

# Planting Strategy

Nathan Campus

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## Vision

Nathan Campus, the first established by Griffith University, is situated about 13km south of Brisbane's city centre. It is set in the southern portion of the 260ha Toohey Forest Conservation Park; an island of remnant forest surrounded by suburban development. This setting gives the campus a unique and rich biodiversity that much of the surrounding modified landscape has lost. The remnant vegetation is primarily dry sclerophyll forest with some wet sclerophyll and riverine habitat along watercourses. To date, over 400 species of plants and animals have been recorded around Nathan Campus including a number listed as rare and threatened.

This biological richness and its successful conservation make the campus a perfect location for world-class research and education in environment and sustainability. Griffith University is committed to the preservation and enhancement of the Toohey Forest ecosystem.

The aim of this document therefore is to create a landscape strategy and planting palette for use in the consultation and management of the main campus area where most future development will take place. It will be used by decision-makers to facilitate appropriate use of plants in this area maintaining the natural aesthetic, limiting disturbance and providing low-maintenance interest and attraction to campus users. It is hoped that this will serve to enhance the local environment and biodiversity whilst also providing an appealing, educational and recreational resource for students, staff and visitors alike.

# Objectives

To uphold the vision, a number of practical objectives must be achieved:

Plant species used should:

- Be native to the local area, unless there is no other option
- Be low maintenance
- Provide interest, aesthetic appeal and/or have cultural or conservation significance.
- Withstand harsh local environmental conditions including low soil moisture, thin soil and high exposure to wind and UV
- Promote a 'sticky campus' to facilitate student interaction
- Be mostly in tune with the local character and environment of Toohey Forest
- Be planted mindfully so as not to increase fire-risk around buildings
- Be easily-sourced
- Have long life-spans
- Benefit local wildlife

To improve landscape maintenance:

- Water tanks with higher holding capacity (> 3,000 litres) should be strategically placed under new developments or retrofitted as free-standing among current ones to allow sufficient irrigation of planted areas, especially ornamental beds
- High-maintenance lawns should be avoided unless for a specific purpose (e.g. student social area, sports)
- Consultation should be encouraged between gardeners, architects and other stakeholders using this document as a guide. Working through the character, microclimate and planting palette with clear, guided consultation is essential when planning newly vegetated areas
- Enact a regular maintenance regime of mulches to minimise soil drying



## Key features of the planting palette



### Neat

Plant species should be easily contained and structurally attractive



### Native

All species must be native to the local area, unless there is no other option



### Form

A range of different growth forms should be encouraged to add structural variety



### Colour

A range of colours from native species is to be show-cased



### Conservation

Plants should be consistent with surrounding Toohey Forest ecosystem unless for a specific purpose such as displays of Griffith corporate colours or in difficult areas such as shady, dry beds.



### Maintenance

Gardeners require low maintenance species to allow for sufficient management of the campus as a whole



### Red

In selected locations planting should be used to reinforce the Griffith corporate colour

## Suggested layout and zonation of the landscape strategy

In 2009, the most recent Nathan Campus Master Plan, compiled by Griffith University and Cox Rayner Architects, included an evaluation of the natural environments and remnant habitats present across the main campus. The surveyors, Stringybark Consulting, classified the surrounding vegetation as predominantly Regional Ecosystem 12.11.5; an open dry sclerophyll forest complex of Lemon-scented Gum, Northern Grey Ironbark and Queensland Grey Gum on metamorphosed substrate with some elements of wet sclerophyll forest near water-courses. They compiled a map of where this ecosystem remains undisturbed, the patches where it has become isolated and modified within the main campus area and the surrounding cleared area for infrastructure, lawns and ornamental gardens.

In conjunction with the findings of this investigation, a zonation scheme is suggested for the new planting strategy that will be largely in keeping with the natural character of the site but allow for some areas to display more formal plantings of 'neat native' species. The peripheral undisturbed vegetation of Toohey Forest Conservation Park that encircles the main campus area and areas of wet sclerophyll forest are unsuitable for new development however, including planned planting. These areas are protected and should remain untouched.

However, all other remnant patches within the main campus development area are relatively suitable for building and since 2009 some of these areas have indeed been developed. These largely isolated and

modified patches of infrastructure, dry sclerophyll forest remnants, ornamental garden and lawn also form the area suggested for future planned planting where this document's landscape strategy and planting palette will be applied. Current and future development in these areas should follow this document in choosing and establishing plants.

The following zonation scheme outlines 6 proposed zones for planting.

Within the main campus development area, six distinct zones are proposed: zones 1, 2a/2b and 3 constitute a relatively small proportion of the overall campus area (around 5-10%) and are the areas targeted with a more ornamental approach using mostly neat natives, but also a number of regionally native species such as *Erythrina numerosa*, *Scaevola aemula* and *Brachychiton bidwillii*. Cultivated varieties of locally native plants (e.g. *Melaleuca/Callistemon* 'Little John') are to be used in select locations as they instigate the Griffith corporate red colour scheme. Two other plants emphasising this include *Kennedia prostrata* and *Leptospermum scoparium* 'Ruby Glow' which are Australian plants but not native to the region. Zones 4, 5 and 6 are cumulatively much larger (- 90% of campus area) and follow a completely native approach using species only found in Toohey Forest and also possibly encouraging the use of some regionally-native, but endangered species.

UNIVERSITY ROAD

NORTH RING ROAD

SOUTH RING ROAD

WEST CREEK ROAD

EAST CARPARK

THE CIRCUIT

GRIFFITH ROAD

RECREATION CENTRE CARPARK

- Zone 1  
Social Areas
- Zone 2  
Main Vehicular and Pedestrian Movement Areas
- Zone 3  
Ornamental Beds
- Zone 4  
Building Edges
- Zone 5  
Modified Sclerophyll Remnants
- Zone 6  
Water Bodies



The main campus development area with 6 planting zones highlighted. All vegetation outside of this zone should be maintained.

## Zone 1 Social Spaces

Architectural modifications at Nathan are being designed to incorporate a 'sticky campus' perspective; facilitating student integration and interaction. A number of social spaces have been provided to promote this including courtyards, dining areas, seats and lawns.

### Courtyards and dining areas

The main courtyard is located at N76, the Campus Heart. This is an exciting location with the majority of campus activity centralising here. However the soil and light levels are poor, and coupled with exposure to strong winds, the area's planting beds require very durable species. As such, in the most difficult areas, the hardiest species are often non-native plants. Some of these such as the Parlour Palm (*Chamaedora siefrizii*) and Haran (*Aspidistra elatior*) cope very well. However, some natives could be trialled here that withstand dry shade including the Native Hoya (*Hoya australis*), Cockspur Flower (*Plectranthus parviflorus*) and Basket Fern (*Drynaria rigidula*). Attempts to choose attractive plants should be prioritised due to the public exposure this area receives.

Two courtyards of particular focus, mentioned also in the 2009 Nathan Campus Master Plan are located in front of the Northern Theatres 3, 4 & 5 (N29), and that between the Science and Technology Buildings (N34 and N44). For the former, improved through-access and seating are encouraged, while planting should follow a semi-ornamental style using 'neat natives'. The latter is very shaded and lacks attraction to 'stay a while'. This could be improved by clearing invasive understories and augmenting forest edges with attractive native shrubs such as *Pultenaea*

*villosa*, dwarf *Acacia fimbriata* and dwarf *Melia azedarach* alongside wooden seating.

### Seats

Seating areas may allow for the use of planters. However, planters will require constant watering and maintenance, and may not be a good idea in the long-term. If discouraged, seated areas should be planted with graded vegetation that has reduced height and spread near where people will be seated. Using shade trees in seating areas is also encouraged, including *Flindersia australis* and *Alectryon tomentosus*.

### Lawns

The university lawn outside Macrossan Building has been subject to ever-changing plans. In the 2009 Nathan Campus Master Plan, the most recent proposal is to extend the lawn area to the north and east by removing mid and understorey vegetation in surrounding bush remnants and leaving stand-alone mature trees. This plan could be implemented alongside establishment of additional trees using a specimen planting approach. Trees added to this lawn will give it a semi-formal arboretum feel, using species of interest from the local area including *Melicope elleryana*. The lawn affront N66 should be maintained as it is believed this gently sloping, north-facing lawn functions as a good student social area especially on warm days, and should be kept so. The current and suggested grass is *Stenotaphrum secundatum* 'Sir Walter'. Other lawn areas may need to be discouraged from creation due to the high maintenance they require.





## Zone 2a & 2b Main Vehicular and Pedestrian Movement Areas

These areas of largely linear infrastructure include walkways, roads, car parks and pavements. They form two distinct zones: i) those on the periphery of the main campus that allow for vehicular movement, access and parking, and ii) pedestrianized walkways between buildings within the campus. Only those movement areas which facilitate the majority of visitor traffic should be modified, with a general rule that less-used lineal routes through sclerophyll remnants should have their natural character retained.

### 2a. Campus periphery

It is suggested the campus ringroad is divided into two sub-zones.

The first is the stretch of main entrance that starts at University Road, heads south and west along South Ring Road through two roundabouts and then left and south onto Griffith Road. This road forms the main artery for visiting transport to and from the campus and is largely remnant, rather sparse vegetation. Selected prominent sections along this road are encouraged to be enhanced and in-filled with red plants, emphasising the Griffith colour. The roads are divided by a central island of vegetation, as well as a circ. 1m pavement edge of vegetation bordered by logs either side. These should be target planting areas with anything beyond that left as remnant bushland. A number of locally native or nationally native plants have been selected for these areas bearing in mind the dry, exposed conditions: *Brachychiton acerifolius*, *Melaleuca viminalis* 'Little John', *Erythrina numerosa*, *Dodonaea viscosa*, *Leptospermum scoparium* 'Ruby Glow' and *Kennedia prostrata*. However, the soil here tends to be rather root-bound and extensive work may be required to

make the area suitable for more formalised planting. In light of this, the most prominent areas should be targeted first, such as the initial roundabout.

The second sub-zone is the remaining ring roads to the west and north. These areas should be planted with a similar style to that of sclerophyll remnants, allowing for development of restored forest with mixed age structure and varied composition. The campus car-parks and ring-road in essence form an ecotone between the Toohey Forest Conservation Park and human disturbance and should be largely retained as natural forest edges, with little need for much maintenance apart from planned burning, some weed control and removing overhanging branches/limbs.

### 2b. Pedestrianised walkways

Within the campus, a number of pedestrianized routes run between buildings including concrete paths, underpasses and raised walkways. These areas maintain user traffic and facilitate ease of access to campus facilities. The sides of these walkways should be planted to maintain flow of user-traffic, retain edges and provide aesthetic appeal using a minimum 1m border. A more ornamental scheme using 'neat native' species should be adopted, especially along the main campus artery, the Johnson Path. Bushy species such as dwarf *Acacia fimbriata* and *Sannantha virgata* would be appropriate planted amongst dwarf rushes, ferns and flowering creepers such as *Lomandra confertifolia* 'Little Con', *Calochlaena dubia* and *Pandorea jasminoides*. Selected species in this zone should not include trees or large shrubs due to constraints of size and overhanging branches.



