

ABSTRACT

The Anatomy and Natural Durability of
Fourteen Species of Local Timber

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Trinidad and Tobago has more than sixty species of trees of which only about twenty-five are used for timber production, leading to over-exploitation of these species and under-utilization of the others. This is partly caused by the lack of reliable data on the properties of local timber.

The study has provided information on the anatomical properties and natural durability of fourteen species of local timber. An identification key, based on macroscopic (with a hard lens x10) features has been constructed and can be expanded to include all local species. A detailed anatomical study of the fourteen species with microphotographs is included. The characteristics observed agree with the description of the genera and sometimes species in the published literature and are useful in distinguishing the species studied. The species have been rated for their natural durability, both in the laboratory and under field conditions. The species Spondias monbin (Hog plum) and Sterculia caribae (Mahoe) have shown little or no resistance in both the field test and the laboratory

study. Species such as Peltogyne porphyrocardia (Purpleheart), Andira inermis (Angelin) and Manilkara bidentata (Balata) have proved to be resistant - very resistant to deterioration.

Details of the testing methods are included for the anatomical study, the laboratory testing for durability and the field study. These methods can then be applied to all the other species of timber in Trinidad and Tobago. Further work is also suggested to complete a detailed manual and wood atlas of timbers of Trinidad and Tobago.

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