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Rural Trees Species for Rural Development in Sudan

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Abstract

The vast majority of Sudan forests are situated in poor rural areas; nevertheless rural populations are not benefiting much from them. Despite the great diversity of tree species in Sudan, the utilisation of wood resources is traditionally concentrated on a few species only. Most of the indigenous hardwood tree species in Sudan are used as charcoal, firewood and fuel wood due to the lack of information on their properties. There is an urgent need to study the wood properties of the local raw material in order to suggest alternative uses. This would not only reduce wood imports, but also promote rural development, alleviate poverty and improve livelihoods of local communities.

The present study investigated the wood fiber characteristics of different tree species growing in rural areas of the woodland savannah of Sudan. Wood materials from thirty-two hardwood species belonging to eighteen families, collected from southern Kordofan and Sennar states were used for this purpose. Several fiber characteristics were investigated such as: length, diameter, lumen diameter and double wall thickness.

The results revealed that the wood fiber characteristics of several of the selected species (for example *Adansonia digitata*, *Ceiba pentandra*, *Sterculia setigera* and *Ficus sycomorus*) qualify for advanced industrial utilisations like pulp, paper and fiber board. The results of this study could enhance the establishment of wood processing industries in the rural areas of Sudan.

Keywords: Fiber characteristics, forests based industries, rural areas, Sudan