## Zone 3 Ornamental Beds

Across the campus a number of large ornamental and semi-ornamental beds occur. Some have been completely excavated and replanted, whilst others for example around The Circuit (fronting Sir Samuel Griffith Centre (N78)) where the majority of public transport users now arrive, have elements of the remnant bushland remaining. These are areas of largely ornamental planted beds. These beds could function similarly to social spaces in show-casing our attractive native plants to campus users as they are the two zones in which people spend most stationary time.

Bed design and planting should be mindful of space restrictions, for example the use of large-crowned and rooted trees is not advised, unless in the very centre of such islands with sufficient buffers. This will avoid damage to surrounding infrastructure. Ornamental beds will generally follow a conical gradient such that largest and tallest plants are furthest from the edges. Species such as *Rhodospaera rhodantha* and *Castanospermum australe* would form the centre of the bed, while shrubs (e.g. *Alpinia caerulea* and *Cordyline rubra*) lead outward to groundcover and tussock herbs, ferns and rushes on the periphery: *Patersonia sericea*, *Scaevola albida*, *Drynaria rigidula*, *Hibbertia diffusa* and *Goodenia ovata chrysocephalum*.

In order to limit maintenance time and costs, judicious choice of species should be applied before planting, for example avoid deciduous trees near building roofs and gutters, inter-mix planting to avoid monotony and site species with greater water requirements nearer irrigation/drippers.





## Zone 4 Building Edges

Current and planned development of campus buildings need not pose a great threat to local biodiversity if maintained to proposed areas and sprawl into neighbouring forest is limited. Within the areas of development, all buildings should adhere to a 5m buffer as a fire break, with no trees. Within these buffers, planting should focus on smaller understorey and mid-storey species with little fuel load. The buildings often provide an altered microclimate depending on their aspect and surfacing with dark walls maintaining heat well, and white ones reflecting it. Generally a few shrubs such as *Olearia nernstii* intermixed with slender herbs and small groundcover such as *Dianella longifolia* and *Chrysocephalum apiculatum* would do well, while on south-facing shadier sites, other ferns such as *Cyathea cooperi* and *Adiantum hispidulum* could be planted.



## Zone 5 Modified Sclerophyll Remnants

The natural setting of Nathan campus provides an exciting and educational living ecosystem on our doorstep. Most of the remnants within the main campus area are interspersed by buildings while larger areas border the ringroads and extend well into Toohey Forest itself. The remnants within the main campus development zone should be maintained if possible to allow easy access sites for environmental researchers and students, provide an educational tool for visitors without them needing to venture into Toohey Forest itself, and also give a natural feel to the campus' main areas.

These remnants also allow for actively encouraging locally threatened plant species lost from the area due to fragmentation and land-use change. Many of these species are in cultivation and could be easily sourced. Such species include *Eucalyptus curtisii*, *Sophora fraseri*, *Notelaea lloydii*, *Corchorus cunninghamii* and *Syzygium oleosum*. Many of these species are federally protected and Griffith University could assist in reinstating populations of them within their former range.

In total there are < 10 patches of remnant sclerophyll forest located within the main campus area. Key points to note in managing them include:

- ➔ Maintaining natural character with varied age structure and species composition – avoid over-competition of mid-storey or weeds
- ➔ Due to the small size of these patches, ecological function is limited – chances for connectivity should be targeted especially for the benefit of local wildlife
- ➔ Encourage volunteer planting days to maintain health and diversity of these zones

- ➔ Plant species of conservation or educational significance to enhance value of these remnants
- ➔ Maintain a 5m graded zone around building edges as a fire break

Overall, the campus' remnants are a key asset of Nathan in providing green spaces that are not as altered by human use and as such maintain the majority of campus biodiversity for both fauna and flora. They should be managed in keeping with the composition of Toohey Forest itself with key species including: *Corymbia citriodora* ssp. *variegata*, *Corymbia intermedia*, *Corymbia gummiifera* and *Lophostemon confertus* in larger areas, and *Acacia complanata*, *Xanthorrea johnsonii*, *Melaleuca salicina* and *Lomatia silaifolia* in smaller areas.





## Zone 6 Water bodies

Within the campus, a number of water bodies (mostly ponds of less than 20m<sup>2</sup>) exist. These areas offer unique micro habitats for aquatic species within the main campus area and also provide interest to visitors and opportunities for seating areas. They should be maintained as open spaces, removing too much overhanging vegetation and any weeds. Planting should largely focus on non-invasive, short-medium sized species with a gradient increasing in size away from the water itself. Edges of the pond may utilise sedges and ferns such as *Carex appressa* and *Adiantum hispidulum* providing cover for frogs and other fauna whilst aquatic species should include water-lilies which reduce algal blooms and provide bursts of colour for campus users; especially the endangered *Nymphaea gigantea*. Key oxygenating plants such as *Ceratophyllum demersum* will also help maintain a healthy aquatic ecosystem.



# Strategic approach



1. Client and grounds staff consultation at the outset and throughout to determine practicability of desired projects. The designs should be tested through a continual client-consultant review process
2. Determine which of the 6 planting zones best fits the area to be landscaped, and decide whether it is in a highly visible area or in an area of minimal use.
3. Observe the micro-climate of the area bearing in mind light, soil, exposure, moisture, nutrients and competing species. For example, will the area need pre-clearing of weeds before planting? Is the area considerably exposed to wind damage?
  - What is the distance to the nearest reliable water source for irrigation?
4. Depending on the area's zone use and micro-climate, consult the planting palette for the zone and select species most suitable for the chosen area.
5. Implement the design with approval from clients and ground-staff, as well as choosing a suitable maintenance regime and how it will be achieved.

# Character

## Zone 1 - Social Spaces

Social spaces are characterised by an open plan design to allow for access and ease-of-use by campus students, staff and visitors. Planting in these areas should fulfil both an ornamental and practical perspective, with use of resistant species such as turf grasses for lawns and small specimen trees for interest. Planters may be used to provide splashes of ground-level colour.



## Zone 2 - Pedestrian and vehicular movement areas

Pedestrian and vehicular movement areas are areas that showcase the Griffith corporate colour of red. The zone is split into two sub-zones. The main entry/exit ring-road will use locally and regionally-native species of trees and shrubs that provide good colour and form. The pedestrian pathways however will use smaller plants to fringe path boundaries and guide movement. The use of benches and shade trees is encouraged along pedestrian pathways, as is full lighting requirements.



### Zone 3 - Ornamental Beds

Ornamental beds will showcase species from the local area that provide aesthetic interest. Species chosen will have a diversity of foliage types, forms, colours and uses. These species should be chosen primarily for their appeal to campus users as well as possibly some educational benefits. The use of mulches and strong borders is encouraged to provide a neat presentation.



### Zone 5 - Modified Sclerophyll Remnants

Modified sclerophyll remnants within the main campus area will mirror the character of Toohey Forest itself. These isolated patches of forest should, as much as possible, function as ecosystems and so only a limited amount of alteration should occur. The planting of tree-fall gaps with replacement trees and shrubs is encouraged, and fringe areas could be enhanced through the use of rare local species for teaching purposes and for ex-situ conservation.



### Zone 4 - Building Edge Planting

Building edge planting will essentially function as a fire break but will also provide some visual appeal from windows for people studying and working from within the buildings. The planting is primarily low-growth shrubs and forbs with a variety of colours, fruits and leaf-shapes. Plants should be maintained to suitable dimensions.



### Zone 6 - Water Bodies

Water bodies are scarce in the main campus area with only a few scattered ponds. These ponds should be cleared of weeds, re-sculpted and opened up using planting of select species. Seating around these areas should be encouraged to allow campus users to stay and enjoy. Gravels and pebbles could be added to pond edges to provide extra form.



## Key species to target and remove

Across the campus a number of pest species need to be targeted and removed.

**Palm Grass (*Molinieria capitulata*)** - Grows widely as a planted ornamental on campus especially at the north-western end of The Circuit. This plant is native to the very tropical north of Australia, but does not fit well with the campus character at Nathan.

**Asparagus-fern (*Asparagus aethiopicus*)** - An invasive monocot weed with spiny stems and poisonous berries. It is hard to remove due to its ability to re-sprout from any small section of fibrous root that is left in the ground. May need to be sprayed out.

**Fishbone Fern (*Nephrolepis cordifolia*)** - A rapidly-spreading native fern that has a habit of overtaking in flower beds and also in forest understories especially near disturbed edges.

**Stinking Passionflower (*Passiflora foetida*)** - A non-native weed from South America, this plant should be contained and removed wherever found on site.

**Mickey Mouse Plant (*Ochna serrulata*)** - Another weed, this plant is indigenous to South Africa, and has the ability to spread quickly through bird-mediated seed dispersal. Remove.

**Brazilian Nightshade (*Solanum seaforthianum*)** - A long-lived climbing plant with purple flowers and poisonous berries. Needs cutting and then foliar spray to remove.

**Resurrection Plant (*Bryophyllum pinnatum*)** - An upright fleshy plant with lobed leaves. Leaves and stems reproduce vegetatively and even broken fractions of plant can grow into mature individuals. Needs containment, cutting and removal.

## Planting Palette

The planting palette has been specifically designed against the 6 planting zones. It is believed that it covers most aspects of the campus main area and as such will aid in future plant choice and design. The palette is ordered by zone, with some species being useful for more than one zone. Each plant in the palette also has information on its status as locally or nationally native, its requirements and where it can be sourced (see next section). Plant selection should follow the strategic approach using integration of client and grounds staff expertise throughout, with plans submitted to Griffith University for final approval and consultation. Once permission is granted, planting can commence.

Using this approach, a clear and concise planting vision can be provided for future developments of the main campus area. This will ensure easy maintenance and growth of a visually unique, biologically rich and iconic, memorable campus.

