
TIMBER RESOURCES FOR CONSTRUCTION AND WOODEN PRODUCTS SECTOR IN SRI LANKA

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Traditionally construction and wooden products sector select naturally grown timber for most of their timber requirements. These include high rated rare hardwood timber species such as mee, satin, wewarana, milla, palu, halmilla, hulanhik, etathimbiri, dun, alubo, liyan and suriyamara. These species are mostly grown in natural forests and their supplies have now become very limited. Hence timber industry has to rely on alternative timber species that originate from sources other than natural forests. Properties that are essential for the introduction of plantation and home gardens species to the market are discussed in this paper.

Based on density and strength properties, *Eucalyptus grandis*, *E. microcorys*, ginisapu, teak, mahogany and jak are potential construction timbers for the future. Teak is an excellent durable timber however it is very expensive. