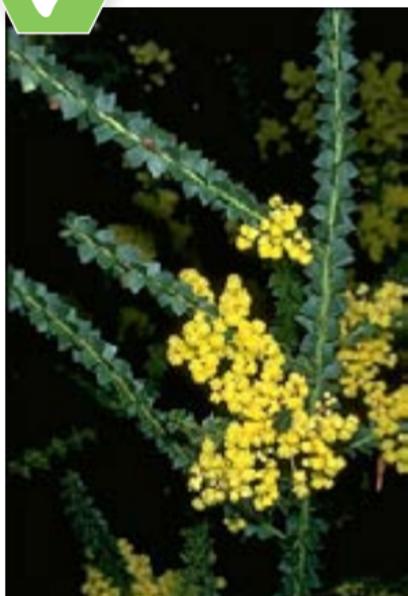


Photo: Fagg, M - ANBG

A small compact form of *Acacia pravissima* with grey/green foliage and a mass display of golden flowers in Spring. It grows in full sun to dappled shade and is suited to most soil types that are well drained. Once established Golden Glow requires very little maintenance but responds well to tip pruning and will tolerate dry periods and will make a good low compact hedge ideal for smaller gardens.



Hairy Wattle or Weeping Boree

Acacia vestita



Photo: Jackie Miles

This plant occurs naturally on the western slopes and southern tablelands of New South Wales. A graceful, free-flowering weeping shrub with bright yellow flowers in spring.



Box Elder

Acer negundo



Photo: Lorna Rose

In the past this green leaf form was often used as a street or garden tree. It grows to 9m to form pretty deciduous shade tree however the mass of seeds produced has made them a major bushland invader. They are also used as an understock for other ornamental grafted maples. Silver and gold variegated forms also revert back to this green form and can bear seeds on the variegated branches.

HOW IT SPREADS

- Produces masses of 'winged' seeds which are readily carried on the winds.
- Seeds germinate rapidly in gardens, guttering, gaps in paving and driveways etc.
- Wind transfers them from garden to bushland, parks and reserves.
- Removal of these invasive plants is both difficult and costly.



Acer 'Sensation'

Acer negundo 'Sensation'



Photo: Fleming's Nurseries

The best of the box elder maples. Grows to 9 m tall. With lovely bronze- burgundy growing tips that turn mid green in summer it is beautiful shade tree. Tolerates heat and drought and given good cultivation may grow beyond 10m in height. This variety is sterile, so the self seeding issue with the species is not concern.



Indian Bean Tree

Catalpa bignonioides



Photo: Fleming's Nurseries

A fast growing tree to 12m tall will provide wonderful summer shade, large heart shaped leaves appear after the bell shaped white flowers. Highly recommended.



Forest Pansy

Cercis canadensis



Photo: Fleming's Nurseries

Highly recommended small tree, an excellent choice for a landscape where a purple-leaved tree is desired. A moderate grower to 5m high by 5m wide. Masses of small, pink, 'pea'-like flowers in spring.

For further information visit www.flemings.com.au



Nettle Tree

Celtis australis



Photo: Fleming's Nurseries

A deciduous tree up to 12m high. Leaves are dark green, turning to pale yellow in autumn. Flowers are inconspicuous green, appearing in spring. Green fruit aging to yellow when ripe.

In the past this was extensively used as a shady, street or specimen tree.

HOW IT SPREADS

- The fruit is small and is easily spread by birds and small mammals.

Avoid planting this tree and choose from the many superior alternatives.



Ornamental Pears

Pyrus species



Photo: Fleming's Nurseries

A small deciduous tree grown for its ornamental flowers and fruit. It has erect branches and woolly white new leaves maturing to silver green. Masses of white spring flowers are followed by small round yellow-green fruit. A highly recommended tree.



Zelkova

Zelkova serrata 'Green Vase'



Photo: Fleming's Nurseries

A vase shaped tree, very tolerant of pollution. It grows 20 to 25m tall by 25m wide and is reportedly not affected by the Elm beetle. It has a moderate growth rate and likes a sunny exposure. The leaves turn a brilliant burnt umber in the autumn.



Persian Witch Hazel

Parrotia Persica



Photo: Fleming's Nurseries

A stately, medium sized deciduous tree valued for its rich autumn colour, attractive flaking bark and heat tolerance. It is a rounded, spreading tree at maturity and is often multi-stemmed. Young foliage emerges with a bronze tinge and matures to a lustrous dark green.

With excellent autumn foliage in colours of yellow, orange, burgundy and red, this tree is highly recommended

For further information visit www.flemings.com.au



Fountain Grass

Pennisetum setaceum



Photo: Macbird Floraprint

Tall perennial grass forming tufts to 1m high. Arching leaves 20-30cm long, with thin leathery texture and prominent veins running lengthways.

Flowers are small, occur in pink or purple, bristly, upright spikes at the ends of bamboo-like canes. Fruit are small and dry with long, showy bristles.

HOW IT SPREADS

- This plant has adapted to colonising after fires, it displaces natives and increases fuel loads.
- Mainly spread by humans and wind, animals and water

Always check the label and ask at your garden centre for correct information on grasses. There are many look alikes that could prove to be very invasive.



Purple Fountain Grass

Pennisetum advena 'Rubrum'



Photo: Colourwise nursery

This showy and popular, ornamental perennial grass grows in dense clumps of burgundy coloured foliage with arching purple-pink flower plumes in summer. Blooms are foxtail-like arching flower plumes displayed above the foliage and produced in warm weather. This is a sterile hybrid.

Please note: This is not the plant banned from sale in NSW.

Another similar plant is *Pennisetum alopecuroides*, considered to be native to the Southern Tablelands.



Saw Sedge

Gahnia seiberana



Photo: ASGAP

An Australian native occurring on the forested edges of the Southern Tablelands. This large, robust sedge, with long, arching leaves is usually found in damp areas. It forms large clumps 1.5 to 2m high, with flowering stems to 3m. The tiny flowers occur in spring and summer, followed by shiny, decorative red-brown seeds.



