



CHAPTER 12 - SUMMARY

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Eucalypts have been part of the New Zealand forestry scene for over a century, but have only cemented a small niche in the forest industry. It is a challenge to summarise the performances of eucalypts in New Zealand, not only from reporting on the best of the 240 species planted, but also because the eucalypt forestry scene is a dynamic one, caused by new health issues, and/or continuing research on species selection, siting and utilisation. However, one of the most knowledgeable people, the farm forestry eucalypt guru Neil Barr, summarised species experience and performance in New Zealand in his 1996 book.

Barr selected 11 of the best eucalypt species for New Zealand at that time, which he named “The First Eleven”. This selection was, in his

words, because “... someone has to warn intending growers of eucalypts for timber that the good ones have been sorted out. Indeed many of the early species brought across by miners and early Australian migrants have proved to be the best ones for milling”. In the description of species and their timbers he nominated the 11 most proven ones as: *E. botryoides*, *E. saligna*, *E. pilularis*, *E. muelleriana*, *E. globoidea*, *E. obliqua*, *E. fastigata*, *E. regnans*, *E. nitens*, *E. delegatensis*, and *E. fraxinoides*.

Twelve years later would we have the same list? The answer is no, because the regular incursion of Australian insects and some foliar diseases have limited species selection.

Table 28: 2008 comments on Barr’s “First Eleven”

Species	Comment
<i>E. botryooides</i>	No longer recommended because of susceptibility to insect predation.
<i>E. saligna</i>	No longer recommended because of susceptibility to insect predation.
<i>E. pilularis</i>	Has potential but requires sheltered site; susceptible to black butt leaf miner, requires frost-free site.
<i>E. muelleriana</i>	Potential, requires reasonably frost-free site.
<i>E. globoidea</i>	Potential, more site tolerant than similar species.
<i>E. obliqua</i>	Mixed performances, susceptible to kino attack if planted in exposed conditions, preference for lower rainfall areas.
<i>E. fastigata</i>	The best eucalypt for multi purpose planting, has wide site tolerance.
<i>E. regnans</i>	No longer recommended because of history of cell collapse on drying and prone to foliage diseases if poorly sited.
<i>E. nitens</i>	Vigorous growth, recommended only for cold sites, but prone to leaf chewing insects and foliar diseases if poorly sited.
<i>E. delegatensis</i>	No longer recommended because of history of cell collapse on drying and prone to foliage and root diseases if poorly sited.
<i>E. fraxinoides</i>	No longer recommended because of susceptibility to root rot if poorly sited, successful on exposed dry ridges.

To continue the sporting theme, what species would make the 2008 “First Eleven”? Such a list is subjective, and can - and will - be debated and amended over time.



Table 29: Current list of better performing species

Species	Comment
<i>E. fastigata</i>	The best eucalypt for multi-purpose planting, has wide site tolerance, preferring cool rather than very hot or very cold conditions, sapwood susceptible to lyctus borer.
<i>E. youmanii</i>	Relatively unproven, excellent frost resistance but has potential as a durable species on cold sites.
<i>E. pilularis</i>	Potential but requires sheltered and frost-free site, susceptible to black butt leaf miner, excellent timber properties.
<i>E. muelleriana</i>	Potential, requires good frost drainage.
<i>E. globoidea</i>	Potential, more site tolerant than similar species.
<i>E. obliqua</i>	Mixed performances, susceptible to kino attack if planted in exposed conditions, preference for lower rainfall areas.
<i>E. bosistoana</i>	Relatively unproven, but siting versatility and high durability rating offers potential.
<i>E. regnans</i>	No longer recommended because of its propensity to cell collapse on drying and prone to foliage diseases if poorly sited, excellent growth rate if well sited, sapwood resistant to lyctus borer.
<i>E. nitens</i>	Vigorous growth, recommended only for cold sites, but prone to leaf chewing insects and foliar diseases if poorly sited.
<i>E. maidenii</i>	Coppicing and high wood density with some durability, has the ability to tolerate some insect attack and foliar diseases and tolerates comparatively high soil moisture levels.
<i>E. microcorys</i>	Excellent timber properties but requires sheltered frost-free site.

This list is provided as a guide only. Local NZ Farm Forestry Association branches will and should debate what does best on the various sites in the local area, so seek advice from them.

E. fastigata is the current best option for eucalypt plantations on many sites, although it does not have durable timber and there are better options at each end of the climatic scale for very hot or very cold conditions.

A second weakness of this list is the lack of

a red timber. Historically this was met by *E. saligna* and *E. botryoides*, which may warrant continued planting on a small scale or in mixtures with healthier species. There are several species not in the list above which show potential and further research may provide the confidence to plant on a larger scale. These are some of the better performing stringybarks, such as *E. eugenoides*, *E. cameronii*, *E. laevopinea*, *E. calignosa*, *E. macroryncha*, *E. baxteri* and *E. blaxlandii*.



Key Points

- Eucalypt species selection and performance is dynamic and can change over time.
- Broad recommendations on the best performing eucalypt species can be made.
- These are: *E. fastigata*, *E. globoidea*, *E. muelleriana*, *E. obliqua*, *E. youmanii*, *E. pilularis*, *E. bosistoana*, *E. regnans*, *E. nitens*, *E. maidenii* and *E. microcorys*.
- As more information is obtained other species could be added to this list.
- Seek help from local Farm Forestry Association branches.