# Nathan Campus Planting Palette

N = native to Nathan Campus  
 R = native to local region (<20km2)  
 C = of conservation significance

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
<b>Zone 1: Social Spaces</b>						
<b>Trees</b>						
Rutaceae	Melicope elleryana	Pink Euodia	NR	A small wet sclerophyll or rainforest tree growing to around 20m maximum. The bark is soft and pale. Leaves are in threes to 13cm long and quite glossy. Flowers are cauliform (grow along branches) and beautiful plush-pink. A tree that attracts butterflies. Requires some watering in dry spells and during establishment. Good specimen tree at lawn edges.	Sun or partial shade with damp to medium-dry soils	1, 5, 7
Rutaceae	Flindersia australis	Crow's Ash	NR	A rather large dry rainforest tree with pale grey bark and dark green foliage. The tree is evergreen and bears small white, perfumed flowers. It requires low maintenance, tolerates a range of soil types and survives drought well. Already used around The Circuit area, but may need to be pruned to maintain height.	Stand-alone in a sunny area	1, 2, 3, 6, 7
Cupressaceae	Callitris rhomboidea	Port Jackson Pine	NR	A small-medium conifer growing to about 12m high with a 4m spread. It has a columnar growth form with numerous olive-green needle-like leaves. It is evergreen and is tolerant of very dry conditions and most soils. A good low-maintenance, but stately option for lawn areas.	Stand-alone in a sunny area	1
Podocarpaceae	Podocarpus elatus	Brown Pine	NR	This tree can grow quite large to 35m. It has broad pine leaves with a rich green colour, lanceolate in shape to 15cm long. 2cm blue seed cones are produced all over the tree giving it an attractive ornamental look. Likes deeper soils, but tolerates thin dry areas too. A good specimen tree.	Stand-alone in a sunny area	1, 3, 5, 6, 7
Sapindaceae	Alectryon tomentosus	Hairy Rambutan	NR	A beautiful dry rainforest tree that does require loamy soils and some watering during dry spells, but is usually rather resistant to drought. The tree grows to 8m high and has a spread of about 5m. Leaves are attractive, bright green with jagged edges. Flowers are pinkish in spikes and fruit is brilliant red and soft protecting a black seed. Great food source for birds.	Edging in shadier spots with damper soils	1, 5
Proteaceae	Xylomelum bentharii	Woody Pear	NRC	A very unusual member of the Proteaceae family, this small tree grows to 10m and has stiff lance-shaped leaves and large woody pear-like fruit. It tolerates sandy soils and dry conditions. A good species to plant in natural bush remnants on campus due to its unusual form and local rarity. Also known as X. salicinum.	Full sun	6
Meliaceae	Melia azedarach	White Cedar 'Dwarf'	NR	A fantastic plant, grows to a maximum of 5m (dwarf variety of a much larger tree) and with a spread of 2-3m. It is a dry rainforest tree that can tolerate full sun, low maintenance and thin soils. Produces beautiful white and pinkish blooms above larger compound leaves. Flowers are fragrant and fruit is a good source of food for animals.	Full sun or shade areas	

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Myrtaceae	Lophostemon confertus	Brush Box	NR	A very useful tree. It has strong disease-resistance, tolerates droughts, wind, pollution and pest attack. The leaves are glossy green and oval-shaped bearing white fringed flowers in summer. It likes sandy-loam soils and once established requires little maintenance except maybe some overhead lopping to keep shape. Good shade tree.	Full sun or partial shade	1, 2, 3, 5, 7
<b>Shrubs</b>						
Asparagaceae	Cordyline rubra	Common Palm Lily	NR	This species of Cordyline has already been extensively used throughout and I suggest it is kept as it does well in sheltered, shady spots and tolerates drought by shutting down growth and 'waiting' for rain. The leaves are broad, bright green and are subtended by bright red 1-2cm berries. However, the cultivar Cordyline fruticosa 'Rubra' should be avoided as it does not fit in with the native planting scheme.	Shady areas, can tolerate dry shade, but needs some protection from wind	1, 6, 7
Myrtaceae	Austromyrtus dulcis	Midgen Berry	NR	A tight-growing ground-cover species with small angular leaves and attractive pinkish new foliage. Flowers are white and rather showy. Shrub grows only to about 50cm in height. The plant likes well-drained soils and high light. Maintenance is low. Good shrub for along walkways and around building edges. Prune to keep in form.	Areas of good light but not direct exposure, possibly around rocks	1, 2, 6, 7
Proteaceae	Banksia spinulosa var. collina	Hairpin Banksia	NR	Medium shrubs that arise from lignotubers. Leaves are very thin and irregularly-toothed. Flowers in tall 45cm inflorescences containing many orange flowers. It is native to local dry sclerophyll and montane heath sites and does well in cultivation here. It does require full sun, well-drained soils and no phosphorous. The cultivar 'Birthday Candles' is good as it is dwarf and keeps a good form without going straggly. Once established can be cut regularly to maintain shape.	Open areas with full sun	1, 2, 5
Proteaceae	Banksia robur	Swamp Banksia		A small, broad-leaved shrub to 2m. Leaves are very big, oval-shaped with beautiful undulating undersides in leathery-brown. Flowers in inflorescences to 30cm tall, yellowish-blue. Very hardy in local area but does need a little more soil moisture than other Banksias.	Tolerates full sun and partial shade	1, 2, 5, 7
Fabaceae	Pultenaea euchila	Orange Pultenaea	NR	A rather ornamental, spreading shrub with orange-yellow sprays of flowers. A nice plant for pots or planters with well-drained medium. The plant thrives in full sun and survives drought.	Full sun	6
Mimosaceae	Acacia fimbriata	Brisbane Wattle 'Dwarf'	NR	This dwarf form of the common Brisbane Wattle is a fantastic screen or hedge plant thanks to its dense foliage. It only grows to around 2m maximum. Flowers are lemon-yellow and scented, good for insects. It can tolerate sclerophyll forest conditions and dry soils. Prune after flowering to maintain bushy form.	Open areas with sun or partial shade	1

N = native to Nathan Campus  
 R = native to local region (<20km2)  
 C = of conservation significance

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
<b>Groundcover</b>						
Dilleniaceae	Hibbertia diffusa	Wedge Guinea Flower	NR	A beautiful prostrate guinea flower creating ground-hugging mats of compact vegetation 1m2. It has disc-shaped bright yellow flowers from spring through summer. Responds well to pruning and thrives in sun with good soil drainage. Also a good container plant possibly for social areas.	In containers around seating areas or in edges of lawns	
Goodeniaceae	Goodenia ovata	Hop Goodenia	NR	A clump-forming goodenia with serrated round leaves that form bright green mats and small lemon-yellow flowers that flower profusely. Good species used in ornamental beds and other spaces on the Gold Coast campus and doing very well in dry, open sites as long as watered sufficiently during establishment. Buy the prostrate form.	Open, dry sites with some water early on	2, 6, 7
Goodeniaceae	Scaevola aemula	Pale Fan Flower	NR	An attractive regional plant with low-growing, mat-forming leaves and short inflorescences of fan-like purple flowers. Recommended as a good species to mix with Chrysocephalum apiculatum groundcover in more ornamental beds. The variety 'Lilac Fanfare' is good.	Full sun	2, 5
Asteraceae	Chrysocephalum apiculatum	Yellow Buttons	NR	Common plant found growing native to the site as a forest understorey species. It has silvery matt-forming foliage and small button-like yellow flowers. It is resistant to low moisture levels, UV-exposure and winds, but does best with some mulching. Good to mix with Scaevola aemula. The variety 'Desert Flame' is persistent.	Full sun	1, 5, 7
Poaceae	Stenotaphrum secundatum	Buffalo Grass 'Sir Walter'	-	Not a native species of grass, but extremely durable, drought-resistant and cheap. Australia's most popular, long-lasting lawn grass. Already in use.	Sun or partial shade on all lawns, not so tolerant of full shade and may go patchy	

## Zones 2a and 2b: Vehicular and pedestrian movement areas

<b>Trees</b>						
Mimosaceae	Acacia maidenii	Maiden's Wattle	NR	A generally longer-lived Acacia than most of the other local natives. This plant grows to around 15m in height and grows rather fast. It can tolerate poor, dry soils and heavy UV exposure. It bears pale yellow flowers in spikes in winter. A nice wattle to use in remnant areas, and possibly along the ring-road of the campus.	Open areas with sun	1, 2, 5, 6, 7
Mimosaceae	Acacia dispartima	Hickory Wattle	NR	"This species of acaica is long-lived, hardy in most dry situations, has attractive bark and foliage and is summer flowering. The plant could be used along bushland edges to give a more colourful edging mixed in with A. maidenii.		
"	Open areas with sun	1, 2, 5, 7				

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Fabaceae	Erythrina numerosa	Pine Mountain Coral Tree	R	A very attractive local tree, and relatively common in western Brisbane area. It is a small tree to 6m with corky, grey bark. Leaves are broad and wedge-shaped; rather unusual. Large orange-red 4cm pea flowers appear from August to September. Long seed pods to 12cm are showy. Needs plenty of sun, likes all soils and is easy to care for. Plants provided by university staff.	Full sun	1, 3
Malvaceae	Brachychiton acerifolius	Illawarra Flame Tree	NR	A native tree found in wetter gully areas and rainforest. The tree can grow rather large to 30m, but often stays smaller in confinement. It is deciduous losing its leaves in the dry season and flowering in profusion during this period. Flowers are small (around 0.5cm) and electric red. Leaves regained during wet period. Tolerates all soils and droughts. Care must be taken not to plant near people's reach due to irritating hairs in seed pods.	Full sun, deep soils so if planted in ring-road islands the soil will need to be excavated first	1, 3, 5, 6, 7
Malvaceae	Brachychiton bidwillii	Dwarf Kurrajong	R	Same family as B. acerifolius but this species is much smaller and can be more easily contained in small ring-road islands. As all bottle-trees this species drought tolerant but will need deep soils and watering for establishment. Has been used in highway medians in Brisbane and does well using specimens grafted onto B. acerifolius root-stock. Make sure to plant away from pedestrian walkways to avoid irritating hairs.	Full sun with deep soils	1, 5, 6
<b>Shrubs</b>						
Sapindaceae	Dodonaea viscosa	Sticky Hop-bush	R	A very hardy shrub with spectacular carmine-coloured seed capsules that adorn the bushes. It has upright growth and a dense form which makes it a good subject for hedging. It can tolerate droughts and frosts and only requires annual pruning to encourage branching. Not grown at Nathan before so advise trial planting.	Open areas with sun or partial shade	1, 5, 6, 7
Mimosaceae	Acacia fimbriata	Brisbane Wattle 'Dwarf'	NR	This dwarf form of the common Brisbane Wattle is a fantastic screen or hedge plant thanks to its dense foliage. It only grows to around 2m maximum. Flowers are lemon-yellow and scented, good for insects. It can tolerate sclerophyll forest conditions and dry soils. Prune after flowering to maintain bushy form.	Open areas with sun or partial shade	1
Mimosaceae	Acacia complanata	Flat-stemmed Wattle	NR	A very attractive local wattle that already grows in remnant bushland areas on the campus. It is a small species to around 3m with attractive flat stems, blade-like leaves and bright yellow globular flower-heads. If this shrub is pruned from a young age it retains a good shape and doesn't become straggly like other wattles tend to do. It is long-lived too and widely recommended by local councils.	Open areas with full sun	1, 3, 5, 6, 7
Proteaceae	Banksia spinulosa var. collina	Hairpin Banksia	NR	Medium shrubs that arise from lignotubers. Leaves are very thin and irregularly-toothed. Flowers in tall 45cm inflorescences containing many orange flowers. It is native to local dry sclerophyll and montane heath sites and does well in cultivation here. It does require full sun, well-drained soils and no phosphorous. The cultivar 'Birthday Candles' is good as it is dwarf and keeps a good form without going straggly. Once established can be cut regularly to maintain shape.	Open areas with full sun	1, 2, 5

