



Coconut Timber Utilization

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Primary species of timber such as teak, rosewood and other exotic hardwoods are becoming increasingly scarce. As a consequence of limited availability, such timbers have become considerably more expensive and this trend will continue in future. In this context, secondary species of timber, available at lower prices, seem to be the right alternative. Coconut wood is now available in plenty in India, and will continue to be so for many years to come.

Preservation

Coconut wood belongs to the non-durable group of timber. When used in

1. Preparing the Material for Treatment

A preservative treatment can only be effective if the wood is properly prepared. Selection of defect-free coconut wood prior to treatment is necessary to obtain optimum results and good performance thereafter.

Machining operations like cutting in sizes appropriate to the end-use, planing the surfaces and boring should be undertaken before preservative treatment. In addition, the wood's surface must be free from sawdust, paint or any other surface coating and there must be no sign of attack of wood destroying insects and fungi.

Treatment of coconut wood by diffusion process should be done in green or freshly cut condition to permit free movement of preservative solution into the inner cavities of the wood. For other method, drying before treatment is necessary to allow

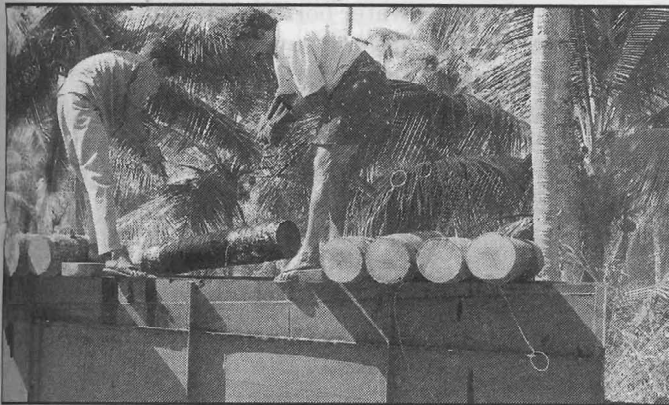
adequate penetration and uniform distribution of preservative into the material.

For round coconut wood, debarking should be made to minimize, if not totally prevent, attack of insects and decay fungi during air drying.

In sawn form, the lumber is easily attacked by mould and stain fungi during the air drying process leaving discoloured surfaces of wood. To prevent this problem, the newly sawn lumber should be dipped at once into a tank containing anti-sapstain chemical before seasoning. However, the dipped timber receives only temporary protection from staining and it should



Timber kept exposed with ground contact and without ground contact



Placing coconut timber for treatment

situations favourable to attack by decay fungi and wood boring insects, the hard dermal portion of the trunk will last only for a period of one to two years. The soft inner portion will deteriorate in a few months when left exposed to the weather.

Its low natural durability requires preservative treatment to ensure that the wood is used within a reasonable service life. Coconut wood should be properly treated to protect it against attack of wood destroying organisms especially when used in ground contact and exposed to the weather.



Left - Timber without treatment. Right - Timber treated with wood preservative creosote