

SPECIES SELECTION IN A CHANGING ENVIRONMENT

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Abstract

Municipal arborists are tasked with building resilient and diverse urban forests in complex built environments that present many challenges and affect tree establishment and long-term viability. In this time of climate change and wider environmental responses to the changing conditions, these challenges are becoming increasingly unpredictable. If CO₂ emissions remain on their current high trajectory it will become increasingly difficult to foresee the conditions that suburban trees will face and to manage their responses in environments that already place many of them under significant stress. As temperature and rainfall quantity and intensity change, and pests and diseases vary, some established tree species may not continue to thrive. It is essential that resilient and diverse tree populations are established that are more likely to withstand these unpredictable and potentially extreme changes, to minimize long-term impacts on urban forests. Some species familiar to arborists and urban foresters in the Northern Territory are presented in this paper; these are included as knowledge of their performance in the north suggests they may be or become suitable in the warming conditions in southern Australia. It is anticipated that these species will be further researched by TREENET's network of urban foresters, that established examples might be identified in areas across Australia, and that saplings will be established as trial plantings across diverse environments. If these trees are then recorded in the Urban Tree Trials Database so the data become accessible to all then they may inform more resilient future plantings.

Introduction

Successful tree selection relies on data. Data relevant to urban trees is increasing and there is also considerable knowledge amongst practitioners that isn't widely available and hasn't been published. The increased use of tree inventory systems is improving access to practitioner knowledge, and local governments in particular will play a part in improving urban forestry through sharing this information. TREENET's centralized national database, the Urban Tree Trials Database, is already beginning to share representative data on species growing in diverse Australian urban environments. It is important that urban tree data continues to be collected because trees grown in nurseries and planted in streets amongst built urban infrastructure are subject to different stressors and limitations than those growing under natural conditions or in gardens (Arndt and Livesley et al., 2023).

Knowledge of the performance of established street trees and saplings planted as trials in different locations can be used to predict performance under different climate change scenarios. Climate analogues are useful to help predict conditions in various localities based on projected emissions scenarios when compared with baseline data. As an example, it is predicted that the city of Melbourne under a moderate representative

emissions concentration pathway (RCP) of 4.5 will in 2090 have a similar climate to that at Wagga Wagga currently, and with an RCP of 8.5 its climate will be comparable to current day Dubbo and Parkes. These changes would clearly impact the viability of some tree species that currently thrive in southern Victoria. This highlights the importance of species selection based on the traits and characteristics that will allow successful establishment and long-term viability in the changing climate.

There are many tree species in the Northern Territory that may prove successful in southern localities, based on their inherent traits and adaptation to the northern climatic region. Some examples include:

- *Callitris intratropica* - a highly drought tolerant and storm resistant species
- *Allosyncarpia ternata* - which can withstand drought and flooding and is termite resistant
- *Alstonia actinophylla* – known to be termite, salt, fire, drought and storm resistant
- *Corymbia bella* – tolerates saline and drought conditions and survives fire
- *Syzigium forte* – has good storm resilience and is salt and flood tolerant

Discussion

Ecophysiology is the study of how organisms interact with their environment on a physiological level. The ecophysiology of a plant or tree includes how the effects of environmental conditions such as nutrients, light and water availability influence morphological traits and biochemical processes. It is generally understood that the functional traits of a tree are responses to the convergent evolutionary development of a particular species, growing in a particular environment. Research shows that these traits vary across a spectrum of acquisitive (fast) or conservative (slow) strategies. Oftentimes there is a trade-off between developing a strong trait to withstand environmental stress and developing a strong trait for optimal function (Maracahipes et al., 2018; Lohbeck et al., 2015; Dyderski and Jagodzinski, 2019).

Maracahipes et al. (2018) reported that a tree species growing in a forest environment where there is high competition for light will typically allocate more resources to growing in height and developing a large leaf area with thinner, less resource costly leaves to capitalise on the available light; these are acquisitive traits. Species growing in open, drier, less competitive environments, such as a savannah, might tend to use more conservative strategies such as developing smaller, thicker leaves that are more resource costly to build but can withstand a drier environment with more sunlight.

Some functional traits exhibit plasticity in accordance with environmental conditions, allowing a tree to readily acclimate to changes in environmental conditions. As an example, a temporal trait variation on an individual specimen are shade leaves and sun leaves. Leaves that are in continual direct sunlight tend to be thicker than those growing in shaded conditions. This variability is due to the requirement for protection from sun damage and water loss, as well as providing sufficient mesophyll surfaces for increased

chloroplast density, to carry out photosynthetic reactions and CO₂ assimilation from the available radiation (Terashima, 2001).