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Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Proteaceae	Grevillea banksii	Banks' Grevillea	-	A small spreading shrub to around 3m with pale-dusty dissected foliage and bright red/pink inflorescences of multiple flowers. The shrub comes in a number of hybrids, some of which are a brilliant red colour, for example 'Robyn Gordon'. Likes well-drained soils in full sun, perfect for roads.	Full sun	1, 7
Myrtaceae	Austromyrtus dulcis	Midgen Berry	NR	A tight-growing ground-cover species with small angular leaves and attractive pinkish new foliage. Flowers are white and rather showy. Shrub grows only to about 50cm in height. The plant likes well-drained soils and high light. Maintenance is low. Good shrub for along walkways and around building edges. Prune to keep in form.	Areas of good light but not direct exposure, possibly around rocks	1, 2, 6, 7
Myrtaceae	Backhousia myrtifolia	Grey Myrtle	NR	A shrub with a beautiful glossy image. Flowers are scented. Can be maintained as a bush if leaders are pruned each year. Very easy to maintain, with a constant slightly moist soil and overhead strong sun. Good for edges of paths or buildings.	Full or partial sun with fairly well-maintained moisture, possibly best in areas with deeper soils	1, 6, 7
Myrtaceae	Sannantha virgata	Twiggy Heath Myrtle	NR	Otherwise known as Baeckea virgata, it is a small shrub with rounded form to 1.3m spread and half a meter height. Grows in medium and lightly-drained soils with full sun. Good hedging plant.	Full sun	1
Myrtaceae	Melaleuca viminalis	Bottlebrush 'Little John'	NR	A well-used plant on the Gold Coast campus. The parent species is native, and this variety is a good cultivar due to small, dwarf size which it maintains well. Tolerates all soils, and full sun. It is also drought and frost hardy. Good 'Griffith Red' species especially when planted on mass. Flowers most of the year. Care should be taken to monitor this plant for Myrtle Rust disease.	Full sun	1, 3, 4, 6
Myrtaceae	Leptospermum scoparium	Tea Tree 'Ruby Glow'	-	A spectacular red-flowered tea tree with small, dark glossy foliage. A striking plant for the campus entrances. It flowers most of the year round and has aromatic foliage. Its double flowers are brilliant carmine red. It grows to a maximum of around 2m and can be maintained as a smaller shrub. Likes full sun and well-drained soils, tolerates drought but likes some watering. Pest attacks, general ugliness of the affected plants and lack of persistence may affect these plants in the longer term.	Full sun	1
Fabaceae	Hovea acutifolia	Common Hovea	NR	A medium shrub growing into a rotund bush. The plants themselves are not that long lived (5-7 years) and may need re-planting after some time. However, if planted in succession they provide up to 3 months of winter colour with purple pea-like blooms. Requires well-drained soil, sun or partial shade and tolerates droughts well.	Sun or partial shade with some wind protection	1, 2, 3, 5, 6, 7
Fabaceae	Daviesia ulicifolia	Gorse Bitter Pea	NR	Locally common species. A small shrub to 2m high with numerous small prickly leaves. Shrub develops a shower of orange pea-shaped flowers during winter to summer. It is probably best planted in remnant bush areas but may also make an attractive species for the campus ring-roads.	Sun or areas with partial canopy shading	2

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Fabaceae	Indigofera australis	Native Indigo	NR	A very attractive shrub growing to 2m. Flexible stems tend to weep or arch giving it a wonderful form. The shrub withstands drought quite well, although moisture will help retain foliage better. If pruned rather strictly, it can also adapt to a prostrate growth form. Flowering occurs during late spring with bright pink racemes of pea-like blooms.	Full sun	3, 5, 7
Fabaceae	Jacksonia scoparia	Dogwood	NR	A tall, elegant shrub to 4m with a soft, drooping crown of thin branchlets in grey-green. Flowers in spring with numerous 6mm pea-shaped blooms in a golden-yellow colour. Hardy of drought and wind. Does do best with some watering around flowering season, otherwise is relatively low maintenance.	Full sun	1, 2, 5, 7
Lamiaceae	Westringia eremicola	Slender Westringia	NR	A very nice local shrub that may be used as a loose hedging plant. It tolerates full sun, drought and harsh winds. Grows to 1.5 x 1.5m and has silvery-grey foliage that maintains its colour rather well. Flowers are lobed, white and mauve. Easy to maintain. It also comes in a few more easily-cultivated varieties such as 'Lavender Breeze'.	Full sun	3
Asteraceae	Ozothamnus diosmifolia	Rice Flower	NR	An attractive tall herb with white flowers and thin green leaves. The plants grow to 1-2m high and tolerate sandy, dry conditions with little need for after-planting care. Tends to die off young however (after 2 or 3 years), so may need continual re-planting.	Full sun or partial shade, but needs shade if to maintain pink forms	
<b>Climbers and Scramblers</b>						
Bignoniaceae	Pandorea jasminoides	Bower Vine	NR	A vigorous climbing plant that can also establish as a creeper across flower beds. The vine bears bright green foliage and large tubular pink flowers. It is hardy of drought once established, but may need a reliable water supply during first months of establishment. Good plant for walls and trellis.	Full sun, may need moisture during establishment phase	1, 2, 5, 6
Bignoniaceae	Pandorea pandorana	Wonga Vine	NR	A strong native climber with dissected foliage and bright white, or plush-pink tubular flowers. There are a number of cultivars that are popular garden plants. It is suited to open, sunny situations and flowers profusely. Its evergreen foliage spreads quickly so it is important to prune it. Otherwise, low maintenance.	Full sun	1, 5, 7
Passifloraceae	Passiflora aurantia	Blunt-leaved Passionflower	R	A tendril climber needing support, either buildings, trellis or other plants. Broad, rounded leaves are produced up stems and create nice cover, with salmon-pink turning red flowers that appear throughout winter and spring and sometimes into summer too. Fruits are 5cm rounded berries. It is best grown on moister soils with good drainage in areas with sun or semi-shade.	Full sun or partly shaded areas, probably best with some wind protection	
Fabaceae	Kennedia prostrata	Prostrate Kennedy Pea	-	This mat-forming creeper is a stunning red-flowering plant perfect for creating mass colour along the ring-roads. Sadly it is not locally native to the region, but is native in neighbouring New South Wales. Flowers throughout spring and summer. Requires full sun and well-drained soils, but can also tolerate dry shade. Easy to maintain providing it does not receive frost.	Full sun or dry shade	

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Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
<b>Herbs and Ferns</b>						
Dicksoniaceae	Calochlaena dubia	False Bracken	NR	A good fern for shady areas with fairly decent loam soils. It grows to around 1-1.5m and spreads rather well. The fern is common in the local area in damper habitats and would do well as an ornamental in shady spots.	Shady south-facing corners with accumulations of soil moisture	1
<b>Groundcover</b>						
Goodeniaceae	Scaevola aemula	Pale Fan Flower	R	An attractive regional plant with low-growing, mat-forming leaves and short inflorescences of fan-like purple flowers. Recommended as a good species to mix with Chrysocephalum apiculatum groundcover in more ornamental beds. The variety 'Lilac Fanfare' is good.	Full sun	2, 5
Goodeniaceae	Goodenia ovata	Hop Goodenia	NR	A clump-forming goodenia with serrated round leaves that form bright green mats and small lemon-yellow flowers that flower profusely. Good species used in ornamental beds and other spaces on the Gold Coast campus and doing very well in dry, open sites as long as watered sufficiently during establishment. Buy the prostrate form.	Open, dry sites with some water early on	2, 6, 7
Asteraceae	Chrysocephalum apiculatum	Yellow Buttons	NR	Common plant found growing native to the site as a forest understorey species. It has silvery matt-forming foliage and small button-like yellow flowers. It is resistant to low moisture levels, UV-exposure and winds, but does best with some mulching. Good to mix with Scaevola aemula. The variety 'Desert Flame' is persistent.	Full sun	1, 5, 7
Asparagaceae	Lomandra confertifolia	Cushion Mat-rush 'Little Con'	NR	A slow-growing and less vigorous mat-rush than the more common L. longifolia. This variety is the best suited of all to dry, low maintenance conditions. It has rhizomes that allow it to spread faster, but still may need some care in initial 18 months, e.g. irrigation. After that, it is very drought tolerant. The plant only grows to around 60cm maximum. The foliage is cushion-like and a brilliant shade of green. Good along paths.	Full sun or partial shade	1, 4, 6, 7
Asparagaceae	Lomandra longifolia	Spiny-headed Mat-rush	NR	A very robust species which is extremely hard to remove once in the ground. The strap-like leaves reach 80cm in length and flowers are produced in dense yellow-brown spikes and are rather inconspicuous. The plant should only be used near car-parks and the ring road as an infill species planting at least 1m from the edge of sidewalks or roads to avoid overgrowth. Almost no maintenance needed apart from occasional trimming.	Sun	1, 2, 3, 5, 6, 7
Asparagaceae	Lomandra hystrix	Green Mat-rush	NR	Another robust mat-rush with the same properties as L. longifolia except it may have slightly less drought tolerance. Again, should be used only as infill in places where pollution, road heat and drought mean survival of other plants is poor.	Sun	1, 2, 3, 4, 5, 6, 7

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
<b>Zone 3: Ornamental beds</b>						
<b>Trees</b>						
Anacardiaceae	Rhodospaera rhodantha	Tulip Satinwood	NR	A medium-sized evergreen tree that reaches a maximum height of 15m. Leaves are lobed when young and become ovate as they mature. Attractive 'chains' of red flowers borne on panicles from September to October. Fruit is a small 1cm black berry. A good regenerating tree, is slow-growing (so easily controllable) and widely used in parks. Can tolerate drought, grows wild in dry rainforest areas. Foliage can be very attractive to possums and a leaf-miner grub which can virtually defoliate it however.	Stand-alone with either sun or shade positioning	1, 5, 6, 7
Malvaceae	Brachychiton rupestris	Queensland Bottle Tree	NR	A very charismatic, slow-growing tree with a stout bottle-shaped trunk. It is very slow growing and can tolerate a range of soil types. It's swollen trunk allows it to withstand extensive droughts also. The tree can be transplanted as a mature plant, with some surviving 3 months out of the ground. The flowers are small and cream-salmon in colour followed by brown pods. Pods may need to be removed before dehiscing as they contain hairs that can irritate skin in some people.	Full sun	1, 5
Arecaceae	Chamaeodora sieffrizii	Parlour Palm	-	Not advisable to use this species, not native to Australia. However, it is currently used around Campus Heart and does survive well in drafty, shady, dry places better than most natives.	Shady locations with either damp or dry soils	
Meliaceae	Melia azedarach	White Cedar 'Dwarf'	NR	A fantastic plant, grows to a maximum of 5m (dwarf variety of a much larger tree) and with a spread of 2-3m. It is a dry rainforest tree that can tolerate full sun, low maintenance and thin soils. Produces beautiful white and pinkish blooms above larger compound leaves. Flowers are fragrant and fruit is a good source of food for animals.	Full sun or shade areas	
Pittosporaceae	Hymenosporum flavum	Native Frangipani	NR	An evergreen tree to around 10-20m but can be contained to less. It has dark green, glossy leaves and white-cream flowers that age to dark yellow. Flowers are scented. Branches form in a layered pattern and this tree is a really stunning plant. Likes full sun or dappled shade with free-draining soils (with added lime in acid areas) and protection from winds.	Full sun or semi-shade with wind protection	
Myrtaceae	Syzygium oleosum	Blue Lillipilli	NR	A medium tree to 5-8m with beautiful stamen-dominant flowers in white followed by big pink or blue cherry-like fruits. Leaves are glossy green and have oil glands. Found typical along water-courses or in moister sclerophyll forests so does require moist soils in cultivation. Otherwise it is generally low maintenance and does tolerate some drought. Great species for birds.	Shadier spots with damper soils, possibly good in beds in the shelter of buildings	1, 2, 5, 7
Myrtaceae	Syzygium australe	Creek Satinash	NR	A small tree to 5m high. Glossy green leaves, pink fruit that attracts birds. Requires sun and well-drained loamy soils. The species does need some maintenance in dry spells.	Shady spots with some soil moisture	1, 2, 5

