
THE EFFECTS OF AGE AND HEIGHT POSITION ON THE PHYSICAL PROPERTIES OF BAMBOO (*Dendrocalamus barbatus* Hsueh et D. Z. Li)

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SUMMARY

The physical properties of *Dendrocalamus barbatus* are related to the age and height position. This study determined the changes of some physical properties of *D. barbatus* based on plant age and height position such as density and shrinkage. The results showed that the physical properties at all age levels changed from root to tip: the basic density 0.424 to 0.638 g/cm³, while the air dried density (moisture content = 12%) ranged from 0.564 to 0.795 g/cm³. The radial and tangential shrinkage of the moisture content at 0% humidity ranged from 6.77 to 14.76% and from 6.37 to 11.22%, respectively, while the radial and tangential shrinkage of the moisture content at 12% humidity varied from 4.99 to 12.05% and from 4.37 to 9.19%, respectively. The age and height on *D. barbatus* a significant effect on density and shrinkage. However, at age 4 and above, these properties reached a more stable state.

Keywords: *Dendrocalamus barbatus*, density, height, plant age, shrinkage.

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