Phormium Tenax and Cultivars



Photo: Macbird Floraprint

This evergreen clump-forming perennial will grow to 1.6m tall and 1.5m wide with stunning glossy green strap like foliage. There are various new coloured leaf cultivars available, very suited for pots in a sheltered position. Check with your garden centre which varieties are best for your garden.



Nassella Grasses

Nassella species



Many of these grasses look native and are often sold as native *Stipa* species. Beware when buying any grasses and check that they are what the label says. Many have become invasive, particularly Serrated Tussock (*Nassella trichotoma*) and Mexican Feather Grass (*Nassella tenuissima*). Serrated Tussock is a Weed of National Significance and its entry into Australia is prohibited.

HOW IT SPREADS

- Invades pastures, native grasslands and woodlands
- Seeds spread by wind up to 16km
- Seeds spread by animals, hay, machinery and on clothing
- Sometimes dug up and planted in gardens
- Unpalatable to stock
- Tolerates poor soil, fire, drought and frost

Don't be confused. Visit www.ozbreed.com.au for more information.



Common Tussock Grass

Poa labillardieri



Forms a densely-tufted tussock about 1m tall with seed heads up to 1.2m high. Leaves vary from green, grey-green to blue-green. Flowers Oct-Feb and grows in moist to slightly dry soils. Grows quickly. Widely available in nurseries.

Note: There are other species of *Poa* available from indigenous nurseries.



Purple Fountain Grass

Pennisetum advena 'Rubrum'



Photo: Colourwise nursery

The exceptionally showy and popular, ornamental perennial grass grows in dense clumps of burgundy coloured foliage with arching purple-pink flower plumes in summer. As a striking colour accent in perennial beds, it performs good erosion control on embankments. Blooms prolifically during warm weather, with foxtail-like arching flower plumes displayed above the foliage. This sterile hybrid Grows rapidly to form dense clumps up to 1.5m tall, spreading 1.2m across.

Please note: This is not the plant banned from sale in NSW.



Native Pennisetum or Swamp Foxtail

Pennisetum alopecuroides



An environmentally friendly Australian native. Excellent for attracting native birds. With a low viability of seed, this form is non-invasive to native bushland. It is a showy, clumping perennial grass with arching leaves and spectacular feathery flower plumes from Summer to Autumn. The feature of this variety is its elegant purple flower heads.

Mass plant as an accent plant for rockeries and borders and low maintenance gardens. The plumes suitable for dried arrangements.

Tolerates a wide variety of soils and climatic conditions, including poorly drained soils. Frost and drought tolerant.



Scotch or Common Broom

Cytisus scoparius



Photo: Lorna Rose

This plant is a declared noxious weed in SA, WA, and parts of NSW, VIC and Tasmania.

It has bright yellow pea-type flowers that persist over summer.

HOW IT SPREADS

- Each flower produces a pod of five to eight seeds, the summer ripened seeds explode from the pod as a scattering mechanism.
- Seed is carried by livestock, humans and the movement of soil or by floodwaters.
- The seeds are viable for a long time contributing to succeeding generations of plants.
- Avoid growing the *Genista monspessulana* or *Spartium junceum* for the same reasons.
- This plant can arrive in your garden as an uninvited guest.
- Please resist the temptation to let it remain and dig it out!



Hairy Wattle or Weeping Boree

Acacia vestita

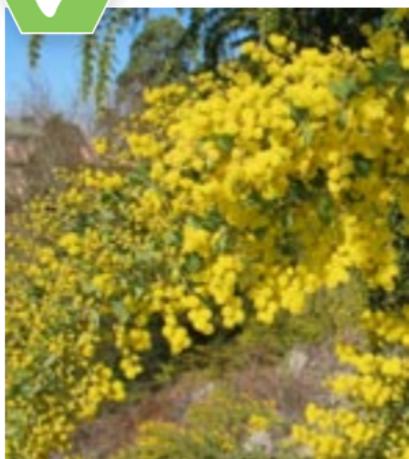


Photo: Jackie Miles

This plant occurs naturally on the western slopes and southern tablelands of New South Wales. A graceful, free-flowering weeping shrub with bright yellow flowers in spring.



Forsythia

Forsythia X intermedia and '*Suspensa*'



Photo: Lorna Rose

An extremely hardy, vase shaped, frost resistant, deciduous shrub to 4 m high. Bare stems burst forth in spring with masses of golden yellow bells. The selected form '*Suspensa*' has a weeping habit.

Bare stems cut in bud will open and flower indoors.



Golden Everlasting or Strawflower

Xerochrysum bracteatum '*Dargan Hill Monarch*'



Photo: Macbird Floraprint

Australian annual or short-lived perennial. The flowers are a deep golden yellow everlasting daisy and are suitable for use as a dried cut flower. Ask for these and other varieties at your garden centre.



Spanish Heath

Erica lusitanica



Photo: Jackie Miles

This erect woody shrub produces millions of seeds in its 30 year life span. It rapidly spreads along roadsides and drainage lines via water and machinery. It invades heath lands, waterways and damp or dry bush land.

HOW IT SPREADS

- Tolerates drought, grazing, splashing and trampling
- Roots readily sucker and spread
- Seeds spread by wind, water, soil, machinery and dumped garden refuse.
- Seeds remain viable in the soil for many years.



Common Heath

Epacris impressa



Photo: Macbird Floraprint

Victoria's state floral emblem it is an upright shrub to 1.5m tall with masses of small prickly leaves and white, pink or red flowers from March to November. Great for rockeries and native gardens.



Paynes Thryptomene

Thryptomene saxicola 'Paynes Hybrid'



Photo: Macbird Floraprint

A small shrub to 1 m. The leaves contain fragrant, aromatic oils. Small, pale-pink flowers occur in winter/spring. It is a hardy plant. Can be used as a cut flower.