With the effects of climate change increasing unpredictable weather patterns and posing unprecedented water and temperature stresses on trees, understanding adaptive traits is becoming increasingly important. This is particularly significant in urban environments where anthropogenic activities generally decrease a trees' useful life expectancy through lowered resource availability and higher levels of stress on tree function (Czaja et al., 2020).

Trees established in urban environments provide many ecosystem services and benefits, both on an ecological and anthropogenic scale. It is well understood that trees in urban environments provide aesthetic appeal, reduce the heat island effect, help regulate groundwater runoff, reduce noise and dust pollution and provide anthropological social and health benefits (Czaja et al., 2020). Trees in urbanised environments face numerous and ongoing stressors that impact their growth and survival. Urban environments are largely altered from a natural setting, with manufactured surrounds such as concrete and buildings, degraded soil quality, altered hydrological patterns and constrained growing environments both above and below ground. As such, understanding how a tree will respond to a particular urban environment is paramount in making appropriate species selections for successful establishment and longevity.

In the changing climate, understanding a tree's traits and characteristics will assist in species selection and success. Successful species establishment and longevity will rely on mechanistic functionality to withstand changes in climatic conditions. Given the rate of climate change, trees planted for future success will likely be adapted to warmer locations, as can be predicted through climate change analogue modelling.

Water deficit

Research has shown that trees tend to exhibit one of three main strategies for dealing with water deficit: drought avoidance, drought resistance, or drought tolerance. Each strategy is strongly linked with particular functional traits to withstand a lack of adequate water (Chaturvedi et al., 2021). Stomatal regulation is important to maintaining plant water potential during hydrologic stress. Isohydric tree species regulate water loss at their stomata to maintain plant water potential and avoid xylem cavitation, which is considered a conservative trait. Conversely, an acquisitive anisohydric strategy is one where a tree allows leaf water potential to decrease, however this strategy poses a higher risk of xylem cavitation (Griffin-Nolan et al., 2023). Interestingly the anisohydric strategy also maintains carbon assimilation which would be considered an acquisitive strategy. Griffin-Nolan et al. (2023) stated that rarely are plant drought strategies characterized simply as either acquisitive or conservative, as these exist on a spectrum involving the complex coordination of multiple physiological responses to dehydration.

Xylem conductivity is critical in maintaining turgor and plant water potential. While larger xylem vessels are more efficient in transpiration (acquisitive trait), they are also more vulnerable to cavitation during hydrological stress. Vulnerability to hydraulic failure is usually quantified as Ψ_{P50} , the water potential at which half of the sapwood conductivity

is lost (Flo et al., 2021). Smaller xylem vessels, such as those found in gymnosperms, are more resistant to embolism but this comes with a trade-off of optimal efficiency (conservative trait). Research suggests that there are other conservative functional and morphological traits associated with tolerance to hydrologic stress that would be beneficial in locations experiencing water deficit, including deciduousness, lower specific leaf area, smaller leaf size and stem water storage capability (Flo et al., 2021; Goldstein et al., 1998).

Dimorphic root systems comprise surface roots that have a subterranean horizontal spread from the trunk and sinker roots that grow to greater depths. Increasing evidence is accumulating that the surface and sinker roots form a dynamic water facilitating system in the soil (Devi et al., 2017). This would be considered an acquisitive characteristic. Research by Burgess et al. (2000) showed a dimorphic root system comprising shallow lateral roots and deeper sinker roots can redistribute water in the direction of difference in soil water potential. This process is termed 'hydraulic lift' or 'inverse hydraulic lift' and is advantageous in accessing heterogeneously available soil water, particularly in shallowly irrigated environments.

Increased photosynthetically active radiation

Poorter (1999) shows that trees adapted to high radiation have morphological adaptations such as thicker leaves with several photosynthetically active parenchyma layers to enhance photosynthetic capacity. Tree species growing under high light conditions generally exhibit a larger biomass, owing to increased photosynthetic rates, as well as greater leaf turnover rates, which are acquisitive traits. Another acquisitive trait is a higher investment in root production to compensate for higher transpiration losses. Givnish (1988) reported that morphological traits associated with high light species tended to be the converse of low light species, including traits such as stomatal density and arrangement and leaf and branching structures (conservative traits).

