BLACKWOOD AND OTHER WATTLE STORIES

Robin Cromer

Genus Acacia

The XVII International Botanical

Congress (2005 Vienna) accepted a change in the classification of the Genus. Upheld at the Congress in 2011.

The name *Acacia* is now conserved for 948 Australian species, 7 Pacific Islands, 10 tropical Asia and 1 or 2 in Madagascar (total 966).

Another 400 species are now classified under four new genera.

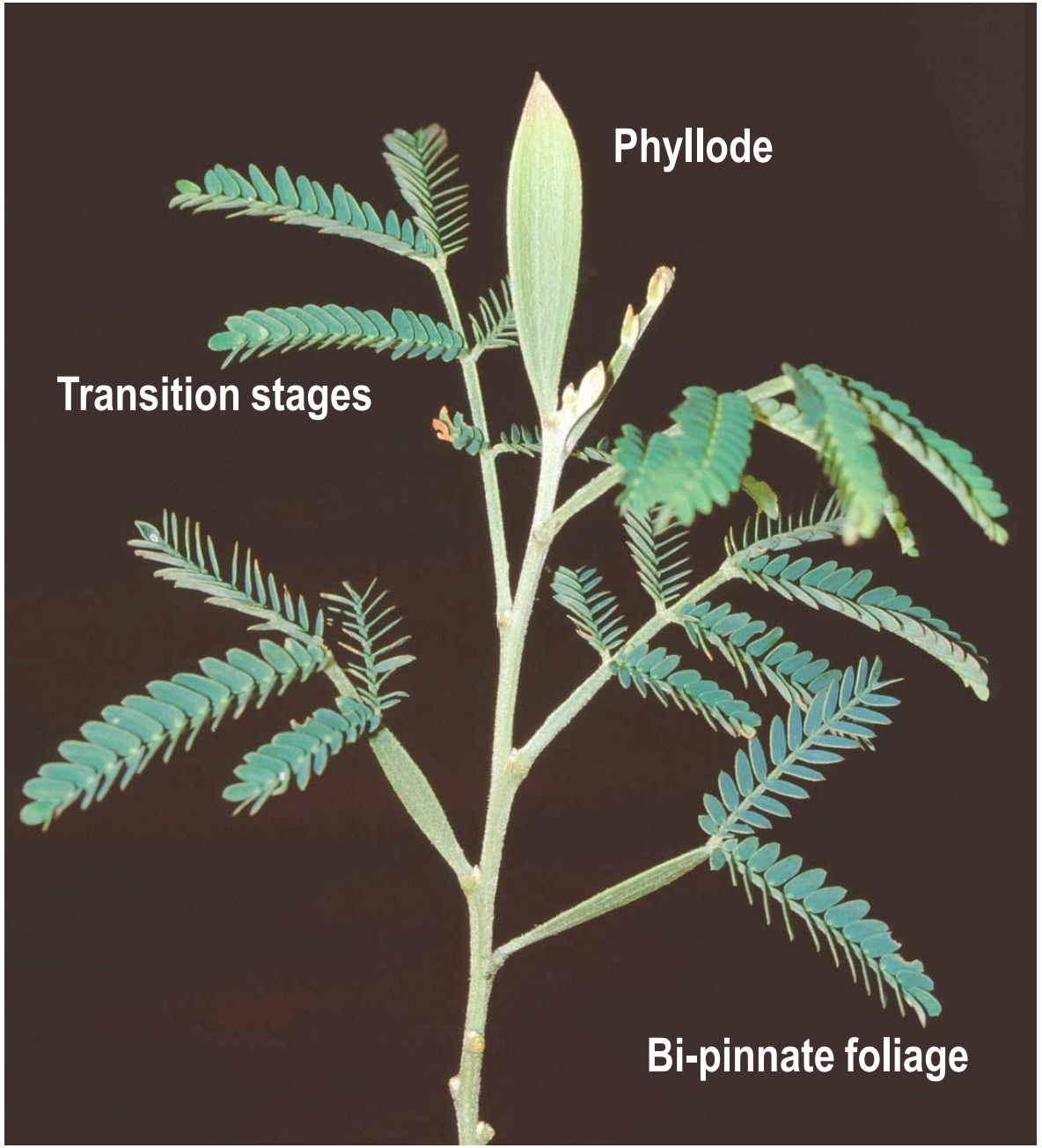
Acacia pennenervis – Hickory wattle

Contrasting Acacia foliage

Bi-pinnate foliage (e.g. Black wattle)

Phyllode (e.g. Blackwood) with longitudinal venation.

Acacias with phyllodes



Germinating seedlings initially have bi-pinnate foliage.

They then undergo a transition with their petioles becoming flatter and broader.

The petiole eventually replaces the bi-pinnate foliage and is called a phyllode.