Eriostemon

Philotheca myoporoides

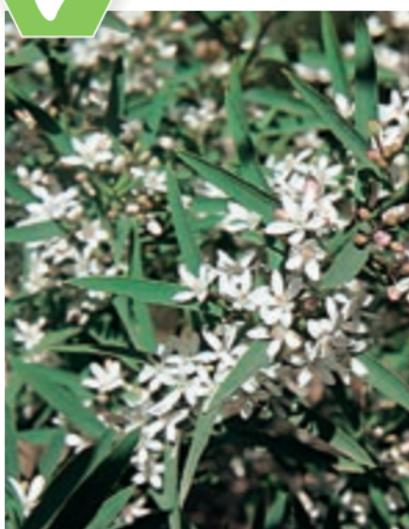


Photo: Macbird Floraprint

This shrub grows to 2 m high with a bushy habit. Related to citrus, the leaves have a strong pleasant aroma when crushed. The waxy, white flowers appear winter to late spring. Hardy in a range of climates. It can withstand extended dry periods once established.



English Ivy

Hedera helix



Photo: Lorna Rose

Small and large, dark-green, lobed leaves on a tightly clinging vine used unsuspectingly to cover brick walls, or sheds or as ground cover beneath trees. Without pruning control, it smothers everything, debilitates trees and sets large quantities of seed.

HOW IT SPREADS

- Tenacious and invasive aerial roots cling to trees smothering the bark. Trailing stems will easily take root and spread along the ground. When the plant is allowed to mature to the shrubby adult form the small umbels of white flowers are followed by a prolific amount of blue-black berries and is quickly spread by birds. Aerial roots may destroy mortar joints on walls..
- Clippings easily take root when dumped on unused ground or in bushland areas



Star Jasmine

Trachelospermum jasminoides



This evergreen vine from China has dark, glossy foliage and small, starchy, white, spicy, nutmeg-scented flowers in summer. It is slow-growing initially but later becomes vigorous. Variegated leaf forms are also available. It is a popular ground cover, however it will also climb to cover lattice or can be trained up a frame for topiary.



Native Sarsaparilla

Hardenbergia violacea 'Happy Wanderer'



Photo: Macbird Floraprint

This is a popular and generally hardy garden plant which is widely grown. The pea shape flowers appear in winter and spring and are usually violet in colour but pink and white forms are also available. It is adaptable to most soils and aspects although sunnier positions produce better flowering. Given the wide range of the species, forms from drier areas may not be vigorous in tropical areas. Ask at your local garden centre for the best varieties to suit your local area.



Groundcover Grevillea

Grevillea species and hybrids



Photo: Macbird Floraprint

These fast growing ground covers have mainly toothbrush style flowers which occur in spring and autumn. They grow approximately 30cm high x 2m across and are frost tolerant. They will grow over banks or hang down walls and attracts nectar-feeding birds. Ask at your garden centre for the selected forms of 'Gaudi Chaudi', 'Royal Mantle' and 'Bedspread'.



Broad Leaf Privet

Ligustrum lucidum

Small Leaf Privet

Ligustrum sinense



Example of the broad leaf privet

photo: Delwyn Thomas

Very common hardy shrub or tree initially used in ACT gardens for hardy hedges. It will grow to 10m tall in ideal conditions and is often found in nutrient rich sites such as gullies on roadsides and in home gardens. Large dark green leaves and small, white, strongly scented flowers in summer.

Special note: May be confused with the native Lilly Pilly (*Acmena smithii*). The Lilly Pilly has oil glands in its leaves.

HOW IT SPREADS

- Sprays of purple-black berries occurring in autumn and winter are dispersed by birds and water. These decorative berries are used by florists who unwittingly spread the seeds.



Escallonia

Escallonia bifida



Photo: Macbird Floraprint

An upright evergreen shrub, with glossy dark green foliage. During the summer months it bears clusters of fragrant, pure white flowers. Grows to 3m by 3m. The fruits are capsules, not berries.



Japanese Photinia

Photinia glabra 'Rubens'



Photo: Macbird Floraprint

Shiny leaves form a dense shrub, new leaves are bright red and showy. Prune to shape as required. There are new various improved varieties. Seek advice from your local garden centre.



Japanese Box

Buxus japonica



Photo: Macbird Floraprint

Large evergreen shrub to 3m tall and 2m wide. With small, shiny, green rounded leaves this fast growing shrub readily forms an excellent dense hedge. Plant at 60 cm intervals for a fast growing low hedge.



Japanese Honeysuckle

Lonicera japonica



Photo: Macbird Floraprint

This aggressive climbing shrub smothers native ground layer plants, shrubs and trees. It grows in woodlands, heathlands and riparian areas.

The sweetly scented cream and yellow flowers made this a popular vine. There are many cultivars and species available but this one is particularly invasive.

HOW IT SPREADS

- It spreads by stolons
- Plant fragments are spread by water, soil, birds and garden waste
- It can cover up to 6m square in one season
- Poisonous (to humans) the black berries are spread by birds

Avoid growing these weedy varieties. Visit your local Garden Centre or a specialist native plant nursery for advice about other honeysuckle alternatives.



Five-leafed Akebia

Akebia quinata



Photo: Macbird Floraprint

Fast growing semi-evergreen, vigorous twining climber with attractive dainty five leafleted leaves. The vanilla scented purplish-brown flowers appear late spring to early summer.



Clematis

Clematis Jackmanii Hybrids



Photo: Macbird Floraprint

These large spring flowering Clematis make a dazzling display. The vine tendrils become covered in flowers which are large and luscious, 15-18cm wide. These varieties grow to a compact 2.5m. Many vines invade and take over the garden, but not these. Perfect to soften harsh edges - posts, pergolas fences and walls.