Increased pest and disease

Climate change can alter pests' and pathogens' host range and as trees become stressed their resilience reduces, so they can become more vulnerable to pest and disease outbreaks. Increased prevalence of pests due to deterioration of natural defence mechanisms, such as balanced and resilient ecosystems, may also increase impacts on tree populations. Maintaining tree health free of stress is imperative to increase resilience and withstand increasingly frequent or severe pest and disease outbreaks.

Northern Australian species with potential for trials in the south

Suggested here are some species from northern Australia that may prove successful in streets in southern locations due to their traits and characteristics. While the author's experience with these in the tropics suggests they may be suitable in southern locations as climates warm, local knowledge is essential to effective urban forestry so small-scale trial plantings in low-risk locations are highly recommended.

Callitris intratropica

The genus *Callitris* is considered one of the most drought tolerant clades worldwide, with very high resistance to xylem embolism (Larter et al., 2017). The species *Callitris intratropica* (Cypress pine) (Figure 1) is known to be generally storm resilient and rich in essential oils containing phytotoxic chemicals, giving it allelopathic qualities and a high resilience to pests and pathogens (Kochti et al., 2024).



Figure 1: *Callitris intratropica*, Stokes Street Park, Parap, NT, 15 July 2025 ©M. Brencher

Allosyncarpia ternata

Allosyncarpia ternata (An-binik) (Figure 2) grows naturally in a wide range of habitats and is known to exhibit diverse water relation adaptations which enable it to thrive in sites as diverse as soils with permanent water availability to dry cliffs and hilltops (Fordyce et al., 1997). This resilience makes the species an ideal choice for trial plantings in many and varied situations.



Figure 2: *Allosyncarpia ternata*, Smith St Mall, Darwin, NT, 7 July 2025 ©M. Brencher

Alstonia actinophylla

Alstonia actinophylla (Northern Milkwood)(Figure 3) is known to tolerate salinity, drought and to recover following fire. The species is also storm resistant and does not appear to be affected significantly by termites. Darwin is home to a highly destructive termite species, *Mastoterme darwiniensis*, which feeds on everything from cellulose to car tyres, yet the author has not noted any termite damage of Northern milkwood anywhere in the Darwin region.



Figure 3: *Alstonia actinophylla*, Anula Greenbelt, NT, 9 September 2024 ©M. Brencher

Corymbia bella

Corymbia bella (Weeping ghost gum) is an attractive, medium-sized gum that is well suited to a wide variety of soils and provides many landscape benefits to urban parkland settings. The species readily tolerates foreshore planting locations that experience regular salt spray. Following scorching of the entire canopy from fire, *C. bella* has a mortality rate of less than 30% and it is considered drought tolerant.



Figure 4: *Corymbia bella*, Jingili Water Gardens, Jingili, NT, 6 September 2024 ©M. Brencher

Syzygium forte

Syzygium forte (White bush apple) (Figure 5) typically develops a well-formed and spreading crown with attractive bark and showy white flowers (Brock, 2022). The species has a wide distribution range and establishes well in a variety of soil types (Brock, 2022; CSIRO, 2020). *S. forte* is also considered salt tolerant (Atlas of Living Australia, 2024) and withstands strong winds (CSIRO, 2020).



Figure 5: *Syzygium forte*, left: Chambers Crs, Malak and right: bark and leaf detail, NT, 7 July 2025 ©M. Brencher

Conclusion

Urban environments are challenging places to establish resilient urban forests, and it is foreseeable that changing climatic conditions will significantly increase these challenges. Tried and trusted tree species that are well adapted to prevailing conditions are likely to become less suited to their current locations as the climate warms and extremes of heat, cold, rain, drought and wind change. Widely planted species may no longer thrive or even survive in areas where they currently flourish. Diversifying tree populations by selecting species known to have inherent characteristics that will tolerate the changing climate is an essential strategy to sustain resilient urban forests into the future.

Species selections for future resilience will involve trialling non-endemic species. Climate change modelling can help predict changes to inform species selections for trials. As with any successful planting, it is important to analyse microclimates as well as the broader climatic conditions, with attention to soil types, weather patterns, hydrology, temperatures and other locally varying characteristics, to gain a better-informed

understanding of the traits needed for long-term tree success. By coupling these considerations with the usual requirements of landscape amenity, human and ecosystem benefits, and other practical and financial matters, it will be possible to not only sustain urban forests but to enhance them and their service to communities. It is clear that our urban environments will look somewhat different to arborists and urban foresters in the long term. It is also clear that arborists and urban foresters will continue to face challenges in their roles well into the future.