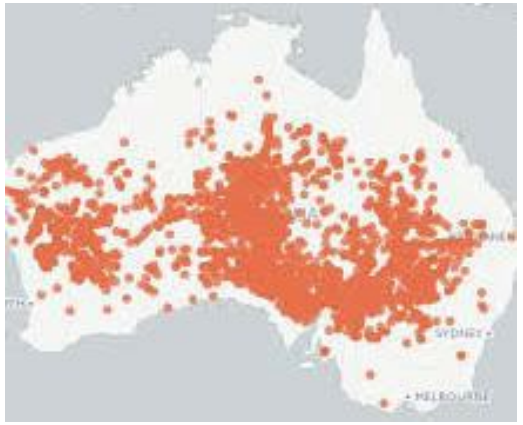
Acacia aneura - Mulga

Very widely distributed in low rainfall zones. Important fodder tree.

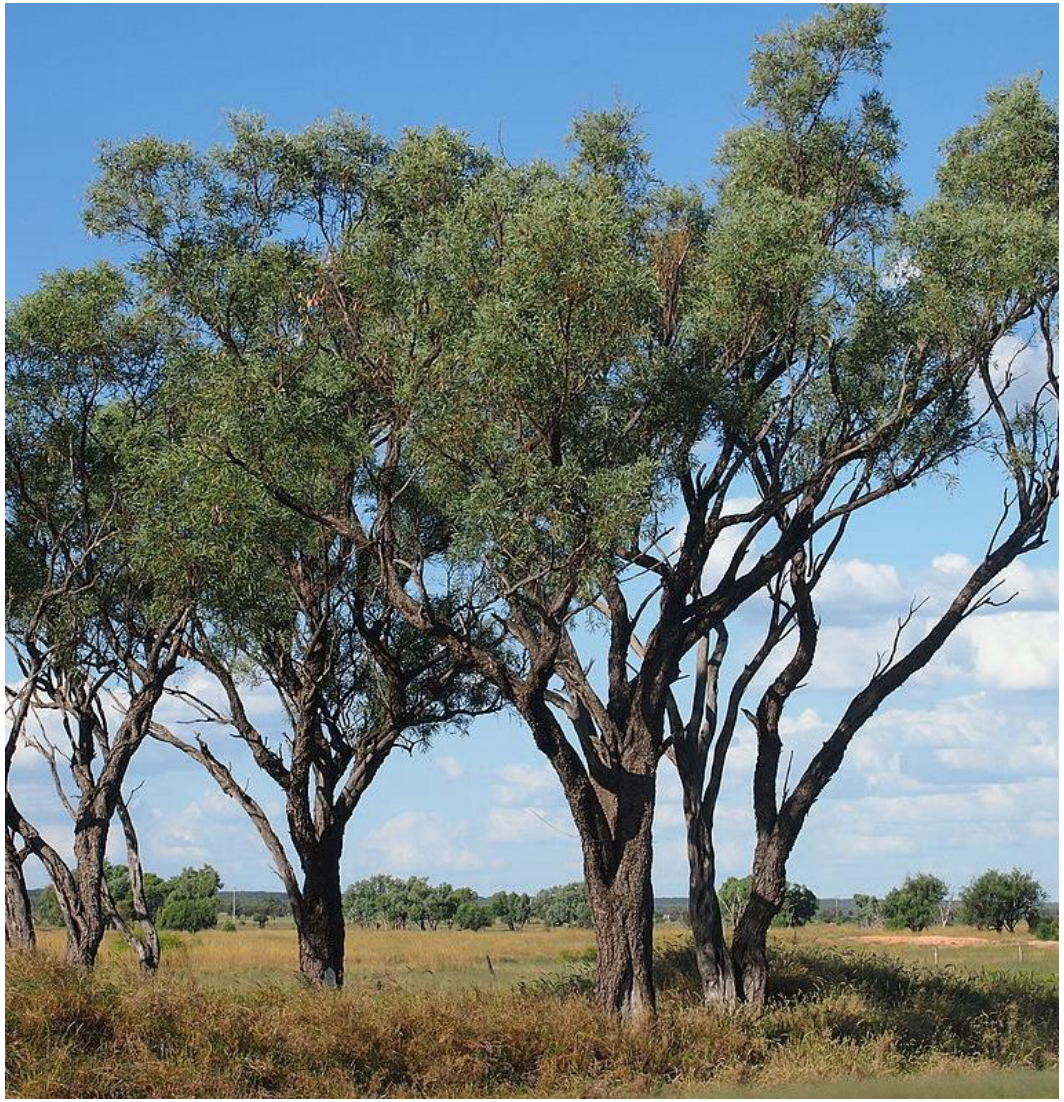
Heartwood dark brown to red-brown, sapwood white.

Very hard, close textured timber. Density 1090 kg m^{-3}. Turns well and takes a high polish. Shrinkage: Radial 2.0%, tangential 2.3%.

Aboriginals used for spears, clubs and boomerangs.



Acacia cambagei - Gidgee



Stinking wattle! Excellent firewood.

Heartwood is dark-brown, almost black. Sapwood pale yellow.

