

Supplementary Submission No. 59.1



Australian Government

Department of Agriculture, Fisheries and Forestry

Mr David Brunoro
Committee Secretary
Standing Committee on Agriculture,
Resources, Fisheries and Forestry
House of Representatives
PO Box 6021
Parliament House
CANBERRA ACT 2600

Dear Mr Brunoro,

Species Trials for the Committee

At the Department of Agriculture, Fisheries and Forestry's public hearing before the Standing Committee on Agriculture, Resources, Fisheries and Forestry into the Inquiry into the Australian Forestry Industry on 15 June 2011, the Chair requested further information on species trials currently being conducted in Australia.

The department has been in contact with state agencies in Victoria and New South Wales and research institutes (the Cooperative Research Centre for Forestry, CSIRO, Forest and Wood Products Australia and the University of Melbourne) specifically addressing the Committees' request. In recognising that there are many trials occurring throughout Australia, and in consultation with the above agencies, a list of species trials has been developed for your consideration. The department has not visited these sites, as a basis for making these recommendations, rather it has relied on the views expressed from the science and state forestry organisations consulted.

The attached list identifies species trials that are currently occurring that would address the committees' specified interests as we understand them (Attachment A). For each trial site we have identified the locality for the species trial, the species involved and the research that is being undertaken. A contact person associated with each species trial is also identified.

Further, there is a listing of publications on species trials from the Rural Industries Research and Development Corporation (RIRDC) and Forest and Wood Products Australia (FWPA) (Attachment B). Copies of reports are available from these organisations either from their websites or on request.

Yours sincerely

John Talbot
General Manager - Forestry
Climate Change Division

5 July 2011

Attachment A: Species Trial Sites

TASMANIA

- **Creekton, south Geeveston, Tasmania**

CRC for Forestry in partnership with Forestry Tasmania

Eucalyptus nitens is being observed for its growth response to different thinning regimes, including the implication of the thinning regime on the quality (and time taken) to reach the end product. The stand is approximately 20 years old.

VICTORIA

- **Gippsland**

University of Melbourne in partnership with state agencies (DSE, DPI and its predecessors) and industry

There are numerous hardwood timber production species trials currently being conducted in Gippsland in Victoria. In east Gippsland there is a silvicultural trial, established in 1991, examining the impacts of thinning and fertiliser regimes on Eucalyptus globulus, Eucalyptus viminalis and Eucalyptus nitens. In south Gippsland, there is a Eucalyptus nitens silvicultural trial established in 2003, examining the impacts of thinning, pruning, and fertiliser regimes on producing hardwood sawlogs.

- **Hamilton**

DPI, VIC in partnership with Australian Low Rainfall Tree Improvement Group (ALRTIG)

This progeny trial is looking at the performance of Spotted Gum and Sugar Gum in Hamilton, Victoria. The trees grown have over 100 parent trees, and observations are being made about the interaction between genetics and the environment. There is a possibility the site will be a seed orchard in the future.

NEW SOUTH WALES

- **Corowa**

CSIRO

Species at site: Eucalyptus dunnii, Eucalyptus cladocalyx, Spotted gum (Corymbia maculata) and Red iron bark

Corowa has multiple clonal species trials occurring. Eucalyptus dunnii and spotted gum are being grown for seed, both species are not normally grown in Corowa. Eucalyptus cladocalyx and Red iron bark are being assessed for performance in situ (both species are suited to Albury's climate). The environmental effects on growth form are also being

observed. For those clones with favourable form and growth, seed is harvested for use in plantations.

QUEENSLAND

- **Traveston Dam**

CSIRO in partnership with DEEDI

Species at site: *Eucalyptus cloeziana*, *Eucalyptus corymbia*
Traveston Dam is a species 'trial' complex. Both eucalyptus species are 5 years old. Eucalyptus cloeziana is being looked at as a high-value timber species, and Eucalyptus corymbia is being assessed for growth rates, straightness and performance. Both species are being assessed and trialled as replacement species for native species.

SOUTH AUSTRALIA

- **Bordertown and the Avenue Range, Kingston**

CSIRO in partnership with SA Government

Species at site: *Eucalyptus cladocalyx*
These species trials are examining the performance of Eucalyptus cladocalyx in addressing dry-land salinity, whilst providing a timber product. The species trials are environmentally driven, and seek to monitor the performance of Eucalyptus cladocalyx as a species that could perform on marginal land, produce a timber product and sequester carbon.

Attachment B: Species Trial publications

Rural Industries Research and Development Corporation (RIRDC)

Listed below is a collection of publications which are available for download from the Rural Industries Research and Development Corporation (RIRDC) website. An extract of the blurb is also included, to provide further information on what has been examined in each of these trials.