Banksia Rose

Rosa Banksia 'Lutea'

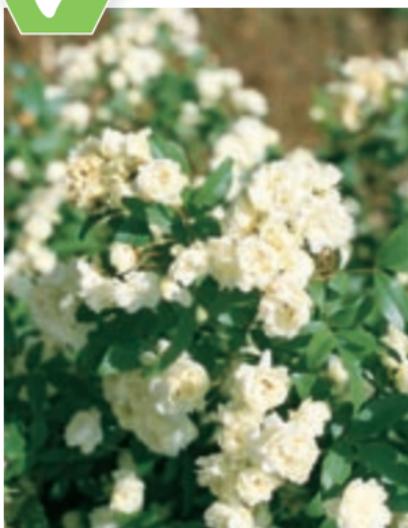


Photo: Macbird Floraprint

This climbing rose produces long slender twining canes with masses of tiny, double, white or yellow flowers in spring. It is one of the most popular climbing roses because of the beautiful spring blooms and absence of thorns.



Tall Oregon Grape

(Formerly *Berberis*.) *Mahonia aquafolium*



Photo: Macbird Floraprint

This medium shrub grows to 3m or 4m tall with shiny evergreen divided leaves on tall canes. The yellow flowers appear above the curl edged, spine tipped leaves and are followed by dusty blue berries. It resembles somewhat the common holly. It has now become invasive in native bush land and open forest areas.



Elaeagnus

Elaeagnus macrophylla



Photo: Yarralumla Nursery

This shrub grows to a height of 3m by 3m wide. A moderate grower for hedging. Silvery fragrant flowers appear in autumn, followed by red scaly fruit. There are excellent variegated forms available.



Sasanqua Camellias

Camellia sasanqua



Photo: Lorna Rose

These hardy camellias are available in a wide range of height and forms. With single and double blooms in light to deep pinks, white, red and many bi colours available. Choose from sun hardy or shade tolerant varieties.

Your garden centre will have a wide range of selected cultivars suitable for pots, hedging, screens, borders or as a specimen plant.



Japanese Barberry

Berberis thunbergii 'Rose Glow'



Photo: Macbird Floraprint

This Japanese barberry cultivar is a dense, hardy deciduous shrub which grows to 1m tall. Leaves are purple, new shoots emerge as a rose-pink. Yellow flowers are followed by elongated red berries. Very adaptable shrub tolerant of pollution. Often used as a barrier plant because of the thick sharp spines on the stems.



African and European Olives.

Olea europea ssp europaea and cuspidata



Hardy long-lived evergreen, small to medium trees which produce green or black fruits for table and oil production. The fruits are considered a delicacy after they have been processed. Those of the African olive are only edible by birds.

Olive oil and table fruit production are important economic crops but the management of wild seedlings is critical.

The seedlings are extremely invasive and have taken over large areas of the state.

HOW IT SPREADS

- Unviable production trees left to grow wild, produce fruit which is not managed.
- Fruit is attractive to and spread by birds and small mammals.

If you have fruiting olive trees and are not harvesting the fruit ask permission from your council to have them removed.



Snow Gum

Eucalyptus pauciflora



Fast growing semi-evergreen, vigorous twining climber with attractive dainty five leafleted leaves. The vanilla scented purplish-brown flowers appear late spring to early summer.



Small Leaved Gum

Eucalyptus parvula



Photo: Jackie Miles

This small-leaved tree is one of the most compact of the eucalypt species, having a rounded shape with branches close to the ground. *E. parvula* is an ideal specimen tree for small gardens. It is also useful in groups for wind protection or in hedge-type rows for privacy. It is an excellent tree for cold damp positions. In its natural habitat it is restricted to the high country of south-eastern New South Wales.



Wolgan Snow Gum

Eucalyptus gregsoniana



Photo: Brooker & Kleinig (c) Australian National Botanic Gardens

Formerly, this species was known as *E. pauciflora* var. *nana*, but it has been separated as a distinct species. Growing to about 3m, first as a small tree and eventually malleeing, it features weeping, falcate leaves, bright green buds, white stems and red branchlets.



Photo: Macbird Floraprint



Yellow Bamboo & Black Bamboo

Phyllostachys aurea

Phyllostachys Nigra



Photo: Bamboo Downunder

Cultivated as ornamentals, these two varieties are very invasive weeds in gardens, bushland and wasteland.

HOW IT SPREADS

- They have a spreading habit, sending their invasive rhizomes (roots) underground where they will travel many metres.
- If the roots are disturbed or find fertile ground they will produce shoots and establish.

Any type of running rhizomatous bamboo is to be avoided, avoid planting these and choose the clumping types instead.



Gold Stripe

Bambusa multiplex



Photo: Bamboo Downunder

Clumping bamboo to 3m high With erect growth and stems 3.5cm across, bright yellow, striped green leaves. A very attractive and ideal garden specimen.



Oldhami

Bambusa oldhamii



Photo: Bamboo Downunder

A favourite of collectors, also called 'Giant Timber Bamboo'. Growing to 15m high with useable timber, Oldhami is a good 'all-rounder'. It has the highest quality edible shoots and is frost hardy. This bamboo will form as excellent ornamental windbreak



Chungi

Bambusa chungii



Photo: Bamboo Downunder

This is a highly ornamental and traditional bamboo. The new shoots and young culms are heavily covered in white powder, giving them a bluish appearance. A vigorous growing and hardy bamboo, it can withstand frost, cold wind and dry winters.



Radiata Pine

Pinus radiata



Photo: Jackie Miles

This large evergreen tree has been very widely planted in Australia as a windbreak and timber tree.

HOW IT SPREADS

- The winged seeds are contained in woody cones from which they are released when ripe to spread on the wind.
- It is possible that cockatoos, which eat the seeds, may sometimes carry the cones longer distances than they could travel on the wind as plants are found in the bush many kilometres from the nearest plantations.
- Self-sown young trees are a very common sight near mature trees. Other pine species may also be as invasive.

Please note: It is desirable to replace the pines with native conifers as exotic conifers do not harbour our native birds and small mammals.