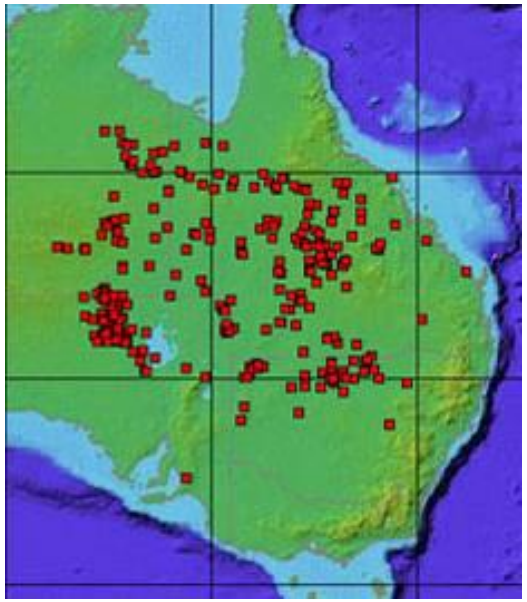
Wood is hard, very heavy, close grained & often interlocked.

Density 1,150 kg m^{-3} , Janka hardness 18,900 N

Shrinkage: Radial 4.0%,

tangential 5.1%

Some stems have curly figuring which is called ‘ringed Gidgee’.



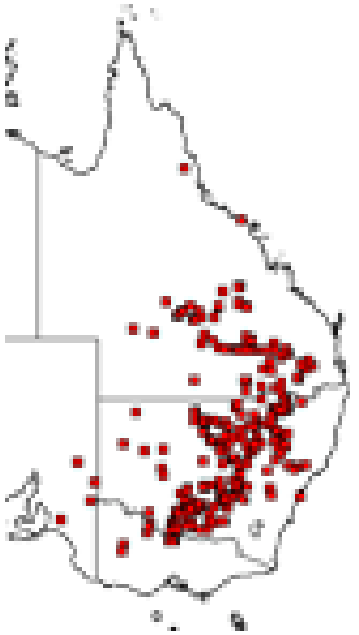
Acacia pendula – Weeping myall

Valuable fodder for sheep & cattle. Useful for windbreaks, shade & shelter. Very attractive weeping habit.

Excellent fuel.

Heartwood dark brown, very heavy, hard & close-grained (1100 kg m^{-3}).

Suitable for turnery.



Acacia mangium – Brown salwood

Fast-growing tropical tree: Extensive plantations in Sabah.

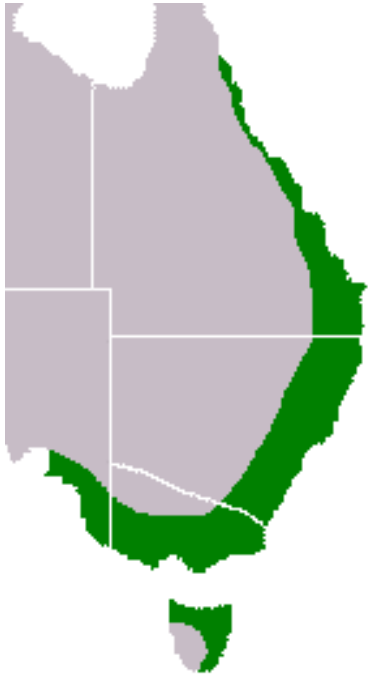
Heartwood is pale yellow-brown with narrow sapwood. Wood is close grained with a density of 515 kg m-3, Janka hardness: 4890 N

Shrinkage: Radial 2.8%, tangential 7.8.

Timber easily sawn, planed, polished & drilled.

Useful for fuelwood , furniture, particle board, pulp & paper. Sliced for veneer.

Acacia melanoxylon - Blackwood



Main distribution: tablelands and coastal escarpments of eastern Australia.

Trees often 10-20 m tall & 0.5 m in diameter.

NW Tasmania & Otways, can be 35 m & 1-1.5 m diam.

Mean annual rainfall 750-1500 mm per year.

Generally an understory tree in wet sclerophyll eucalypt forest.

In suitable areas, excellent for shelter, shade & ornamental planting.

Acacia melanoxylon – Appearance

Sapwood white, +/- 10 cm wide.

Heartwood golden-brown to darker brown, sometimes with reddish tints and streaks.

Grain usually straight but sometimes wavy with ‘fiddleback’ feature.

With a high sheen, blackwood is one of the most decorative Australian timbers.

In Tasmania, blackwood was initially called ‘lightwood’ relative to other species in use (Maiden, Alan Casimir). Another reference in the Great Exhibition (1851 UK), cabinetmaker John Brown indicated ‘lightwood’ was used in Hobart, ‘blackwood’ in Launceston (Rowan Reid, Heartwood).

Gordon J Bradbury – PhD Uni. Tas. (2010)

‘Environmental & genetic variation in blackwood’

- Significant genetic & environmental variation in heartwood colour, between & within seed-lots.

  Good potential to breed for colour.
- Increased growth rate led to increase in % heartwood with little effect on other properties.

  Faster growth good.
- As trees aged ‘lightness’ & ‘yellowness’ decreased and redness increased.

  Older better for colour.