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Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Fabaceae	Erythrina numerosa	Pine Mountain Coral Tree	R	A very attractive local tree, and relatively common in western Brisbane area. It is a small tree to 6m with corky, grey bark. Leaves are broad and wedge-shaped; rather unusual. Large orange-red 4cm pea flowers appear from August to September. Long seed pods to 12cm are showy. Needs plenty of sun, likes all soils and is easy to care for. Plants provided by university staff.	Full sun	1, 3
Fabaceae	Castanospermum australe	Moreton Bay Chestnut	NR	A beautiful glossy-leaved native tree found across Queensland. It requires moister soils with some humus, so best kept to islands with some shelter from full sun and drying out. The tree can reach 20m in height with an 8m spread. From October to November it has large sprays of orange pea-like flowers to 4cm long. Large fruit pods are then produced after this. A good nectar tree for birds and butterflies. It has an extensive root-system and should definitely be planted at least 10m away from buildings or infrastructure.	Semi-shade with moister soils	1, 2, 3, 5, 6
Arecaceae	Livistona australis	Cabbage Tree Palm	NR	This slender palm has a robust crown of broad leaves. It can grow to over 25m in height but can also be contained well in an ornamental setting as is planned for the Gold Coast campus. This palm likes sheltered, more humus soils so good for south-sides of buildings with damper drainage areas.	Semi-shade with moister soils	1
<b>Shrubs</b>						
Asparagaceae	Cordyline rubra	Common Palm Lily	NR	This species of Cordyline has already been extensively used throughout and I suggest it is kept as it does well in sheltered, shady spots and tolerates drought by shutting down growth and 'waiting' for rain. The leaves are broad, bright green and are subtended by bright red 1-2cm berries. However, the cultivar Cordyline fruticosa 'Rubra' should be avoided as it does not fit in with the native planting scheme.	Shady areas, can tolerate dry shade, but needs some protection from wind	1, 6, 7
Asparagaceae	Cordyline petiolaris	Broad-leaved Palm-lily	NR	This Cordyline is similar to C. rubra, it tolerates drought for a while and does well in shade. This species has slightly bigger leaves and red berries.	Shady areas with either dry or damp soils, but needs protection from strong gusts	1, 5, 6, 7
Asparagaceae	Cordyline stricta	Slender Palm-lily	NR	An attractive Cordyline with mauve-flowers and thin strap-like leaves. I recommend this species used in amongst the other two Cordyline species suggested in mixed planting. All three species require similar conditions.	Shady areas with either dry or damp soils, but needs protection from winds	1, 5
Zingiberaceae	Alpinia caerulea	Native Ginger	NR	A stout rainforest species that grows well in cultivation. It has a robust stem to 2m, glossy oval-shaped leaves, white lobed flowers and attractive blue fruit. Its underground rhizomes do allow it to form colonies and store water giving it some resistance to drought.	Semi-shade or shade with moister soils	1, 6, 7
Mimosaceae	Acacia fimbriata	Brisbane Wattle 'Dwarf'	NR	This dwarf form of the common Brisbane Wattle is a fantastic screen or hedge plant thanks to its dense foliage. It only grows to around 2m maximum. Flowers are lemon-yellow and scented, good for insects. It can tolerate sclerophyll forest conditions and dry soils. Prune after flowering to maintain bushy form.	Open areas with sun or partial shade	1

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Proteaceae	Banksia robur	Swamp Banksia	NR	A small, broad-leaved shrub to 2m. Leaves are very big, oval-shaped with beautiful undulating undersides in leathery-brown. Flowers in inflorescences to 30cm tall, yellowish-blue. Very hardy in local area, needing no phosphorous, little water and well-drained soils.	Tolerates full sun and partial shade	1, 2, 5, 7
Xanthorrhoeaceae	Xanthorrhoea johnsonii	Johnson's Grass-tree	NR	A popular ornamental tree that is commonly found in dry sclerophyll forests throughout the region. It survives transplanting well if well watered during establishment and disrupted repeatedly. Flowering spikes are tall to 2.5m and bearing many hundreds of tiny white flowers. Trunk-forming. Tolerates very dry conditions, with well-drained soils.	Full sun	1, 4
Xanthorrhoeaceae	Xanthorrhoea macronema	Bottle-brush Grass-tree	NR	This grass-tree is very similar to the former, except flowers are in cylindrical heads and much larger. This species is tolerant of dry, well-drained conditions, however it is less successful in transplanting and needs extra care to ensure proper establishment in new ground.	Full sun	
Myrsinaceae	Myrsine variabilis	Muttonwood	NR	A stunning little shrub to around 3 x 3m. It has glossy green, small wavy leaves and brilliant blue-purple berries in autumn/winter. Requires little maintenance and watering, but some loam content in soil. Could be used as an ornamental in places. Also known as Rapanea variabilis.	Partial shade with good light	1, 3, 5, 6, 7
Rutaceae	Boronia rosmarinifolia	Forest Boronia	NR	A stunning native shrub with star-shaped pink flowers and small leaves. It does very well in local Toohey Forest. However, like most Boronias, this species is quite hard to grow in cultivation. It should be fairly easy to maintain once established and a real asset to the university, however to ensure it lasts, plant in dappled sunlight and ensure its in a location with good soil drainage. Does not need much watering after establishment.	Dappled light or full sun	
Myrtaceae	Leptospermum polygalifolium	Wild May	NR	A common local shrub with masses of white, scented flowers in spring. Grows to around 3m with brittle woody stems, however the cultivar 'Coastal Carpet' maintains a more tight spread of only 50cm high and 3m wide and has bright pink new leaves. The plant tends to get sooty mould in too shady or damp conditions. It is best to plant it in sun.	Full sun	2, 3, 5, 6, 7
<b>Climbers and Scramblers</b>						
Bignoniaceae	Pandorea jasminoides	Bower Vine	NR	A vigorous climbing plant that can also establish as a creeper across flower beds. The vine bears bright green foliage and large tubular pink flowers. It is hardy of drought once established, but may need a reliable water supply during first months of establishment. Good plant for walls and trellis.	Full sun, may need moisture during establishment phase	1, 2, 5, 6
Bignoniaceae	Pandorea pandorana	Wonga Vine	NR	A strong native climber with dissected foliage and bright white, or plush-pink tubular flowers. There are a number of cultivars that are popular garden plants. It is suited to open, sunny situations and flowers profusely. Its evergreen foliage spreads quickly so it is important to prune it. Otherwise, low maintenance.	Full sun	1, 5, 7

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Asclepiadaceae	Hoya australis	Native Hoya	NR	A very attractive climbing plant commonly referred to as a wax flower due to its thick succulent leaves and waxy flowers. It trails and climbs readily over rocks and walls and does well in shady spots. The flowers are in umbels and are often white or sometime pinkish. Requires little water and good, drained soil. Possibly a good species dry, shady places.	Shady, dry locations	1, 3, 7
<b>Herbs and Ferns</b>						
Iridaceae	Patersonia sericea	Native Iris	NR	A very attractive species that flowers during late winter and spring with bright purple, flag-like blooms to 5cm across. The greyish-green strap-like leaves are also attractive. Flowers sadly don't last long however, but foliage is attractive to make up for lack of blooms during the rest of the year. It requires, sunny, well-drained, sandy-based soils so should do well in most dry, drought-prone areas. It can withstand some frost and wind too. It may need to be put in en masse.	Full sun or dappled sunlight	
Dicksoniaceae	Calochlaena dubia	False Bracken	NR	A good fern for shady areas with fairly decent loam soils. It grows to around 1-1.5m and spreads rather well. The fern is common in the local area in damper habitats and would do well as an ornamental in shady spots.	Shady south-facing corners with accumulations of soil moisture	1
Dennstaedtiaceae	Histiopteris incisa	Bat's-wing Fern	NR	A delicate-looking fern that should be easy to cultivate, although not much in cultivation at the moment. Grows to quite a robust plant, requires little water and maintenance, but some loam in the soil. Likely a good plant for shady, damper spots.	Shady spaces with some soil dampness	
Pteridaceae	Adiantum hispidulum	Rough Maidenhair Fern	NR	A very attractive fern with crimson-tinted new fronds. Requires some watering, and organic matter in soil, but apart from that is relatively low maintenance. A good plant for shady, damper spots amongst tree-ferns perhaps.	Shady spaces with some soil dampness	1
Polypodiaceae	Drynaria rigidula	Basket Fern	NRC	An easy fern to cultivate requiring little water. It would be ideal for semi shade spots that may dry out or be exposed to wind. It grows to 1-2m high and has beautiful bronze lower foliage and bright green fronds. Forms attractive colonise with little maintenance. Tolerates clay, loam and sandy soils.	Some sunlight, or dappled light on slopes or thin soils	
Cyatheaceae	Cyathea cooperi	Coinspot Tree-fern	NR	A commonly-used tree fern in ornamental gardens. This species is native to the region, but prefers to be planted in shady, damper conditions on south-facing sides of buildings for example. The species can tolerate direct sun but requires damp soil. Other than that, it is relatively low maintenance. Good form, very appealing plant for visitors.	Damp, shady spots with good humus	1, 2, 5
Zamiaceae	Macrozamia lucida	Burrawang	NRC	A small stocky cycad with large fronds reaching 90cm in length, smooth and rigid. The plant as a whole can reach 1.5m high with a 2m spread. The central trunk is short. Attractive bright pink and green cones. A species that adapts well in cultivation, may need good watering during establishment but is drought tolerant following this period. It likes rocky or sandy dry soils.	Full or partial sun	

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
<b>Groundcover</b>						
Goodeniaceae	Scaevola aemula	Pale Fan Flower	R	An attractive regional plant with low-growing, mat-forming leaves and short inflorescences of fan-like purple flowers. Recommended as a good species to mix with Chrysocephalum apiculatum groundcover in more ornamental beds. The variety 'Lilac Fanfare' is good.	Full sun	2, 5
Goodeniaceae	Goodenia ovata	Hop Goodenia	NR	A clump-forming goodenia with serrated round leaves that form bright green mats and small lemon-yellow flowers that flower profusely. Good species used in ornamental beds and other spaces on the Gold Coast campus and doing very well in dry, open sites as long as watered sufficiently during establishment. Buy the prostrate form.	Open, dry sites with some water early on	2, 6, 7
Asteraceae	Chrysocephalum apiculatum	Yellow Buttons	NR	Common plant found growing native to the site as a forest understorey species. It has silvery matt-forming foliage and small button-like yellow flowers. It is resistant to low moisture levels, UV-exposure and winds, but does best with some mulching. Good to mix with Scaevola aemula. The variety 'Desert Flame' is persistent.	Full sun	1, 5, 7
Asparagaceae	Lomandra confertifolia	Cushion Mat-rush 'Little Con'	NR	A slow-growing and less vigorous mat-rush than the more common L. longifolia. This variety is the best suited of all to dry, low maintenance conditions. It has rhizomes that allow it to spread faster, but still may need some care in initial 18 months, e.g. irrigation. After that, it is very drought tolerant. The plant only grows to around 60cm maximum. The foliage is cushion-like and a brilliant shade of green. Good along paths.	Full sun or partial shade	1, 4, 6, 7
Asparagaceae	Aspidistra elatior	Haran	-	Good plant in dry, shady spots but not a native. Not recommended to use except in spots which are windy, dry and shady where no natives will persist.	Dry, shady locations	
Cyperaceae	Gahnia clarkei	Tall Saw-sedge		A tall sedge to 1.5m with dark brown-black seeding heads. Withstands drought and most soil types, but does best with some watering, or moister location. Rather architectural and good for specimen planting, but keep away from pedestrian edges due to saw-edge leaf blades.	Damper locations with good light	1, 5
Dilleniaceae	Hibbertia diffusa	Wedge Guinea Flower	NR	A beautiful prostrate guinea flower creating ground-hugging mats of compact vegetation 1m2. It has disc-shaped bright yellow flowers from spring through summer. Responds well to pruning and thrives in sun with good soil drainage. Also a good container plant possibly for social areas.	In containers around seating areas or in edges of lawns	
Lamiaceae	Plectranthus parviflorus	Cockspur Flower	NR	A small clump-forming perennial with soft arrow-head leaves and lavender-coloured flowers throughout the year. Survives well in dry shade so may be good in hard-to-grow places such as at the campus heart.	Dry or slightly damp shade	
Fabaceae	Kennedia prostrata	Prostrate Kennedy Pea	-	This mat-forming creeper is a stunning red-flowering plant perfect for creating mass colour along the ring-roads. Sadly it is not locally native to the region, but is native in neighbouring New South Wales. Flowers throughout spring and summer. Requires full sun and well-drained soils, but can also tolerate dry shade. Easy to maintain providing it does not receive frost.	Full sun or dry shade	

