

CocoVeneer products



Characteristics of coconut veneer and veneer products.



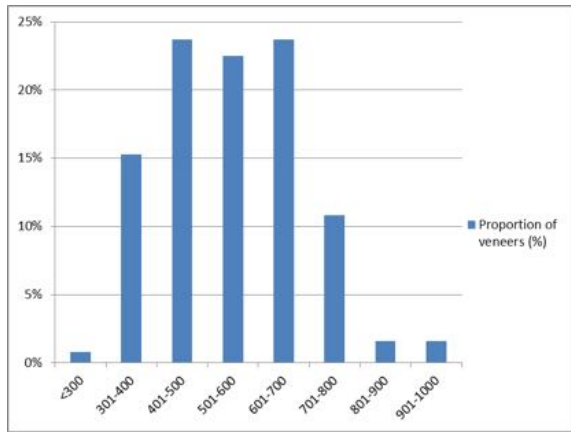
Thanks to Rob McGavin and the QDAF team for veneer, product assembly and testing results.

Content

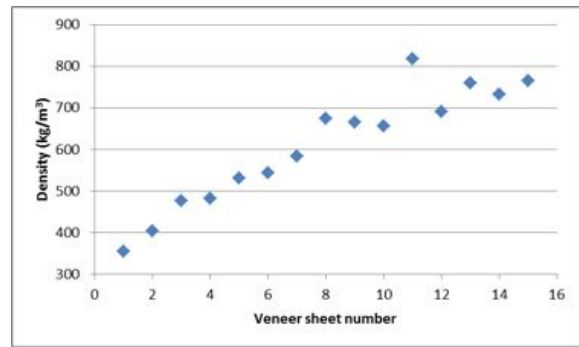


- Material characteristics of coconut veneer.
 - Density and strength
- Product assembly: architectural and structural.
- Potential market advantages and constraints.

Veneer characteristics: density

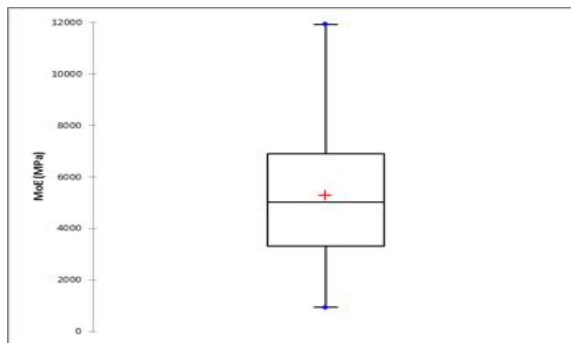


Distribution of veneer air-dry density



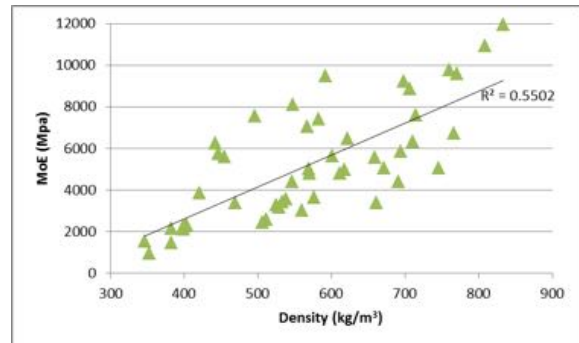
Example of density radial variation from the centre to the outside of a coconut log

Veneer characteristics: stiffness



Veneer MOE

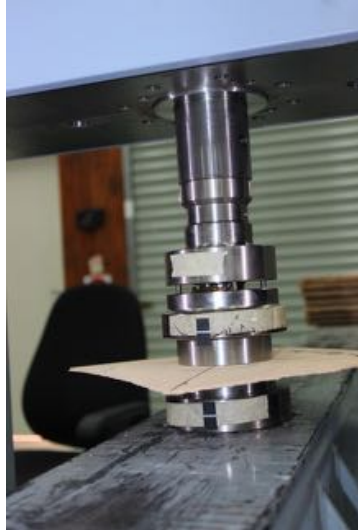
Average MOE is relatively low compared to most commercial wood species.