Western Red cedar

Thuja plicata



Photo: Macbird Floraprint

Grown as a windbreak and famous for the use of its timber, known as the western red cedar. The leaves are dark and glossy above and paler beneath, they emit a strong fruity smell even without being crushed.

An erect robust tree to 30m tall and resistant to pest and diseases.



Black She Oak

Allocasuarina littoralis



Photo: Jackie Miles

An Australian native tree which occurs naturally in parts of the Southern Tablelands. The black sheoak will grow very well both inland and in coastal zones. Grows to about 8m high by 4m wide. The tiny male flowers turn the whole tree a rusty red colour. This is a moderately drought hardy species and can handle very poor soils..



Black Cypress Pine

Callitris endlicherii



This native Australian conifer occurs naturally in the ACT, often in rocky sites such as the Molonglo Gorge. It develops into an erect tree to 15m high with spreading branches, it is drought and frost tolerant and useful for windbreaks and timber.



Photo: Jackie Miles



Cherry Laurel

Prunus laurocerasus



Photo: Delwyn Thomas

This large evergreen shrub or small tree has lustrous deep green leaves that are large, leathery and oblong with bright green shiny upper surfaces. The veins are distinctly yellow. It has strongly scented tiny creamy white flowers in spring

It is known to invade sensitive forests where it shades out and replaces native species, reduces biodiversity and degrades habitat for native fauna.

The leaves of this tree are traditionally used to create Anzac wreaths and the foliage is as cut foliage for florists. The leaves, seeds and fruits are highly toxic to humans and may be an irritant to skin and eyes.

HOW IT SPREADS

- Clusters of cherry-sized succulent berries ripen from green to purplish black through summer and autumn and are spread by birds.



Laurustinus

Viburnum tinus



Photo: Macbird Floraprint

Hardy evergreen bushy shrub with masses of small pinkish white flowers followed by small black berries and dense foliage. It is an excellent hedge or screen plant. Tolerates wind, shade, drought and frost. Also hardy and suitable for coastal areas and is fire retardant. Grows 2-2.5m High by 1.5m wide.



Elaeagnus

Elaeagnus macrophylla



Photo: Yarralumla Nursery

This shrub grows to a height of 3m by 3m wide. It has a moderate growth rate and will form an excellent long lived hedge. Silvery fragrant flowers appear in autumn, followed by red scaly fruit. There are excellent variegated forms available.



Sasanqua Camellias

Camellia sasanqua



Photo: Lorna Rose

These hardy camellias are available in a wide range of height and forms. With single and double blooms in light to deep pinks, white, red and many bi colours available. Choose from sun hardy or shade tolerant varieties.

Your garden centre will have a wide range of selected cultivars suitable for pots, hedging, screens, borders or as a specimen plant.



Golden-leaved Black Locust

Robinia pseudoacacia 'Frisia' and other grafted varieties.



Photo: Fleming's Nurseries

This deciduous, spreading tree has dense, drooping clusters of fragrant, pea-like, white flowers appearing in spring. The trunk has rigid and furrowed bark, the luxuriant leaves are golden yellow when young and turn orange yellow in Autumn

HOW IT SPREADS

- They are prone to suckering. This happens because the variety is grafted on to a vigorous understock, *R. pseudoacacia*, also known as the False Acacia. The False Acacia will grow to 20m (60') and is native to the United States. It is a deciduous tree with green compound leaves and sharp thorns and it is now naturalised in many parts of Europe, Asia and Australia.
- If its roots are damaged (for example by a mower or whipper snipper or by digging) or if the roots hit an obstacle, such as a clay soil, they will produce suckers. This characteristic is retained when the tree is used as an understock.
- The hard-coated seed may also be spread longer distances in soil or water or occasionally by animals.



Mop Top Maple

Acer platanoides 'Globosum'



Photo: Fleming's Nurseries

A dense, symmetrical and formal round-headed small tree to 5m high by 4m wide. Very tough and an ideal street tree where space and height are limited. Generally not prone to pests and diseases and requires little or no pruning to hold its shape. Once established it is quite tolerant to heat, drought and pollution. An excellent alternative to Robinia mop tops.



Indian Bean Tree

Catalpa bignoniodes 'Nana'



Photo: Fleming's Nurseries

This is a top grafted specimen useful as a street tree. Extensively used in Victorian-period landscapes it imparts a lush appearance. This tree will form a tight ball of heart shaped rich green foliage in summer . In autumn the foliage turns a rich bright yellow.



Liquidambar

Liquidambar styraciflua 'Rotundiloba'



Photo: Fleming's Nurseries

This tree makes a superb specimen for large open spaces such as parks and gardens. Notable for its unique foliage shape, autumn colour and the reported absence of woody fruit.

For further information visit www.flemings.com.au



White Poplar

Populus alba



The white poplar is a rounded broad-leaved deciduous tree growing up to 12 m tall. It is distinguished by the blue grey leaves with white undersides and white bark. Leaves turn brilliant yellow in autumn and it is often grown for this feature. It has male and female flowers on separate trees. After flowering in October the unfertilised female flowers become white wind borne 'fluff' which spreads widely causing respiratory irritation to some people.

White poplar may be mistaken for Silver birch.

HOW IT SPREADS

- White poplar spreads by suckers which may from dense thickets in gullies and along streams. Suckering is stimulated by soil disturbance damaging roots.



Silver Birch

Betula pendula



A deciduous medium-sized graceful tree providing light shade in summer. It will grow 6 to 15 m high by 5 to 8 m wide. It may have one or several main trunks and will grow in sun or part shade and prefers a moist soil.. The bark is brown when young but gradually develops to silvery-white papery-bark when mature.

Photo: Fleming's Nurseries



Argyle Apple

Eucalyptus cinerea



Photo: Jackie Miles

This is a popular small tree with distinctive silvery-blue foliage providing a striking contrast in gardens. It grows to about 7 or 8 metres high, sometimes taller, so is ideal for small yards or for use as a street tree. Florists often use the juvenile foliage for arrangements as the stem clasp leaves are quite stunning in colour and form. The argyle apple is found naturally in cold areas of NSW.