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Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
<b>Zone 4: Building edges</b>						
<b>Shrubs</b>						
Myrtaceae	Austromyrtus dulcis	Midgen Berry	NR	A tight-growing ground-cover species with small angular leaves and attractive pinkish new foliage. Flowers are white and rather showy. Shrub grows only to about 50cm in height. The plant likes well-drained soils and high light. Maintenance is low. Good shrub for along walkways and around building edges. Prune to keep in form.	Areas of good light but not direct exposure, possibly on south-facing sides of buildings	1, 2, 6, 7
Myrtaceae	Backhousia myrtifolia	Grey Myrtle	NR	A shrub with a beautiful glossy image. Flowers are scented. Can be maintained as a bush if leaders are pruned each year. Very easy to maintain, with a constant slightly moist soil and overhead strong sun. Good for edges of paths or buildings.	Full or partial sun with fairly well-maintained moisture, possibly best in areas with deeper soils	1, 6, 7
Asteraceae	Olearia nemstii	Snow Bush	NR	A local native which is now in cultivation. This evergreen shrub grows to around 2m in height and has attractive dark green diamon-shaped leaves. A mass of white daisy-like flowers are produced in winter-spring. Tolerates sun, dry soil and low maintenance. However, it usually only survives for around 2-3 years.	Full sun	
<b>Climbers and Scramblers</b>						
Vitaceae	Cissus antarctica	Kangaroo Vine	NR	A native vine with broad heart-shaped leaves and a vigorous habit. It requires little watering, sun or semi-shade and doesn't mind soil-type. However, it can often be high maintenance in that it needs constant containment and pruning to prevent it over-taking. Needs judicious choice of location if used.	Full sun or partial shade	1, 5
Hemerocallidaceae	Geitonoplesium cymosum	Scrambling Lily	NR	A relatively hardy, robust scrambler with shiny leaves and small star-shaped white flowers. Fruits are eaten by native birds. The plant grows to around 3m high climbing up other shrubs and infrastructure. It requires little care, tolerates drought (although likes some moisture), and likes sun or partial shade.	Full sun or partial shade	1, 2, 3, 5, 7
Fabaceae	Kennedia rubicunda	Red Kennedy Pea	NR	A beautiful scrambling or climbing plant with long tendrils and rough green trifoliate leaves. Flowers are crimson red and produced during summer. The plant can become rather vigorous so is best contained or pruned well. It is however, a perfect plant for a trellis or for use in screening. Tolerant of full sun and all soils. Highly drought tolerant.	Full sun or partial shade	2, 7
<b>Herbs and Ferns</b>						
Hemerocallidaceae	Dianella longifolia	Greater Blueberry Lily	NR	A rather bunchy blueberry lily with more robust growth to 1m, better than the more common Dianella caerulea which tends to get thin and weedy. It is also taller and more elegant. This plant is local, tolerant of dry conditions and tends to do well in thin soils. It can also tolerate frosts. Give well-drained soils.	Full sun or partial shade	1, 2, 7
Blechnaceae	Doodia aspera	Prickly Rasp Fern	NR	A relatively robust fern with very attractive pink-flushed new growth. It makes a good ground-cover plant and does best in shade positions.	Shade positions on south-faces of buildings	1, 2, 5, 6

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Dennstaedtiaceae	Histiopteris incisa	Bat's-wing Fern	NR	A delicate-looking fern that should be easy to cultivate, although not much in cultivation at the moment. Grows to quite a robust plant, requires little water and maintenance, but some loam in the soil. Likely a good plant for shady, damper spots.	Shady spaces with some soil dampness	
Pteridaceae	Adiantum hispidulum	Rough Maidenhair Fern	NR	A very attractive fern with crimson-tinted new fronds. Requires some watering, and organic matter in soil, but apart from that is relatively low maintenance. A good plant for shady, damper spots amongst tree-ferns perhaps.	Shady spaces with some soil dampness	1
Polypodiaceae	Drynaria rigidula	Basket Fern	NR	An easy fern to cultivate requiring little water. It would be ideal for semi shade spots that may dry out or be exposed to wind. It grows to 1-2m high and has beautiful bronze lower foliage and bright green fronds. Forms attractive colonies with little maintenance. Tolerates clay, loam and sandy soils.	Some sunlight, or dappled light on slopes or thin soils	
<b>Groundcover</b>						
Goodeniaceae	Scaevola aemula	Pale Fan Flower	R	An attractive regional plant with low-growing, mat-forming leaves and short inflorescences of fan-like purple flowers. Recommended as a good species to mix with Chrysocephalum apiculatum groundcover in more ornamental beds. The variety 'Lilac Fanfare' is good.	Full sun	2, 5
Asteraceae	Chrysocephalum apiculatum	Yellow Buttons	NR	Common plant found growing native to the site as a forest understorey species. It has silvery matt-forming foliage and small button-like yellow flowers. It is resistant to low moisture levels, UV-exposure and winds, but does best with some mulching. Good to mix with Scaevola aemula. The variety 'Desert Flame' is persistent.	Full sun	1, 5, 7

## Zone 5: Modified sclerophyll remnants

<b>Trees</b>						
Elaeocarpaceae	Elaeocarpus reticulatus	Blueberry Ash	R	A very attractive regional plant with shiny green foliage, that turns crimson with age. Flowers are extremely attractive, bell-shaped and form profusely in summer. Berries are blue. Trunk is smooth to 15m. Important local food source for birds. Does prefer some moisture in soils, but can tolerate high UV-exposure and droughts of some duration.	Tolerates shade and full sun	1, 5
Proteaceae	Grevillea robusta	Southern Silky Oak	NR	A tall, hard-wood tree with dainty grey-green dissected leaves. It can grow rather rapidly to 35m but can be contained at much less. Flowers are bottle-brushes of bright orange and rather large. A good nectar tree.	Sunny position	1, 2, 3, 5, 7

N = native to Nathan Campus  
R = native to local region (<20km2)  
C = of conservation significance

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Mimosaceae	Acacia disarrima	Hickory Wattle	NR	"This species of acaica is long-lived, hardy in most dry situations, has attractive bark and foliage and is summer flowering. The plant could be used along bushland edges to give a more colourful edging mixed in with A. maidenii.		
"	Open areas with sun	1, 2, 5, 7				
Sapindaceae	Dodonaea triquetra	Forest Hop Bush	NR	A common forest species around the Toohey area. It is a sparse shrub with green seeds, leaves between 5-12cm and grows to around 2m in height. Prefers sandy soils with dappled sunlight. Tolerates drought and more severe sun exposure at times.	Slightly shadey	1, 2, 5, 6, 7
Pittosporaceae	Pittosporum revolutum	Brisbane Laurel	NR	A small tree to 5m with dark green, evergreen leaves and orange fruits. Flowers are fragrant and appear in yellow clusters at terminals of branches. Fruits a good for wildlife. Low maintenance.	Dry, open area with sun or partial shade	1, 5, 6
Myrtaceae	Eucalyptus planchoniana	Planchon's Stringybark	NRC	A tree growing to 25m, with stringy, fibrous bark. Adult leaves are grey-green in colour and flowers white-cream, 1cm across. Local to the site, and rather restricted in distribution, so a good species for remnant bushland areas.	Full sun	
Myrtaceae	Eucalyptus baileyana	Black Stringybark	NR	A local species of eucalypt with good growth. However, not advisable near buildings or within main campus areas.	Full sun	
Myrtaceae	Eucalyptus pilularis	Blackbutt	NR	A local species that has been widely harvested for timber. Good species for use in rehab areas.	Full sun	1, 2, 5, 6, 7
Myrtaceae	Eucalyptus psammitica	Bastard White Mahogany	NRC	Interesting eucalypt from local area, good for regen sites and in remnant patches but again not near buildings.	Full sun	
Myrtaceae	Eucalyptus seeana	Narrow-leaved Red Gum	NR	Good species with more robust form. Nice for remnant areas away from buildings.	Full sun	3, 5, 6, 7
Myrtaceae	Eucalyptus tindaliae	Tindale's Stringybark	NR	A very large eucalypt growing to over 30m with white bark and stringy texture. It is probably only of use for regen areas and sites away from buildings due to danger of dropping limbs, and root complications.	Full sun	6
Myrtaceae	Corymbia citriodora variegata	Spotted Gum	NR	One of the dominant gum tree species found in the Toohey Forest area. It grows well and requires little maintenance apart from removal of loose limbs or fallen bark.	Full sun	1, 5, 7

