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## EVALUATION OF ACACIA CATECHU WILLD. (KHAIR)FOR PHYSICO-CHEMICAL CHARACTERISTICS OF WOOD

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ABSTRACT: The provenance trial *of Acacia catechu* was established at the Regional Horticultural Research Station at Jachh, Himachal Pradesh in the August 1988. In the year 1998 among 50 provenances, twenty best performing provenances in respect to growth were screened and 40 trees which included 2 trees from each provenance were randomly felled to study the provenance variation for the physico-chemical properties of wood. Assessment results showed significant differences in all sapwood and heartwood properties, except alcohol water solubility in heartwood among the provenances. Assessment of results showed significant difference among provenances for physico-chemical properties of sapwood and heartwood. The moisture content, specific gravity, cold water extractives, hot water extractives, alcohol benzene extractives, lignin and holocellulose content in sapwood ranged from 51.93-58.63%, 0.5907-0.6571,2.92-3.68%, 4.36-5.63%, 3.34-5.28%, 20.89-23.66% and 69.60-70.84% respectively, whereas these were ranged from 32.70-38.66%, 0.6511-0.7463, 8.22-9.78%, 8.42-6.31%, 25.31-28.72% and 62.88-63.93% in heartwood. As for katha production, Nurpur-2 recorded maximum katha content [10.50(3.24) %], which was followed by Parwanoo-1, Sadar Bilaspur-4 and Jangla-1 and the cutch content was the highest in Nurpur-2 [11.17 (3.34) %], followed by Sadar Bilaspur-4, Sadar Bilaspur-5 and Lathiyani-2.

Keywords: Acacia catechu, Extractives, Cutch, Heartwood, Katha, Khair, Physico-chemical, Provenances, Sapwood