- **Farm Forestry Species Trials in the Northern Territory**
Mike Clark, David Carr, Tim Vercoe and Mat Hardy, 2009, RIRDC Publication No. 09-091
This RIRDC report presents the results of a series of farm forestry species trials established in the Top End of the Northern Territory from 1998 until 2003.
- **Farm Forestry Species Trials – North West Slopes and Plains, Dorrigo Plateau and Northern Tablelands, New South Wales**
David Carr, 2009, RIRDC Publication No. 09-087
This RIRDC report describes and analyses a series of trials established between 1993 and 1999 in the North West Slopes and Plains, Northern Tablelands and Dorrigo Plateau to assist farm foresters select species for commercial plantations on farms.
- **Low to Mid Rainfall Farm Forestry Species Trials**
D Carr, J Robinson, L Williamson, R Downie, T Emmott, A Brown, 2009, RIRDC Publication No. 08-163
Farm forestry in low rainfall areas of Australia can be an important source of supplementary income for land owners. It can also contribute to environmental sustainability and enhance existing agricultural enterprises. Some of the constraints on farm forestry in low rainfall areas are not knowing what species to plant, lack of establishment and management skills, and market access. The research discussed in this report addresses the first of these.
- **Australian Low Rainfall Tree Improvement Group: metadata from measures of hardwood tree improvement in southern Australia**
D Bush, T Jackson, J Driscoll, C Harwood, 2009, RIRDC Publication No. 09-078
This JVAP report contains high level data summaries (metadata) taken from the measurement of 30 tree improvement trials established by partners of the Australian Low Rainfall Tree Improvement Group (ALRTIG). The report focuses on hardwood species that are suited to Australia's low rainfall sheep-wheat belt, an area that is of increasing interest to Australian society for a number of reasons including biodiversity, water security and potential for diversified agriculture including carbon sequestration and bioenergy production.

Forest and Wood Products Australia (FWPA)

FWPA has provided a comprehensive list of species trials, listed below, which they have funded. Some of these reports are available from the FWPA website (www.fwpa.com.au) and a representative from FWPA is sending a CD to DAFF containing all the 'complete' reports, listed below. This CD could then be forwarded on to the Committee, at the Committee's request.

Project No.	Project
<u>PN004.95</u>	Increased and sustainable production of <i>Pinus radiata</i> plantations and its potential impact on groundwater use in the south east of South Australia and Western Victoria
<u>PN01.1804</u>	Production of a Report on Alternative Commercial Uses of Non-Paper Quality Pulp Logs and Woodchips
<u>PN01.1904</u>	Breeding <i>Radiata Pine</i> to Maximise Profits from Solid Wood Products
<u>PN02.1907</u>	Effect of Juvenile Core on Softwood Log Processing
<u>PN03.1316</u>	The Impact of Harvesting Age on Sawing, Drying & Solid Wood Properties of Key Regrowth Eucalypt Species
<u>PN03.3906</u>	Resource Evaluation for Future Profit
<u>PN04.3002</u>	Review Past & Current Research on Using Plantation and Young Regrowth Eucalypts as a Resource for Solid Wood Products
<u>PN04.3007</u>	Determining the economics of processing plantation eucalypts for solid timber products
<u>PN06.3014</u>	Benchmarking the Wood Properties of <i>Radiata Pine</i> Plantations. Stage 1: Tasmania.
<u>PN06.3016</u>	Resource characterisation of slash pine plantation wood quality
<u>PN06.3017</u>	Improving dimensional stability in plantation-grown <i>E. pilularis</i> and <i>E. dunnii</i>
<u>PN07.3019</u>	<i>E. nitens</i> thinning and spacing trials for wood property assessment, harvest and processing trials
<u>PN07.3020</u>	Hoop pine resource evaluation (resource and processing properties of <i>Araucaria cunninghamii</i>)
<u>PN07.3022</u> (4 parts)	Evaluation of wood characteristics of tropical post mid-rotation plantation <i>Eucalyptus cloeziana</i> and <i>E. pellita</i>
<u>PN07.4023</u>	Commercial model to assess pruning and thinning options in eucalypt plantations for appearance grade products
<u>PN97.602</u>	Value-adding silvicultural regimes for high quality timber production from intensively managed hardwood and softwood plantations
<u>PN97.606</u>	Furniture from Young, Plantation-grown Eucalypts
<u>PNC050-0304</u>	Juvenile wood initiative
<u>PNC051-0607</u> (6 parts)	The effect of thinning on wood quality and solid wood product recovery in regrowth forests
<u>PNC057-0809</u>	Managing subtropical pines for improved wood production based on a better understanding of genetics, silviculture, environment and their interactions
<u>PNC059-0809</u>	Western Australian Softwood Resource Evaluation: a survey of key characteristics of the <i>Pinus radiata</i> and <i>Pinus pinaster</i> resources in Western Australia with links to product performance of trees sampled from each resource, as determined by a processing study
<u>PN07.4027</u>	Review of alternative pine species for low rainfall zones of Australia
<u>PNC168-0910</u>	The Forest Productivity Optimisation System - A decision support tool for enhancing the management of planted forests in southern Australia under changing climate
<u>PNC196-1011</u>	Predicting wood quality to improve sawlog value in <i>radiata pine</i>
<u>PNC198-1011</u>	Comparison of graded recovery and value of major sub-tropical exotic pine taxa
<u>PRB145-0809</u> (2 progress reports)	FWPA support for Plantation Hardwood Research project 'High value timber composite panels from hardwood plantation thinnings'
<u>PNB139-0809</u>	The potential to recover higher value veneer products from Fibre Managed Plantation <i>Eucalyptus</i> and broaden product and market opportunities for this resource