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Myrtaceae	Corymbia tessellaris	Moreton Bay Ash	NR	A rather tall, slender tree to 35m. Bark is dark brown and tessellated into a collar that terminates about 4m up the trunk, the rest of it being white or grey. Flowers are white and leaves lanceolate, grey-green. Tolerant of all local conditions and a good species for ornamental use along ring roads perhaps as done at Logan Campus.	Full sun	2, 5
Myrtaceae	Corymbia gummifera	Red Bloodwood	NR	A large native tree to 30m. Not recommended near buildings, but a good species in areas of remnant vegetation or for use in rehabilitation.	Full sun	1, 7
Myrtaceae	Corymbia henryi	Large-leaved Spotted Gum	NR	Another fast-growing eucalypt to 30m, similarly good for rehab areas but not near buildings due to flaking bark, tendency to drop limbs and root system.	Full sun	5
Myrtaceae	Corymbia intermedia	Pink Bloodwood	NR	Tall slender eucalypt with fibrous dark bark, similar to C. gummifera. Common in the local area and resilient of drought, mild frost and strong winds. Plant away from buildings and pedestrian traffic.	Full sun	1, 2, 5, 6, 7
Myrtaceae	Angophora leiocarpa	Smooth-barked Apple	NR	A very beautiful native eucalypt with pale grey-buff mottle bark and smooth texture. It grows very well in a variety of soils but often does best with a little shelter from extreme winds and frosts. Limbs drop readily so must not be planted near walk ways and buildings.	Full sun	2
Myrtaceae	Syzygium oleosum	Blue Lillipilli	NR	A medium tree to 5-8m with beautiful stamen-dominant flowers in white followed by big pink or blue cherry-like fruits. Leaves are glossy green and have oil glands. Found typical along water-courses or in moister sclerophyll forests so does require moist soils in cultivation. Otherwise it is generally low maintenance and does tolerate some drought. Great species for birds.	Shadier spots with damper soils, possibly good in beds in the shelter of buildings	1, 2, 5, 7
Myrtaceae	Lophostemon confertus	Brush Box	NR	A very useful tree. It has strong disease-resistance, tolerates droughts, wind, pollution and pest attack. The leaves are glossy green and oval-shaped bearing white fringed flowers in summer. It likes sandy-loam soils and once established requires little maintenance except maybe some overhead lopping to keep shape. Good shade tree.	Full sun or partial shade	1, 2, 3, 5, 7
Myrtaceae	Lophostemon suaveolens	Swamp Box	NR	A nice tree for remnant areas growing to small proportions than L. confertus. It grows to around 8m high and prefers slightly damper spots near creeks or semi-shadey areas. Loamy soils are perfect. Once established is easy to maintain.	Partial shade	1, 2, 5, 7
Rhamnaceae	Alphitonia excelsa	Soap Tree	NR	Fairly attractive tree which provides good shade, but can look a bit messy. Small flowers, berries for birds. The tree grows to 5-8m high with a big spread of up to 10m. Evergreen. Needs well-drained soils and some loam content.	Edging in full sun	1, 2, 5, 7
Moraceae	Ficus coronata	Creek Sandpaper Fig	NR	A good food tree for native bird species with small fruits. Leaves are rough, oval-shaped. Can grow into a large tree and has quite a big root spread, so not good for close to buildings. Suggested use in damper remnant sections. Requires loamy soil, a little damp, but is drought-tolerant. Full sun, or partial shade.	Full sun or partial shade, with some water	1, 2, 3, 5, 6, 7

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Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Fabaceae	Erythrina numerosa	Pine Mountain Coral Tree	NR	A very attractive local tree, and relatively common in western Brisbane area. It is a small tree to 6m with corky, grey bark. Leaves are broad and wedge-shaped; rather unusual. Large orange-red 4cm pea flowers appear from August to September. Long seed pods to 12cm are showy. Needs plenty of sun, likes all soils and is easy to care for. Plants provided by university staff.	Full sun	1, 3
Phyllanthaceae	Glochidion ferdinandi	Cheese Tree	NR	A nice native tree to 8m high and 3m across with glossy ovate foliage and small green-turning pink fruits shaped like waxed cheeses. It is evergreen, requiring sun or partial shade and well-drained soils. It tolerates a wide variety of soil types and withstands droughts well.	Partial shade	1, 2, 3, 5, 6, 7
Phyllanthaceae	Glochidion sumatranum	Umbrella Cheese Tree	NR	A small tree to 8m high and 3m across, similar to the common Cheese Tree above, except this species prefers slightly damper, loam soils.	Partial shade with damp soils	1, 5, 6, 7
<b>Shrubs</b>						
Asteraceae	Olearia nernstii	Snow Bush	NR	A local native which is now in cultivation. This evergreen shrub grows to around 2m in height and has attractive dark green diamond-shaped leaves. A mass of white daisy-like flowers are produced in winter-spring. Tolerates sun, dry soil and low maintenance. However, it usually only survives for around 2-3 years.	Full sun	
Mimosaceae	Acacia complanata	Flat-stemmed Wattle	NR	A very attractive local wattle that already grows in remnant bushland areas on the campus. It is a small species to around 3m with attractive flat stems, blade-like leaves and bright yellow globular flower-heads. If this shrub is pruned from a young age it retains a good shape and doesn't become straggly like other wattles tend to do. It is long-lived too and widely recommended by local councils.	Open areas with full sun	1, 3, 5, 6, 7
Malvaceae	Hibiscus splendens	Native Hibiscus	NR	A medium-sized shrub with an open habit, 3-6m high. It produces short-lived large pink flowers over a long time period. It can be pruned to 1/3 each year to maintain a bushy shape. Tolerates a range of soils and climates, but may need watering in dry spells.	Dappled sunlight, good plant for forest floor depressions or edges	1
Melastomataceae	Melastoma affine	Bluetongue	NR	A commonly-used shrub on Griffith University campuses with ribbed ovate leaves and large discoid violet flowers. The shrub reaches about 2m high and flowers in spring through summer. A good food plant for insects. May suffer from prolonged drought and best planted along creek lines or in shady, damper spots. We should only use stock raised from our own existing local forms in Brisbane.	Dappled sunlight but with good soil moisture	5
Myrtaceae	Melaleuca salicina	Willow Bottlebrush	NR	A tall shrub to 4m with narrow grey-green foliage and creamy-coloured bottlebrush flower spikes in spring. A good tree for remnants providing lots of nectar for insects. The tree is easy to grow surviving well in dry, poor soils. May need watering during establishment. Also called M. salignus.	Full sun, good drainage	2, 5, 7

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Myrtaceae	Melaleuca nodosa	Prickly-leaved Tea-tree	NR	A medium shrub to 3m. Flowers are globular in heads of white-cream. Leaves are linear and somewhat spikey. Does well in areas with good drainage and sunlight. Prune after flowering to keep shape, otherwise the plant can become rather straggly and unattractive.	Full sun and good drainage	1, 2, 5, 7
Proteaceae	Hakea plurinervia	Queensland Hakea	NR	A small, open shrub with thick, strongly-veined leaves. Locally native, easy to maintain and grow. Should be used in remnant areas.	Full sun or dappled light, good drainage	1, 5, 6
Proteaceae	Lomatia silaifolia	Crinkle Bush	NR	A small shrub commonly found growing in the local forest. It regenerates well from fire, has tough dissected leaves and very attractive racemes of white flowers. The plant survives drought well and enjoys well-drained soils and needs hardly any maintenance. Grows to around 1m.	Full sun	1
Xanthorrhoeaceae	Xanthorrea johnsonii	Johnson's Grass-tree	NR	A popular ornamental tree that is commonly found in dry sclerophyll forests throughout the region. It survives transplanting well if well watered during establishment and disrupted repeatedly. Flowering spikes are tall to 2.5m and bearing many hundreds of tiny white flowers. Trunk-forming. Tolerates very dry conditions, with well-drained soils.	Full sun	1, 4
Xanthorrhoeaceae	Xanthorrea macronema	Bottle-brush Grass-tree	NR	This grass-tree is very similar to the former, except flowers are in cylindrical heads and much larger. This species is tolerant of dry, well-drained conditions, however it is less successful in transplanting and needs extra care to ensure proper establishment in new ground.	Full sun	
Myrsinaceae	Myrsine variabilis	Muttonwood	NR	A stunning little shrub to around 3 x 3m. It has glossy green, small wavy leaves and brilliant blue-purple berries in autumn/winter. Requires little maintenance and watering, but some loam content in soil. Could be used as an ornamental in places.	Partial shade with good light	1, 3, 5, 6, 7
Rutaceae	Boronia rosmarinifolia	Forest Boronia	NR	A stunning native shrub with star-shaped pink flowers and small leaves. It does very well in local Toohey Forest. However, like most Boronias, this species is quite hard to grow in cultivation. It should be fairly easy to maintain once established and a real asset to the university, however to ensure it lasts, plant in dappled sunlight and ensure its in a location with good soil drainage. Does not need much watering after establishment.	Dappled light or full sun	
Fabaceae	Daviesia ulicifolia	Gorse Bitter Pea	NR	Locally common species. A small shrub to 2m high with numerous small prickly leaves. Shrub develops a shower of orange pea-shaped flowers during winter to summer. It is probably best planted in remnant bush areas but may also make an attractive species for the campus ring-roads.	Sun or areas with partial canopy shading	2
Fabaceae	Daviesia villifera	Bitter Pea	NR	Similar to D. ulicifolia except the growth tends to be much more straggly and can look a little untidy. Best used in remnant bushland areas only.	Full sun	5

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Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Fabaceae	Pultenaea villosa	Hairy Pea Bush	NR	A very attractive native pea which is often a very prolific flowerer. It can grow to around 2m in height and up to 3m across with very graceful growing tips that droop with maturity. Flowering occurs in spring and summer and is normally a large display if plant is grown in well-lit areas. Needs watering only during hard droughts. Also a good hedge plant responding well to light pruning.	Full sun	1, 2, 5, 6
Fabaceae	Hovea acutifolia	Common Hovea	NR	A medium shrub growing into a rotund bush. The plants themselves are not that long lived (5-7 years) and may need re-planting after some time. However, if planted in succession they provide up to 3 months of winter colour with purple pea-like blooms. Requires well-drained soil, sun or partial shade and tolerates droughts well.	Sun or partial shade with some wind protection	1, 2, 3, 5, 6, 7
Fabaceae	Sophora fraseri	Brush Sophora	RC	A threatened shrub listed as 'Vulnerable' under federal law. The plant has declined rapidly due to urbanisation and changing land-use. It could be sourced and re-grown here in open, damper spots along rainforest/sclerophyll ecotones. May be too hard to source, but worth trying for its conservation benefits. Shrub to 1-2m high with yellow flowers.	Sun or partial shade in moister spots of eucalyptus forests merging into damper wet sclerophyll or rainforests	
Oleaceae	Notelaea lloydii	Lloyd's Olive	RC	Another threatened shrub found along the Brisbane river in very isolated pockets of dry sclerophyll forest on hills and dry hummocks. Listed as 'Vulnerable' by federal government. Grows in open vine thicket and sclerophyll forest on well-drained, gravelly soil. Should be easy to maintain and grow here, good reintroduction/conservation initiative. Grows at Gold Coast campus successfully. Reaches 4m with sickle-shaped leaves and black fruit.	Full sun on dry hummocks and hills with good drainage	1
Tiliaceae	Corchorus cunninghamii	Native Jute	RC	One of the key emblem species for plant conservation in the Brisbane area. This species is listed as 'Endangered' by the federal government. It is found on eastern-facing slopes with thin, dry soils and stony substrate with dappled canopy. It grows well at the Brisbane Botanic Gardens and should do okay here. It may have once been native to the local area but has dramatically declined and disappeared. Semi-herbaceous shrub to 1.5m with serrated ovate leaves and attractive yellow flowers.	Full sun on well-drained eastern slopes with stony substrate	1, 5
<b>Climbers and Scramblers</b>						
Fabaceae	Kennedia rubicunda	Red Kennedy Pea	NR	A beautiful scrambling or climbing plant with long tendrils and rough green trifoliate leaves. Flowers are crimson red and produced during summer. The plant can become rather vigorous so is best contained or pruned well. It is however, a perfect plant for a trellis or for use in screening. Tolerant of full sun and all soils. Highly drought tolerant.	Full sun or partial shade	2, 7
Hemerocallidaceae	Geitonoplesium cymosum	Scrambling Lily	NR	A relatively hardy, robust scrambler with shiny leaves and small star-shaped white flowers. Fruits are eaten by native birds. The plant grows to around 3m high climbing up other shrubs and infrastructure. It requires little care, tolerates drought (although likes some moisture), and likes sun or partial shade.	Full sun or partial shade	1, 2, 3, 5, 7