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SOUTH EAST QUEENSLAND STREET TREE SPECIES SELECTIONS AND TRIALS

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Abstract

Many species currently growing in tropical and sub-tropical Australia are not widely used by councils but may have potential for broader planting as street and park trees. These may be of interest to local governments in southern areas, where species are being sought to ensure that urban forests remain sustainable and resilient in the changing climate. Growing trees in urban environments presents many challenges, including competing land uses and availability of adequate space, soil quality, stock availability and resident perspectives, which can all impact tree selection, establishment and growth. Selecting species for trial planting means working through these and other challenges, but the potential reward of thriving, resilient urban forests justifies the time and investment needed. This paper introduces some native and exotic species that are known through examples in streets and parks in tropical and sub-tropical Australia; species which have characteristics desired of urban trees but which are rarely seen in city and suburban landscapes. These trees and many others have potential for increased use in tropical and sub-tropical areas and, increasingly, for planting as species trials further south. It is hoped that this paper will encourage broader trial plantings of these species in areas beyond their current distribution, to better inform future urban forest species selections.

Introduction

This paper reports observations regarding tree species selections made over several decades working in urban forestry in South East Queensland (SEQ). It identifies species that have proved successful in streets or parks and others that are not widely used but have potential as street trees in SEQ. Some of these species are represented in TREENET's Urban Tree Trials Database in SEQ and/or other areas. TREENET's database is an ideal central location to record information on these and other species, to help practitioners and home gardeners select appropriate trees for their needs. Data recorded in the Urban Tree Trials Database are available to inform new plantings and further trials in areas where the species are not locally familiar.

Delonix regia (royal poinciana) was widely planted in SEQ during the 1970s and 80s to create significant avenues, but much less so this century. *Araucaria heterophylla* (Norfolk Island pine) was also planted more widely than it appears to be today. Such iconic species falling out of favour raises the question of why planting preferences change over time.

Urbanization changes affect planting sites and species suitability, with smaller allotments and higher housing density affecting planting decisions along with perceptions of climate suitability. Previous presenters at TREENET symposia have explained that some climate

suitability studies, including those based on species natural distributions or botanic gardens' specimens, may not reliably reflect the tolerances of plants produced in nurseries for urban use. It is necessary, therefore, to record data relating to urban specimens growing in streets and parks to reliably determine their suitability for and performance under these conditions.

Species availability is another major factor that affects planting plans and projects, as nursery production and stock turnover times and costs guide propagation decisions. Knowledge of species performance, or more likely the gaps in knowledge, affect project planning decisions. Risk management and perceptions of risk attributed to some species also affect selections. Perceptions of overabundance of species that dominated past plantings may now also affect selection, with concerns relating to 'the 10, 20, 30 rule'.

Other species commonly planted in past times include *Corymbia tessellaris* (Moreton Bay Ash), *Eucalyptus tereticornis* (forest red gum), *Eucalyptus siderophloia* (grey ironbark), *Eucalyptus racemosa* (scribbly gum), *Lophostemon confertus* (brush box), *Melaleuca quinquenervia* (broad leaf paperbark), *Hibiscus tiliaceus* (Cotton Tree), *Ficus macrophylla* (Moreton Bay Fig) and *Ficus obliqua* (Small Leaf Fig). Established avenues can also be seen comprising *Ficus benjamina* (weeping fig), *Spathodea campanulata* (African tulip tree), *Tipuana tipu* (Rosewood), *Schotia brachypetala* (parrot tree), *Bauhinia variegata* (orchid tree), *Syagrus romanzoffiana* (cocos palm), *Callistemon viminalis* (weeping bottlebrush), *Cupaniopsis anacardioides* (tuckeroo), *Melaleuca leucadendra* (weeping paperbark), *Caesalpinia ferrea* (leopardwood) and *Buckinghamia celsissima* (ivory curl). It is important that growth of these species is recorded in SEQ and in other areas, with notes on related issues and requirements, to inform future plantings in the area and in other areas where these species might be planted as the climate changes.