Callery Pears

Pyrus calleryana



Photo: Jackie Miles

These are excellent trees for all landscape uses, provided named cultivars are used. They require soils that will not be overly-droughted in summer after establishment. Many horticulturists are choosing to plant selected forms of callery pears in areas where a 6m tall tree is required, ask at your garden centre for the best recommendations for your garden.



Lombardy Poplar

Populus nigra 'Italica'



This is an upright form of *Populus nigra* growing to 25 m in height. It has triangular-shaped dark green leaves which turn a brilliant yellow in late autumn. Poplars have separate male and female trees and the ones first introduced to the ACT were male.

HOW IT SPREADS

- They do not produce seed but reproduce by suckers which can form dense copses.
- Lombardy poplar has been widely planted as an ornamental tree in moist sites and beside streams in the ACT.

It is a non-native naturalised species in the Australian flora having a direct impact on rare and threatened species.



Manna Gum

Eucalyptus viminalis



Indigenous to Victoria, Qld, NSW, Tas and SA the Manna Gum is the primary food tree for Koalas. Tolerant of most situations with the tallest trees found in mountain regions. Bark is shed in ribbons during summer leaving the upper trunk and branches white but the base of the tree remains bark-coated. The leaves are dark green and often sickle-shaped. Flowers are cream coloured in a cluster.



Silver Birch

Betula pendula



Photo: Fleming's Nurseries

A deciduous medium-sized graceful tree providing light shade in summer. It will grow 6 to 15 m high by 5 to 8 m wide. It may have one or several main trunks and will grow in sun or part shade and prefers a moist soil.. The bark is brown when young but gradually develops to silvery-white papery-bark when mature.



Red Spotted Gum

Eucalyptus mannifera



Photo: Jackie Miles

This Australian native tree grows on dry, upland soils where drainage is free, irrigation is occasional, and frosts are common. It is relatively fast growing, and will grow up to 50cm per year in nature. It usually forms a single trunk and has a wide-spreading canopy. The trunks are white and chalky with reddish flecks all the way up the stem and are amongst the most attractive of all the eucalypts.

Red Spotted Gum has been used extensively in urban planting, and is highly successful in Canberra.



Pussy Willow

Salix cinerea



Photo: Macbird Floraprint

Considered to be one of the most invasive species of willow. It is invasive in swamps, drainage lines and other moist sites.



Basket Willow

Salix rubens

By far the most widespread and abundant willows in Australia. Originally planted for stream stabilisation it spreads almost exclusively by plant parts which take root when broken off and washed downstream.



Black Willow

Salix nigra

Deciduous, rapidly-growing tree to about 20m tall with one or less often up to 4 trunks.

Willow tees are either male or female. Flower spikes (catkins) appear with leaves in spring. Male catkins yellow, female catkins green.

HOW IT SPREADS

- Seeds spread by water and new trees can sprout from broken branches. Willows are a major weed of streams and river banks and can block river flow, causing bank erosion.

These willows are declared pest plants in the ACT and are declared weeds of national significance in NSW (WoNS)



River Sheoak

Casuarina cunninghamiana



Photo: Macbird Floraprint

This handsome tree is often seen along rivers and streams. It's widely recognized as an important tree for stabilizing riverbanks and for soil erosion prevention accepting wet and dry soils. Frost tolerant and often widely used as a screening plant. Great for windy sites and also coastal areas. This fast growing tree will reach 20 to 25 metres in height. it is too big for the home garden but suitable for the rural block.



Weeping Snow Gum

Eucalyptus lacrimans



Photo: Fagg, M - ANBG Photo: Jackie Miles

This is an attractive specimen tree for small gardens and growing to 8 to 15m tall by up to 12m high .It is useful planted in groups for wind protection and is an excellent tree for cold damp positions, it grows in poor soils and will withstand snow and ice



Snow Gum

Eucalyptus pauciflora



Photo: Macbird Floraprint

Native to the tablelands, from Northern NSW into Victoria, it is very long-lived and very slow growing. It can withstand snow and ice, and prospers in well-drained soil and colder areas. It can be used for windbreaks, shade, fence posts, fuel and honey. The cream flowers are produced in profusion. Attractive scribbles on the white bark are produced by a small insect.



Rowan Tree, Service Tree or Mountain Ash

Sorbus domestica, Sorbus aucuparia



This is a large group of mostly hardy, deciduous trees and shrubs that are very easily grown. There are basically two different types of Sorbus. The plants belonging to the first type are commonly known as Whitebeams including *Sorbus aucuparia*. They have simple leaves that often have serrated margins and are sometimes lobed. The leaves are usually white or silvery beneath. In the autumn, their clusters of brown to red fruits are attractive to birds which aid their spread. The plants of the second type are commonly known as Mountain Ashes and include *Sorbus domestica*. These plants have pinnate leaves, giving them a fern-like appearance.



Crepe Myrtle

Lagerstroemia indica



A small tree, perfect for suburban gardens or as a stunning street tree. In summer it produces vibrant red, pink, white or lilac flowers which have a texture like crepe fabric. The flowering period lasts for up to three months. The Autumn leaves colour brilliantly in cold climates and the tree also has beautiful smooth bark streaked and mottled in shades of brown.



Irish Strawberry Tree

Arbutus unedo



Photo: Macbird Floraprint

Highly ornamental evergreen, specimen tree with dark green foliage, small, fragrant, urn-shaped flowers, attractive bark and large, rough textured fruit ripening from green through to yellow to striking red.



Flowering Crab apple

Malus species



Photo: Fleming's Nurseries

Very pretty, highly ornamental and deciduous trees grown for beautiful Spring blossom and their showy crimson-red crab apples, the ripe fruit lasts well, decorating the tree from Autumn into early Winter

For further information visit www.flemings.com.au



Periwinkle

Vinca major



Photo: Macbird Floraprint

A groundcover plant that was formerly grown because of its dense green foliage and small blue flowers. This plant has jumped the garden fence and is now well established in wet areas such as natural watercourses and river banks.

