

PRESS RELEASE

Subject: Economic and genetic gain continue to improve over time for *E. globulus*

Date: 5 November 2014

The Southern Tree Breeding Association Inc. (STBA) has recently completed a new genetic analysis (run) for the national *Eucalyptus globulus* tree improvement program using TREEPLAN. Each run builds on previous analyses by including recently acquired performance data gathered from genetic trials across Australia. This improves our knowledge of the genetic potential of all trees for use in breeding and deployment.

STBA provides genetic values for each tree on clearfall characteristics such as growth (harvest volume) and wood properties (density and kraft pulp yield). Economic indices (based on various production environments, processing systems and end uses) are calculated to quantify the net present value of each tree against other trees. Growers can then compare the genetic and economic worth of seedlots and trees depending upon their production and processing objective.

For example:

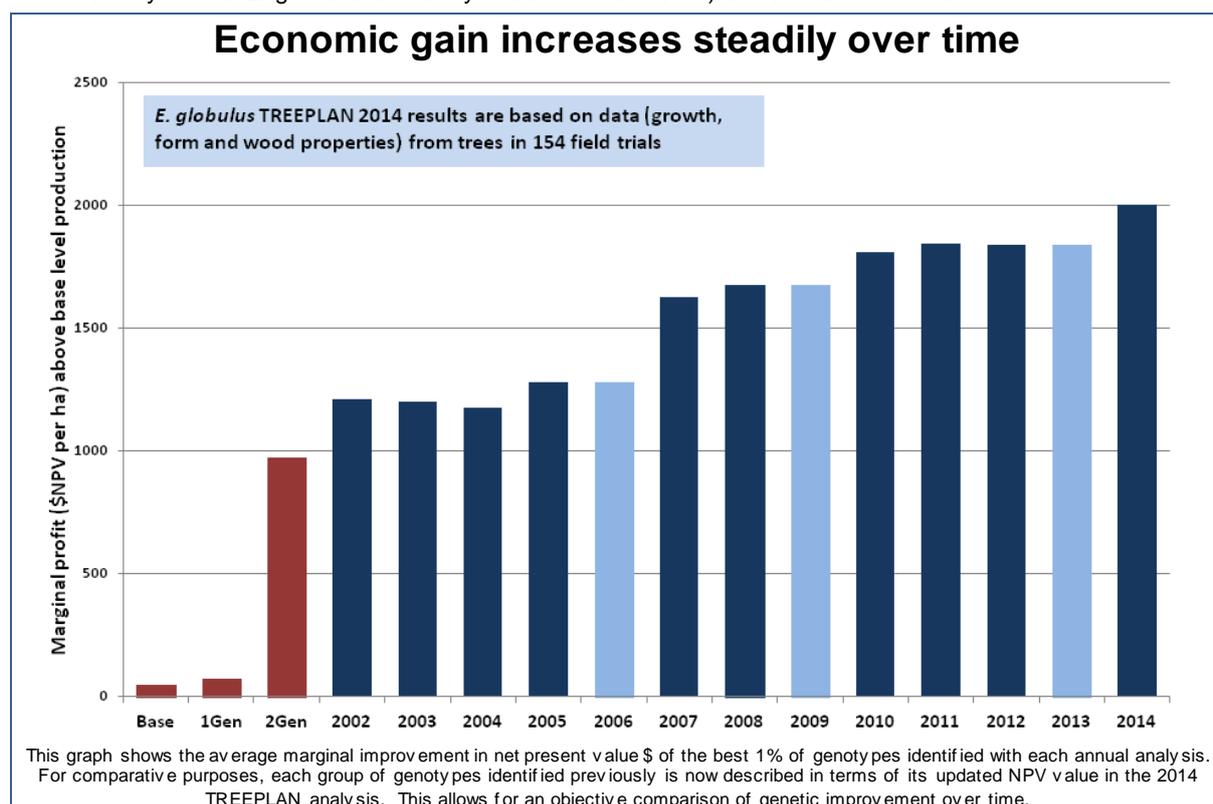
The value of gain in: **Volume** (m³/ha) plus **Density** (kg/m³) plus **Kraft Pulp Yield** (%) equals **\$NPV** marginal gain in net present value by using seed from this tree relative to base line material

The integrated approach provides efficiencies as the national databases allow TREEPLAN to use all historical and new information in a single industrywide multivariate genetic analysis. Growers can compare genetic potential on an “apples vs apples” basis to optimise selection of material for plantation establishment.

TREEPLAN statistics for this run	Trials	Trees	Measured Traits
Total number included:	154	287,557	17
Number of objective traits: 3 (volume growth on a regional basis, density and kraft pulp yield)			
	Trials	Trees	Measurements
Size of <i>E. globulus</i> database:	185	461,603	6.9 million
Total DATAPLAN database size	2040	4 million genotypes	91 million

The Southern Tree Breeding Association (established in 1983) is the national body which manages the Australian tree improvement programs for Blue gum (*E. globulus*) and Radiata pine (*P. radiata*). STBA is a not for profit cooperative and its members collectively contribute resources to maximise the genetic quality and value of the plantation resource.

TREEPLAN software has been jointly developed for use in the forest industry by STBA, AGBU (a joint institute of the University of New England and Industry and Investment NSW) and PlantPlan Genetics.



For more information see the STBA web site (www.stba.com.au) or contact the General Manager, Dr Tony McRae (tmcrae@stba.com.au) or Business Manager, Peter Cunningham (pcunningham@stba.com.au).