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THERMAL DEGRADATION AND MORPHOLOGICAL ASPECTS OF FOUR WOOD SPECIES  
USED IN LUMBER INDUSTRY

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### Abstract

The aim of this work was characterize four wood waste samples from lumber industry in order to obtain previous information about structure and properties of wood before use it as a biofuel or as reinforcement in composite formulations. The influence of wood components on the thermal degradation stability of different wood species has been investigated using thermogravimetry, differential scanning calorimetry and scanning electron microscopy. Four wood species, *Eucalyptus grandis* (EUG), *Pinus elliottii* (PIE), *Dipteryx odorata* (DIP) and *Mezilaurus itauba* (ITA), were used in this study. The results showed that higher extractives contents may form a thin film on the wood fiber surface which can accelerate the degradation process and reduce the wood thermal stability

### Keywords

Wood thermal stability, Wood chemical composition, Wood waste.

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