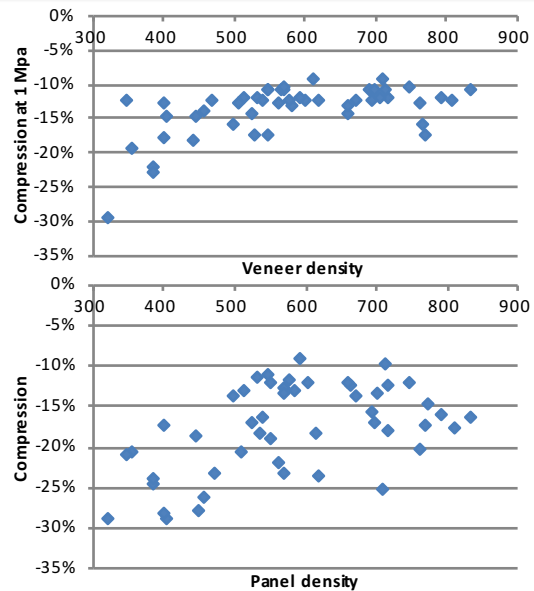
The correlation of MOE to density.



Impact of temperature and adhesion



Advanced veneer and other product from coconut wood



Product options

The range for veneer-based products includes:

- Structural products:
 - plywood and laminated veneer lumber (LVL).
- Architectural products:
 - appearance veneer on board, engineered flooring, multilaminar products.

Test products of each types were assembled and are being tested.

Source veneer was sorted into density groups.

- Low density (<400 kg/m³)
- Medium density (400-600 kg/m³)
- Medium-high density (600-800 kg/m³)
- High density (>800kg/m³).

Products: plywood

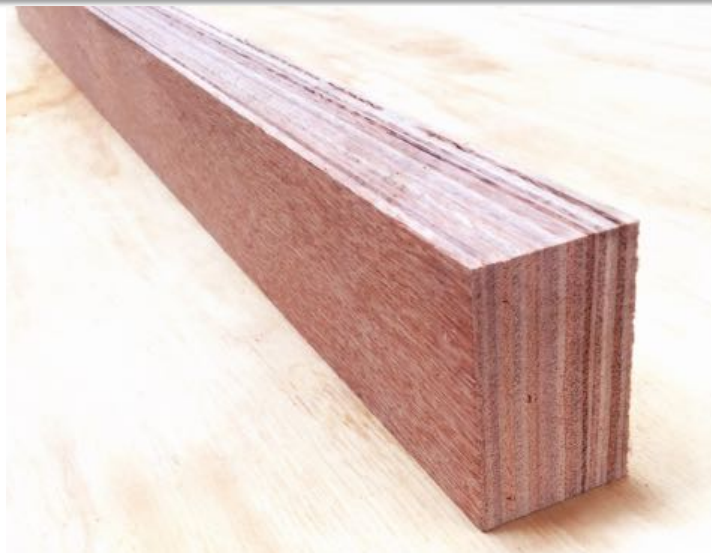
Plywood: Overlay & structural



Advanced veneer and other product from coconut wood

Products: LVL

*Laminated veneer lumber
(LVL)*



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Products: overlay

Veneer overlay on board



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Products: Engineered flooring

Engineered flooring overlay



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Products: multilaminar

Multilaminar blocks for resawing



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Products: multilaminar

*Sawn multilaminar section:
edge grain.*



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Products: multilaminar

Sawn multilaminar section: end grain



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Products: multilaminar

Sawn and turned multilaminar section



Advanced veneer and other product from coconut wood

Further product assembly



Further product testing: plywood

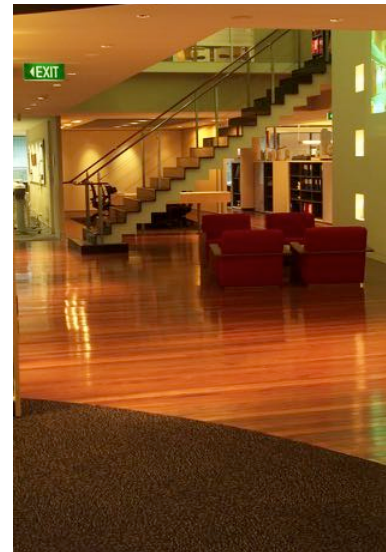


Further product testing: LVL



Product summary

- A range of appearance and structural product opportunities exist for coconut veneer.
 - The project has not yet fully explored the range of possible product opportunities.
- Coconut veneer has some unique qualities that enable potentially high value niche markets to be pursued.
 - Attractive colour, even toned surface, high density, sustainability.



Questions