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Asparagaceae	Eustrephus latifolius	Wombat-berry	NR	An evergreen bushy vine with shiny, lanceolate leaves to 10cm long. The plant itself grows as a scrambling species and may be good around boulders. White flowers produced in spring followed by large globular orange berries. Tolerates drought and thin soils well.	Full sun or partial shade	1, 2, 6, 7
<b>Herbs and Ferns</b>						
Orchidaceae	Cymbidium madidum	Northern Cymbidium	NRC	Suggested as the only orchid suitable for this campus. If bought as potted plants, can be transferred to bark and 'wired' onto host trees/logs. One of the easiest orchids to cultivate, and native to Toohey Forest. Doesn't require much maintenance, apart from some watering in dry spells. But may be too much 'fuss'!	Dappled light, needs cork or some form of attachment to stabilise it to host trees	1
Hemerocallidaceae	Dianella longifolia	Greater Blueberry Lily	NR	A rather bunchy blueberry lily with more robust growth to 1m, better than the more common Dianella caerulea which tends to get thin and weedy. It is also taller and more elegant. This plant is local, tolerant of dry conditions and tends to do well in thin soils. It can also tolerate frosts. Give well-drained soils.	Full sun or partial shade	1, 2, 7
Iridaceae	Patersonia sericea	Native Iris	NR	A very attractive species that flowers during late winter and spring with bright purple, flag-like blooms to 5cm across. The greyish-green strap-like leaves are also attractive. Flowers sadly don't last long however, but foliage is attractive to make up for lack of blooms during the rest of the year. It requires, sunny, well-drained, sandy-based soils so should do well in most dry, drought-prone areas. It can withstand some frost and wind too. It may need to be put in en masse.	Full sun or dappled sunlight	
Acanthaceae	Pseuderanthemum variabile	Love Flower	NR	A small perennial herb to 30cm with ovate, rough leaves and small 5-petalled lilac flowers with speckling. An idea ground-cover for remnant areas which will spread well and tolerate thin soils, dappled shade and little water.	Semi-shade	7
Commelinaceae	Murdannia graminea	Slug Herb	NR	Another easily introduced and cultivated species of forest or open woodland herb. This plant is slender with long tapering leaves and panicles of purple lily-like flowers in spring. The plant survives well in drought.	Sun or partial shade	7
Dicksoniaceae	Calochlaena dubia	False Bracken	NR	A good fern for shady areas with fairly decent loam soils. It grows to around 1-1.5m and spreads rather well. The fern is common in the local area in damper habitats and would do well as an ornamental in shady spots.	Shady south-facing corners with accumulations of soil moisture	1
<b>Groundcover</b>						
Cyperaceae	Carex appressa	Tall Sedge	NR	A tall, bushy sedge with a rather beautiful golden appearance. Can grow to 1m tall with dark seeds and saw-toothed leaves. It is perfect for damper spots to give a marshy look or around ponds to give water birds shelter. It should not be planted near walkways due to slightly sharp leaves. Grows well with some moisture.	Wetter spots with good light exposure	1, 2, 3, 5, 6, 7

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 C = of conservation significance

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Cyperaceae	Gahnia clarkei	Tall Saw-sedge	NR	A tall sedge to 1.5m with dark brown-black seeding heads. Withstands drought and most soil types, but does best with some watering, or moister location. Rather architectural and good for specimen planting, but keep away from pedestrian edges due to saw-edge leaf blades.	Damper locations with good light	1, 5
Poaceae	Cymbopogon refractus	Barbed-wire Grass	NR	A widespread local grass of low nutrient soils and drought-prone areas. Survives very well in cultivation and needs no maintenance. Plants live to 25 years. Prefer sunny, stony slope settings but do well so long as soil is free-draining.	Sun on thin soils	1, 2, 5, 6, 7
Poaceae	Themeda triandra	Kangaroo Grass	NR	Another common grass needing little maintenance. Good ground cover for remnant areas.	Sunny spots	1, 2, 7

Family	Scientific Name	English Name	NRC	Description	Micro-climate	Stock
Dennstaedtiaceae	Histiopteris incisa	Bat's-wing Fern	NR	A delicate-looking fern that should be easy to cultivate, although not much in cultivation at the moment. Grows to quite a robust plant, requires little water and maintenance, but some loam in the soil. Likely a good plant for shady, damper spots.	Shady spaces with some soil dampness	
Pteridaceae	Adiantum hispidulum	Rough Maidenhair Fern	NR	A very attractive fern with crimson-tinted new fronds. Requires some watering, and organic matter in soil, but apart from that is relatively low maintenance. A good plant for shady, damper spots amongst tree-ferns perhaps.	Shady spaces with some soil dampness	1
Violaceae	Viola betonicifolia	Arrow-leaved Violet	NR	Does well in wetter locations with loamy-sandy soils. It has a low growing habit, less than 10cm usually in height and small purple flowers. Forms nice carpets of ground-cover and flowers regularly.	Shady or semi-shady places with damp or semi-dry soils	1, 5, 7

Zone 6: Water bodies						
Groundcover						
Cyperaceae	Carex appressa	Tall Sedge	NR	A tall, bushy sedge with a rather beautiful golden appearance. Can grow to 1m tall with dark seeds and saw-toothed leaves. It is perfect for damper spots to give a marshy look or around ponds to give water birds shelter. It should not be planted near walkways due to slightly sharp leaves. Grows well with some moisture.	Wetter spots with good light exposure	1, 2, 3, 5, 6, 7
Cyperaceae	Gahnia clarkei	Tall Saw-sedge	NR	A tall sedge to 1.5m with dark brown-black seeding heads. Withstands drought and most soil types, but does best with some watering, or moister location. Rather architectural and good for specimen planting, but keep away from pedestrian edges due to saw-edge leaf blades.	Damper locations with good light	1, 5
Cyperaceae	Eleocharis dulcis	Chinese Water Chestnut	NR	A leafless rush to 1.5m with edible tubers. A good species for educational purposes, but may need to be controlled or planted in submerged pots in sides of water columns to prevent spread.	Permanent water edges	5
Dicksoniaceae	Calochlaena dubia	False Bracken	NR	A good fern for shady areas with fairly decent loam soils. It grows to around 1-1.5m and spreads rather well. The fern is common in the local area in damper habitats and would do well as an ornamental in shady spots.	Shady south-facing corners with accumulations of soil moisture	1

Climbers and Scramblers						
Aristolochiaceae	Pararistolochia praevanosa	Richmond Birdwing Vine	NRC	A food plant for the endangered Richmond Birdwing Butterfly. Native to the local area and a relatively easy species to source. Grows on moist soils so ideal for near waterbodies and scrambles up local trees and shrubs. May not be widely usable across campus due to dry conditions and limited water, but in places may be a good educational species to use.	Shade or semi-shade	1
Aquatic						
Menyanthaceae	Nymphoides indica	Water Snowflake	NR	A sub-tropical native aquatic plant with large round leaves and white, frilled flowers. It should be planted in the water column at around 40cm deep. Likes full sun, so good for exposed water bodies. Flowers in spring and summer.	Water plant with roots submerged and attached to bottom substrate	
Nymphaeaceae	Nymphaea gigantea	Giant Water-lily	RC	A perennial aquatic growing from tubers. Flowers are large (25cm across) and range from pale to bright blue. The plant also has large rounded leaves to 75cm. Plant in deep water with sufficient mud to allow tubers to embed. Tolerates semi-shade and sun. A declining species in local area, not present in current local list, but probably once existed here and out-competed by invasive water-plants such as N. caerulea and Salvinia molesta.	Water plant needing deep mud	
Ceratophyllaceae	Ceratophyllum demersum	Hornwort	NR	A key oxygenating plant with aquatic filaments that help secure it in the water column. It is useful in maintaining pond health and providing habitat for aquatic invertebrates. Literally the easiest plant to maintain, ever!	Anywhere in water column	

## Practicalities in obtaining and siting plants

Plants should always be sourced as tube-stock where possible to allow proper root establishment of individuals, make purchase costs cheaper and reduce watering and maintenance time. Some ornamentals however will need to be sought as mature plants for immediate impact, e.g. bottle trees, tree-ferns and grass-trees. Siting of large trees (even if planted as young saplings) needs to be very carefully thought about in order to avoid disruption to building foundations, underground infrastructure and avoid health hazards (e.g. falling limbs) to campus users. Furthermore, any plants with possible hazard to visitors such as irritating hairs (e.g. *Brachychiton* species) need to be located appropriately.

Each of the following stockists (1 – 7) is referenced using their corresponding numbers in the planting palette and provide tube stock. However, a few additional stockists are also included for reference. Bear in mind, stocking is listed at the time of publication and may change over time if species become more or less available.

### Possible stockists

1. [www.burringbarrainforestnursery.net](http://www.burringbarrainforestnursery.net) – located on the QLD-NSW border, it supplies a very large range of mainly wet sclerophyll and rainforest species, but also some dry sclerophyll species. They will also do some requests.
2. [www.wallumnurseries.com](http://www.wallumnurseries.com) – located on New Cleveland Road, Gumdale, this nursery has a good selection of tubestock of native shrubs and trees, but no varieties or hybrids.
3. [www.kumbartcho.org.au/stocklist-a.html](http://www.kumbartcho.org.au/stocklist-a.html) – a nursery selling a wide range of native species, but not varieties or hybrids. Located at Bunya Pine Court, Eatons Hill.
4. [www.rosemountnursery.com/page/420259622](http://www.rosemountnursery.com/page/420259622) – source for grass trees, Petrie Creek Road, Rosemount.
5. [www.qld.greeningaustralia.org.au/gaqotsasp/07\\_plant\\_search/species.asp?page=6](http://www.qld.greeningaustralia.org.au/gaqotsasp/07_plant_search/species.asp?page=6) – a Greening Australia Nursery based at 57 Paten Road, The Gap, Brisbane.
6. [www.brushturkey.com.au/wp-content/uploads/2013/05/May-BTE-tubestock-2013.pdf](http://www.brushturkey.com.au/wp-content/uploads/2013/05/May-BTE-tubestock-2013.pdf) – a family-run native nursery in Maleny, on the Sunshine Coast. The nursery does deliver but is about 90km north of Brisbane.
7. [www.bulimbacreek.org.au/#](http://www.bulimbacreek.org.au/#) – a not-for-profit community-based nursery providing some native plants. Located on Bulimba Creek east of Brisbane.

Indigiscapes Nursery, 17 Sunnymede Road, Capalaba QLD 4157 – (07) 3824 8611 – <http://indigiscapes.redland.qld.gov.au/Pages/default.aspx> – Nursery Co-ordinator is Ben Webb who may be able to assist in further species stock.

Nielsen's Native Nursery, 49-51 Beenleigh-Redland Bay Road, Loganholme QLD 4129 – (07) 3806 1414 – <http://www.nielsensnativenursery.com.au/>. May have some stock available in bulk.

For difficult-to-source species, some nurseries can be contacted in advance of an order and will source, propagate and grow up specimens to a suitable size for translocation and planting.



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