Familiarity with the mature trees from these past plantings has led to changes in species selections over the decades. Some species are still widely planted whereas the use of others appears more restricted, perhaps as a result of lessons learned through their use and familiarity and including understanding of their potential to become weeds. To maintain this knowledge as current, it is essential that small numbers of less-frequently planted species continue to be established and maintained in low-risk situations, so familiarity with their characteristics, performance under local urban conditions, and issues or concerns such as weediness, are not lost.

It might seem counterintuitive to plant potentially problematic species (e.g., weeds or species implicated in conflicts between roots and built assets), but it will be better to obtain and maintain knowledge of species under controlled conditions, e.g., small-scale plantings in well-maintained and low-risk situations, than to see such species selected for broad trials or mainstream planting in the lack of local knowledge. Similarly, planting of species with demonstrated weed potential should be controlled. Species that have become weedy in parts of SEQ include *Corymbia torelliana* (Cadaghi), *Spathodea campanulata* (African Tulip Tree), *Celtis sinensis* (Chinese celtis), *Cinnamomum camphora* (Camphor Laure) and *Syagrus romanzoffiana* (Cocos Palm). Others considered as potential or 'sleeper' weeds include *Fraxinus griffithii* (Evergreen Ash), *Tabebuia chrysotricha* (Golden Trumpet Tree) and *Grevillea baileyana* (White Oak), and others are likely to emerge in the future. Table 1 lists some species currently planted in SEQ and the scale of current plantings.

Table 1. Familiar tree species currently planted in SEQ

Species	Typical usage
<i>Acmena hemilampra</i>	limited use
<i>Agathis robusta</i>	limited use
<i>Banksia integrifolia</i>	limited use
<i>Buckinghamia celsissima</i>	widely planted
<i>Caesalpinia ferrea</i>	widely planted
<i>Callistemon viminalis</i> ‘Dawson River’	typically only replacement trees now planted
<i>Cupaniopsis anacardioides</i>	widely planted
<i>Delonix regia</i>	replacements planted in existing avenues
<i>Flindersia australis</i>	limited use
<i>Grevillea baileyana</i>	limited use
<i>Harpullia pendula</i>	replacement trees planted
<i>Jacaranda mimosifolia</i>	replacements planted in existing avenues
<i>Peltophorum pterocarpum</i>	replacements planted in existing avenues
<i>Syzygium luehmannii</i>	replacement trees planted
<i>Tabebuia palmeri</i>	limited use
<i>Tipuana tipu</i>	replacement trees planted
<i>Tristaniopsis laurina</i>	limited use
<i>Waterhousia floribunda</i>	limited use
<i>Wodeyetia bifurata</i>	to replace cocos palm
<i>Xanthostemon chrysanthus</i>	widely planted

Indigenous species suited to some SEQ sites

There has been interest in planting species indigenous to SEQ in urban streets and parks over several decades. Well-established specimens show some species to be suitable in cultivation as street trees and that they can make valuable contributions in built environments. The following may be suitable for wider cultivation as street trees in some situations in SEQ; some are reasonably well known and others less so. Some are currently being trialled by councils.

Acmena hemilampra (blue satinash), tree to 8 metres tall in cultivation, grown for foliage and creamy flowers with white globular berries, susceptible to sooty mould and scale insects.

Acronychia imperforate (beach acronychia), to about 6 metres in cultivation, hardy, salt tolerant and copes with coastal exposure, suitable for planting under power lines, stock can be difficult to obtain.

Auranticarpa rhombifolium (hollywood), to about 8 metres in cultivation, grown for attractive foliage and ornamental orange fruits, known to suffer from thrips in some areas.

Backhousia citriodora (lemon scented myrtle), tree to 8 metres tall in cultivation, aromatic foliage and creamy white flowers, suitable for planting under power lines, can suffer from moisture stress and drought.

Banksia integrifolia (coast banksia), well known and widely planted tree to 10 - 12 metres tall in cultivation, grown for texture and foliage, tolerates coastal exposure and its flowers are attractive to birds.

Brachychiton bidwillii (rusty kurrajong), small tree growing to about 4 metres in cultivation, grown for its foliage and pinky-red flowers, suitable for growing under power lines.

Diploglottis campbellii (small leaf tamarind), to 6 - 8 metres in cultivation, grown for attractive foliage (similar to *Harpullia pendula*), fruit drop may be a concern at some sites, EPBC Act status: Endangered.

Elaeodendron australe syn ***Cassine australe*** (red olive berry), to 6 metres in cultivation, grown for attractive foliage and bright orange red fruits, not widely cultivated.

