

EFFECT OF MOISTURE CONTENT ON SOUND ABSORPTION CO-EFFICIENT OF SOME INDIAN TIMBERS

D. Biswal¹ and *S. Rout²

¹Forest Research Institute (Deemed) University, Dehradun- 248006 (Uttarakhand) INDIA.

²School of Forestry & Environment, Sam Higginbottom Institute of Agriculture Technology & Sciences, Allahabad-211007 (Uttar Pradesh) INDIA.

Email: srout.forestry@gmail.com

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Abstract: Wood and wood-base materials frequently are used as interior finish in buildings where sound absorption (reduction of the level of sound generated in a room, within that room) needs to be estimated to compare the effectiveness of different species. Various wood based materials of three Indian timbers (*Dalbergia sissoo*, *Cedrus deodara* and *Populus deltoids*) were evaluated for acoustical absorption using the Bureau of Indian Standard (I.S: 10420 -1982) impedance tube method to determine the effect of moisture content based on their specific gravity on sound absorption. Absorption produced by different species at 25 and 35 percent moisture content at room temperature was affected. *Cedrus deodara* species shown best value for sound absorption coefficient at the frequency level of 1000 hertz while the *Populus deltoids* shown minimum values of sound absorption coefficient.

Keywords: Absorption, *Cedrus deodara*, Specific gravity

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*Corresponding Author