It does not produce seed in Australia, but spreads by runners and by fragments carried in water or in relocated soil. It forms dense mats suppressing all other plants. A variegated form may also be invasive.

HOW IT SPREADS

- The spread of this plant has been aided by gardeners who have spread cuttings into the bush.



Convolvulus

Convolvulus sabaticus



Photo: Macbird Floraprint

A dense, trailing plant with masses of pretty lilac-blue cup shape flowers from spring until autumn. Reaching a height of about 20cm, it will spread to 2 metres wide. It looks wonderful massed planted and hanging over retaining walls, or grown in hanging baskets.



Saltbush

Rhagodia spinescens



Photo: Fagg, M. - ANBG

The plant has grey foliage and comes from inland Australia and grows to approx. 3m high. It is a variable shrub that may be upright or spreading. The small leaves are silver-grey, the flowers and fruits are insignificant.

Saltbush is often grown as a foliage plant giving colour where the foliage contrasts with other plants in the garden.



Japanese Star Jasmine

Trachelospermum asiaticum



Photo: Macbird Floraprint

This twining plant is often used as a ground cover with small white lightly fragrant flowers. It will grow in semi shade or full sun in a wide range of soils.



Aquatic plants

In recent years aquatic plants have become a major invader. The cost of removal and control to Local, State and Federal governments runs into many millions of dollars. This plant, the parrot feather is believed to have been dumped from a home aquarium. There are many similar native plants which are just as suitable for aquaria and garden ponds



Parrot Feather

Myriophyllum aquaticum



Photo: Terry Inkson

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

Parrot feather reproduces by fragments breaking from the parent plant and moved by water currents.

Also commonly found in home aquaria as the plant was once sold as an attractive fish tank plant.

This aquatic plant is capable of totally choking water ways, dangerously excluding all other flora and fauna.



Water Milfoil

Myriophyllum papillosum



Photo: Glenfield Nursery

A Perennial herb, aquatic or fully emergent plant, rooting at the nodes.

Fully emergent. Plants occur in shallow water or on mud.



Swamp lily

Ottelia ovalifolia

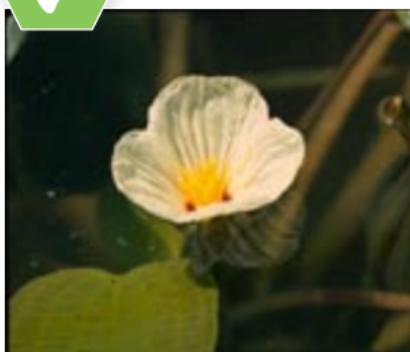


Photo: Fagg, M - ANBG

Occurs in all mainland states and grows in slowly flowing fresh water or the still water of ponds, dams and lagoons. The Swamp Lily may form extensive colonies in nutrient-rich water. The open flowers are the most visible and are white with reddish or purple centres and emerge in the warmer months. Blooms appear regularly and last for less than a day.



Water Ribbons

Triglochin procerum



Photo: Darryl Hoogenboom

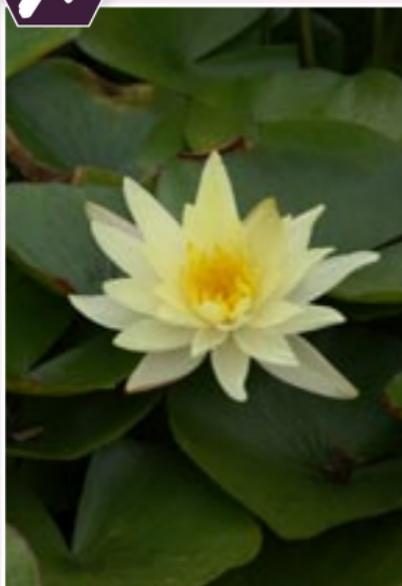
This robust perennial aquatic has leaves which are strap like, rather fleshy, often floating, flowers are small and greenish and carried above the leaves on elongated spikes. It is usually found in still or slow moving water and depressions. The plants survive exposure when the water level drops

All are suitable for attracting frogs into the garden.



Yellow or Mexican Waterlily

Nymphaea mexicana



This species is often traded as a backyard plant due to its bright, attractive yellow flowers. It is an extremely invasive perennial herb that has the ability to entirely choke slow moving or still water bodies. It Produces daughter plants at the ends of stolons that can become detached and float away to establish else where. It is a major weed in SE QLD and throughout NSW and its planting in any garden or water body should be strongly avoided due to its invasiveness and adaptability. This plant has undergone a weed risk assessment and has been recommended for a national ban.



Native Waterlily

Nymphaea violacea



A floating perennial herb growing from a rhizome in the mud of the pond base. Leaves are broadly egg-shaped to circular with a split at the base to the point of the stalk attachment. The flowers are borne on long stalks up to 30 cm above the water surface. They are 7-16 cm in diameter and violet, blue or white in colour.

Photo: Blue Lotus Farm



Wavy Marshwort

Nymphoides crenata



Photo: Glenfield wholesale nursery

Slight bronzed-green waterlily-like leaves with heavily crenate edges and purplish-brown speckles. A robust native water plant with fringed yellow flowers



Swamp Lily

Ottelia ovalifolia

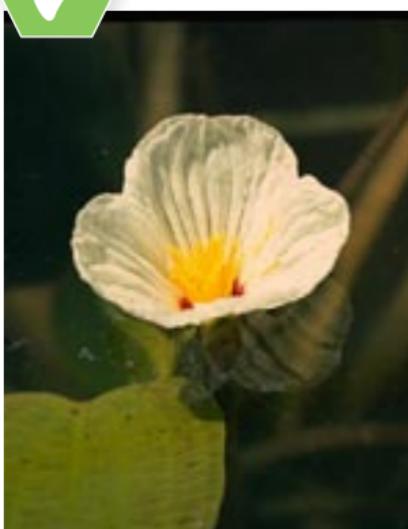


Photo: Fagg, M - ANBG

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Berried Plants

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



Cotoneaster

Cotoneaster species



Photo: Delwyn Thomas

Very commonly planted because of the large crops of red berries which hang on the branches for months after flowering, the cotoneasters are widespread weeds in bushland and farming land. Prostrate forms sold as groundcovers or rockery plants do not appear to be invasive.