Elaeocarpus reticulatus (blueberry ash), bushy tree to about 6 metres in cultivation, grown for attractive foliage and its flowers and blue berries, white and pink flowered forms available. Another species in the genus worthy of consideration is *Elaeocarpus emundi*.

Flindersia australis (crows ash), well known in cultivation to 20 m tall, hardy tree with attractive foliage and mottled bark. Consider also *F. bennettiana*, *F. schottiana* and *F. xanthoxyla*.

Neolitsea dealbata (white bolly gum), to about 6 metres in cultivation, grown for its attractive foliage, fruit attractive to birds, not widely cultivated

Rapanea variabilis (mutton wood), to 6 - 8 metres in cultivation, grown for attractive foliage and small compact form, fruit attractive to fauna, not widely cultivated

Rhodamnia argentea (white myrtle), to 6 - 8 metres in cultivation, uncommon in cultivation, grown for foliage and small white flowers. Similar species worthy of consideration are *R. rubescens* and *R. acuminata*.

Sterculia quadrifida (peanut tree), to about 6 metres in cultivation, hardy, winter-deciduous, has attractive orange fruit.

Toona ciliata syn. ***T. australis*** (red cedar), to 15 - 20 metres in cultivation, deciduous tree with spreading crown, tip borer moth can be a problem on some sites.

Waterhousia floribunda (weeping myrtle), to 12 - 14 metres in cultivation, grown for attractive weeping foliage, used as a substitute for camphor laurel.

Cryptocarya glaucescens (jackwood), to 8 - 10 metres in cultivation, grown for attractive foliage, used as a substitute for camphor laurel.

Species for trials

Trials of the following in appropriate, low-risk sites in SEQ may reveal suitable species for more widespread planting in the changing climate. Some of these species may also prove useful further south as climates warm.

Bolusanthus speciosus (wisteria tree), tree to 8 metres tall in cultivation, hardy, grown for its purple - blue flowers (Figure 1).



Figure 1. *Bolusanthus speciosus*

Brachychiton australis (broad leaved bottle tree), tree to 8 metres tall in cultivation, semi-deciduous with white flowers (Figure 2).



Figure 2. *Brachychiton australis*

Calophyllum inophyllum (beach calophyllum), tree to 12 metres in cultivation, shade tree, tolerates coastal exposure (Figure 3).



Figure 3. *Calophyllum inophyllum*

Coccoloba uvifera (sea grape), to 6 metres in cultivation, tolerates coastal exposure, potential species for under power lines, edible fruit (Figure 4).



Figure 4. *Coccoloba uvifera*

Cordia sebestena (scarlet cordia), to 6 metres tall in cultivation with showy orange flowers (Figure 5).



Figure 5. *Cordia sebestena*

Deplanchea tetraphylla (golden bouquet tree), up to 8 - 10 metres in cultivation, grown for its showy yellow flowers, potentially difficult to source (Figure 6).



Figure 6. *Deplanchea tetraphylla*

Eucalyptus platyphylla (white gum), to 12 metres in cultivation, grown for its attractive white bark, flowers provide nectar and pollen for insects (Figure 7)



Figure 7. *Eucalyptus platyphylla*

Lagerstroemia speciosa (pride of India), tree to 6 - 8 metres tall in cultivation, planted for its vibrant flowers, deciduous (Figure 8).



Figure 8. *Lagerstroemia speciosa*

Mimusops elengi (Bulletwood), to 6 metres in cultivation, tolerates coastal exposure, can be slow growing (Figure 9).



Figure 9. *Mimusops elengi*

Terminalia arenicola (brown damson), to 10 - 12 metres tall in cultivation, planted as a shade tree, food source for black cockatoos (Figure 10).



Figure 10. *Terminalia arenicola*

Conclusion

This paper documents some species known to have grown well in some sites in South East Queensland's streets, parks and gardens since the second half of the 20th century or longer, others that have begun to be planted on a trial basis in recent decades, and others that appear likely to perform well into the future for which trial plantings are desirable. Documenting these species' performance across different sites in the region is essential to enable information to be shared and so inform further plantings into the future, in the region and beyond. Councils are encouraged to include trial plantings in annual greening programs and to record past, present and future species trials in tree inventories for sharing with the public and with research institutions and groups. The TREENET Urban Tree Trials Database can be used to store and access this data.