



R&D WORKS – SEPTEMBER 2013

Welcome to the September edition of the FWPA R&D newsletter.

This month our stories feature the rise of taller mass timber buildings, research into the causes and extent of second rotation productivity in plantation blue gum; a new fertiliser trial in Tasmania with cost savings and environmental benefits; and a high efficiency development and logistics programme designed to maximise residual biomass supply.

I hope you enjoy reading about these interesting research projects.

Ric Sinclair
Managing Director, FWPA

MAIN NEWS



FWPA R&DWorks webinars 2013: bringing our research to you

FWPA are now running an ongoing fortnightly series of webinars highlighting the beneficial outcomes of research projects for those in the wood and timber industry – Wednesday's Webinars.

(more)

FOREST GROWING



Reducing second rotation decline in plantation blue gums

Second rotation blue gum plantations in south western Australia are showing productivity decline as compared with their first rotation. Using existing experimental data and productivity records from industry, a CSIRO research team has quantified the extent of second rotation productivity decline and examined the primary causes.

(more)



Fertiliser trials show forestry benefits

An improved fertiliser product being trialled by Forestry Tasmania in its plantations is showing promising results in terms of tree growth and health, as well as cost savings and environmental benefits.

(more)



New technique for measuring tree growth cuts down on research time

Tree growth is measured to understand tree health, fluxes in carbon sequestration, and other forest ecosystem functions. Scientists have developed a new, resourceful way to take repeated tree growth measurements safely and accurately.

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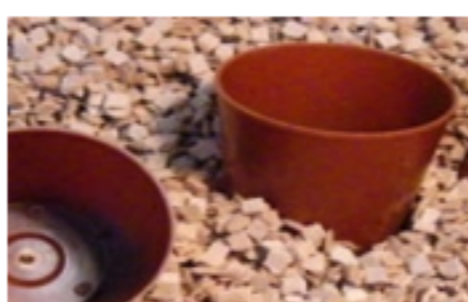


Some trees use less water amid rising carbon dioxide

The fate of the world's forests on a warming planet has long been one of the great unanswered questions about climate change. Now, new research is complicating the picture further, suggesting that big shifts are already under way in how forests work.

(more)

NEW PRODUCT INNOVATIONS



Scion's wood fibre technology branches into North American markets

Crown Research Institute Scion and global wood processing giant Sonae Industria Group have signed an agreement that extends Sonae Industria's exclusive "Woodforce" licence to commercialise a revolutionary wood fibre technology for polymer reinforcement to North America.

(more)



Zeiform: The eco-friendly building material of the future?

Australian company Zeo has developed and patented a glue-free process that creates a strong, versatile new building material out of just cellulose and water. The resulting hardwood-like material known as Zeoform can then be sprayed, molded or shaped into a range of products.

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TIMBER CONSTRUCTION AND DESIGN



Much taller timber buildings on the horizon

Architectural practice Skidmore, Owings & Merrill (SOM) is pushing the boundaries of timber buildings with a study entitled the Timber Tower Research Project. This describes a study that has developed a structural system for a 42-storey prototype building using mass timber.

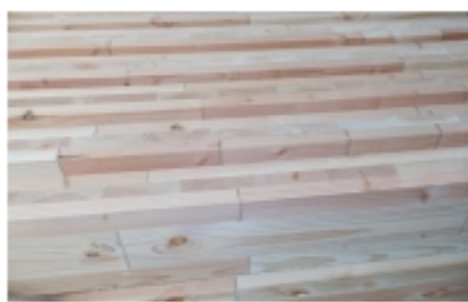
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Carbon-neutral Woodcube apartment block made almost entirely from wood

The use of wood as a building material for larger structures is gaining steam throughout the construction industry. In honour of this year's IBA Hamburg architecture festival, German architectural firm Architekturgentur has created Woodcube: a 5-storey carbon-neutral apartment block constructed almost entirely from wood.

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Report: CLT manufacturing potential in New Zealand

Grow Rotorua commissioned two studies into the potential use of cross laminated timber (CLT) in New Zealand. These combined reports provide an indicative framework that can be used by interested parties to estimate market fit and market size for other engineered wood technologies targeting principally the non-residential building sector

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WOOD HARVESTING, TRANSPORT AND LOGISTICS



Innovative technology and logistics for forest residual biomass supply

INFRES has released new studies on forest biomass markets in Europe and on innovations in biomass recovery. The programme aims at high efficiency and precise deliveries of woody feedstock to heat, power and biorefining industries, development of machines for processing of energy biomass, transportation solutions and ICT systems to manage the entire supply chain.

(more)

WOOD PROCESSING AND MANUFACTURING



New method for identifying annual ring centres in wood blocks

A Japanese inventor has developed a new method for identifying annual ring centres in wood blocks. Noriyuki Hiraoka from Meiman Machinery Works has been awarded the patent and claims the system used in rotary veneer peeling solves strength issues relating to manufacture of laminated wood products.

(more)



Research suggests wet wood dust is as explosive as dry

The smallest-sized wet wood dust is just as explosive as dry wood dust according to a report prepared by FPInnovations for the sawmill sector.

(more)

OTHER INFORMATION



You can count on ERIC in a crisis

When a natural disasters like the recent Tasmanian bushfires strikes, people in particular locations need help quickly. ERIC is a new web-based tool bringing together information from a range of federal and state government agencies into one easy-to-use interface

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