Genetic and environmental controls of traits affecting profitability pulp & solid-wood production from plantation-grown *Eucalyptus nitens*

**Amount:** $30,746 (2015 rate) tax free scholarship with possible 6 month extension plus project operational funds

**Location:** Hobart, Tasmania

**Eligibility:** Domestic and International students with First Class or Second Uppers Honours/Masters or equivalent

**Submission dates for applications are listed on** [http://www.utas.edu.au/arc-forest-value/phd-project-opportunities](http://www.utas.edu.au/arc-forest-value/phd-project-opportunities)

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**About the Centre**

This research project is part of the ARC Centre for Forest Value. The Training Centre will build the capacity to shift the forestry and wood products sector from a traditional, resource driven, low-technology base to a market-driven, precision-manufacturing focused industry that applies modern technologies and business approaches to the value chain from germplasm to commercial buildings, and from production to restoration plantings.

Learn more at [www.utas.edu.au/arc-forest-value](http://www.utas.edu.au/arc-forest-value)

**Project Overview**

Overall, this project aims to enhance plantation productivity and profitability of Australia’s main plantation species by better matching genotypes to environments and silviculture. It will link closely with partner breeding and seed production programs. It aims to determine:

1. Patterns of genotype-by-environment interactions to better define germplasm deployment zones;
2. The sustainability of genotype performance under multi-rotation coppice regimes; and
3. The genetic opportunities and trade-offs amongst traits affecting industrial objectives (e.g. for chip, pulp, timber, engineered wood products and energy production) and risk traits (drought/pest/disease risk)

**Specific Project**

*Eucalyptus nitens* is widely planted in temperate regions of the southern hemisphere and is the main eucalypt species grown in Tasmania. It is principally grown for pulpwood but there is increasing interest in the use of plantation-grown *E. nitens* for other products, particularly veneer and timber.
Wood properties are key determinants of the economics of producing pulp and solid-wood products. This project will exploit historic data sets and field trials established across the *E. nitens* plantation estate in Tasmania to study the influence of genetics and environment on wood properties, as well as the quantity and quality of product recovered from harvested trees.

The ARC Industrial Transformation Training Centre for Forest Value is supported from the Australian Research Council’s Industrial Transformation Training Centres scheme (project number IC150100004).

To submit an expression of interest or for general information, please contact the Centre for Forest Value at forest.value@utas.edu.au

For information related to this project please contact Professor Brad Potts Brad.Potts@utas.edu.au or Professor Mark Hunt Mark.Hunt@utas.edu.au for more information.