

Determination of specific gravity weighted by volume of wood of three tree species

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The present study aimed to determination of specific gravity weighted by volume of wood *Platanus x acerifolia* (Ait.) Willd., *Luehea divaricata* Mart. Et Zucc, e *Carya illinoensis* (Wangenh) K. Koch, as support forest management. The methodology followed the standard COPANT (1971) for extraction of material and used the method of immersion in water and analytical balance (ASTM D 2395-93, 1995) for determination of the property, after it was pondered according to the volume of small logs.

The specie of wood that presented higher specific gravity was *Carya illinoensis* with 612 kg/m³ followed by wood *Platanus x acerifolia* with 584 kg/m³ and lower density wood of *Luehea divaricata* with 499 kg/m³. Through the Fisher's LSD test, it is possible to verify that there was a statistically significant difference error at 1% for the three species.

The differences in specific gravities can be explained by the anatomical nature of their wood, given that they are different species, with anatomical characteristics own. According to Haselein et al. (2002) the specific gravity is the main technological parameter used to express the quality in various sectors of industrial activity due to the intimate relationship with multiple other properties and also because it is easy to determine.

This way it is important emphasize the relevance of knowledge this physical properties for technological improvement and the use of this material.

Keywords: density, forest management and native species.

[1] Comisión Panamericana de Normas Técnicas. Selección y colección de maderas, COPANT 30:1- 001, 1971.

[2] American Society for Testing and Materials. Standard methods of testing small clear specimens of timber: ASTM D 2395-93. Philadelphia, PA: 1995

[3] Haselein, C. R. et al. Propriedades de flexão estática da madeira úmida e a 12 % de umidade de um clone de *Eucalyptus saligna* Smith quando submetido a diferentes espaçamentos e doses de adubação. *Ciência Florestal*, Santa Maria, v. 12, n. 2, p. 147-152, 2002

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