Firethorn

Pyracantha species



Photo: Delwyn Thomas

Flowers in white clusters in spring and summer. Evergreen shrubs to 4 m high that produce prolific clusters of fruit maturing red, orange or yellow. Similar to Cotoneaster but distinguished by having spine tipped small branches.

Pyracantha and Cotoneaster species are often confused with each other. Cotoneaster species are similar but lack thorns.

As an alternative to the Cotoneasters and Pyracanthas, we suggest you grow instead the hardy, Australian native Bottle Brushes which produce bright red flowers to attract and feed native honeyeaters.



Flowering Crab Apple

Malus species



Photo: Macbird Floraprint

Decorative, deciduous, highly ornamental, medium size tree grown for its spring blossom and persistent, showy red crab apples in autumn and winter.

This is a splendid medium tree and will provide wonderful summer shade. Go to www.flemings.com.au for more information.



Bottlebrush

Callistemon 'Kings Park Special'



Photo: Macbird Floraprint

A small bushy tree to 5m tall with attractive weeping branches and grey-green leaves.

Deep red bottle brush flowers are grouped together in bunches and make a spectacular display.



NSW Christmas Bush

Ceratopetalum gummiferum



Photo: Fagg, M - ANBG

A large shrub or small tree to 5m high in cultivation. The foliage is very attractive and the new growth is often pink or bronze coloured. The true flowers are white in colour. The main attraction is the massed display of red sepals which are commonly mistaken to be flowers. These are at their peak in early to mid summer and usually at Christmas. The sepals and foliage are widely used for cut flowers.



Hawthorn

Crataegus monogyna



Photo: Delwyn Thomas

A large prickly deciduous shrub often previously grown for hedges or cheap barrier fences and often planted around homesteads. These plants form a dense, impenetrable thicket and can dominate the under story of bushland.

Now prevalent on the roadside, invading natural bushland and unproductive farmland this plant produces copious bunches of scarlet red fruits spread by birds, small mammals and machinery.



Flowering Crab Apple

Malus species



Photo: Fleming's Nurseries

This crab apple has small white flowers in spring, followed by small purple-red apples that stay persistent through autumn into winter. Brilliant coloured autumn leaves A medium size decorative, deciduous tree.



Bottle Brush

Callistemon 'Western Glory'



Photo: Macbird Floraprint

A hardy shrub suitable for poor soils. It has spectacular clusters of bright mauve-red flowers. Excellent feature plant. Attracts birds to your garden.



Bottle Brush

Callistemon Kings Park Special



Photo: Macbird Floraprint

This bottle brush was raised at Kings Park in Perth. It grows into a small bushy tree to 5m tall by 3m wide. The long brushes are bright red in colour. Spring flowering.



Common Holly

Ilex aquafolium



Photo: Fleming's Nurseries

This tree is slow growing when young but can reach a massive 20m in maturity. Glossy, dark-green leaves are spiny and sharply toothed.

Bright-red winter berries occur only after pollination between male and female plants.

HOW IT SPREADS

- Birds and small mammals ingest berries and the seed is spread in their droppings.

Seedlings and maturing plants are difficult and costly to remove.

While red berried plants add interest and texture to the garden we must avoid the problem plants naturalising in bushland.



Fragrant Olive or Holly Osmanthus

Osmanthus heterophyllus



Photo: Lorna Rose

This large shrub is similar in looks to holly, with mid-green, finely toothed leaves and small flowers that are highly scented in the evening and round, dark blue fruit. Osmanthus will grow to 4m and will grow well in shady areas.



Sasanqua Camellias

Camellia sasanqua



Photo: Lorna Rose

These hardy camellias are available in a wide range of height and forms. Single and double blooms in light to deep pinks, white, red and many bi colours available. Choose from sun hardy or shade tolerant varieties.

It is frost and drought tolerant once established. Many different varieties are available for pots, hedging, screens, borders or as specimen plants. Seek advice at your garden centre for the best Camellias for your garden.



Eleagnus

Elaeagnus macrophylla



Photo: Yarralumla Nursery

Thus shrub grows to a height of 3m by 3m wide. It has a moderate growth rate and will form an excellent long lived hedge. Silvery fragrant flowers appear in autumn followed by red scaly fruit. There are excellent variegated forms available.



Further information and additional resources

There are many areas of information regarding invasive plants, 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** - will also have information about plants considered invasive in your local area and some good indigenous alternatives.
- 3. State Government** - Contact Department of Primary Industries www.dpi.nsw.gov.au has useful information about invasive plants. However, much of this may be confusing so local government authorities will have refined the information pertinent to your area.
- 4. 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. www.weeds.org.au
- 5. Nursery & Garden Industry Australia (NGIA)** - NGIA is the national peak body for the nursery and garden industries in Australia. Their websites have a gardener focus which has good information on invasive plants. A very useful resource is www.ngia.com.au Also look at the Life Is A Garden website www.lifeisagarden.com.au
- 6. The Nursery & Garden Industry NSW & ACT** - NGINA has information on the website about gardens, gardening, invasive plants and your local nurseries. www.ngina.com.au or phone 02 9679 1472
- 7. Australian Government** - Weeds in Australia Website. An excellent website with a good range of information, references, lists, databases and pictures and other resources. Website: www.weeds.org.gov.au.



Environmental choice
logo goes here



Nursery & Garden Industry
NSW & ACT

*A Guide for Gardeners
in ACT & High Country*

