Brisbane City Council – street tree species trials update

Russell Tomlin – BCC Principal Arborist
History - Oakman Era Street Tree Plantings - 1947 – 1968

Familiar Survivors
- Tristania conferta
- Delonix regia
- Buckinghamia celsissima

Learning lessons
- Brassia actinophylla
- Celtis sinensis
- Agonis flexuosa (climate?)

Oakman era - Revisits
- Cassia brewsteri
- Lysiphyllum hookeri

Variegated Agonis flexuosa, Kings Park WA
2001-2004 Trial

- 22 different species
- Documented on TREENET
- Partnerships - BRAIN (SOWN)
- Diversity in the sub-topics different forest types
- Practical, simple and cost effective
- Planted sites well documented
- Limited time and scientific data

Formal revisit and review 2020

- High attrition rate – reason unknown
2001-4 Trial Top Performers

Dissiliaria baloghioides (Picrodendraceae) 995 kg/m3
planted 2003 Reinhold Cres Chermside
Elaeocarpus obovatus (Elaeocarpaceae) 705kg/m3
planted 2003 Miller St Murarrie
2001-4 Trial Top Performers

Elaeocarpus eumundi (Elaeocarpaceae) 600kg/m³
planted 2003 Sandgate Rd Clayfield
**Notable Mention**

Flindersia collina (Rutaceae) 895 kg/m³ planted 2000? Ison St Morningside

**Initial Disappointment**

- Streblus brunonianus
- Brachychiton - grafted varieties
- Guoia semiglaucua
- Flindersia xanthoxylla
- Myrsine variabilis
Species Selection Process - Updating Our Palette

- After reviewing old trials
- Landscape Precincts
- Some current species removed
- Short listing by panel
- New palette - 64 species in appropriate precincts
Species Selection Process - Updating Our Palette

Criteria and Goals
- Climate Ready Provenance and or physiology
- Tolerances
- Aesthetics
- Power lines
- Diversity
- Growth rate – not always bad

**Cupaniopsis anacardioides - Tuckeroo**

**Family:** Sapindaceae

- Coastal
- Undulating plains
- Higher land
- Arterial road medians and roundabouts

**Form & Flower:**

**Environmental Tolerances:**
- **PH range:** Complete range
- **Water logging:** Moderate
- **Soil compaction:** Good
- **Drought:** Very Good
New Palette – What Now?

Wavell Heights Planting Goals
• Showcase and trial novel species
• Close to older trials
• Efficient to deliver

Contract Grown Trees
• 300 hard to source species
• grown by three nurseries
• Planted 2022-3

Some examples
• Elattostachys xylocarpa
• Cassia Paluma Range
• Lepiderema pulchella

Elattostachys xylocarpha *(Sapindaceae)* 770 kg/m3
Planted 2023 Wavell Heights
Working with Nurseries - Partnerships
Contract Growing – Commercial Partnerships
• Quality Control - root stock, provenance, potting on
• Systems for sourcing seed and propagation
• Seed grown (not cutting), direct seeding

Climate Ready Street Trees
• Nursery Contract
• BCC size – 300mm pot
• Propagation and growth rate challenges

Nursery Strategies
• Cash flow and propagation
More Street Tree Trials

- Toechima tennax
- Barklya syringifolia (under power lines)
- Drypetes deplanchei (under power lines)
Thanks for your time and input!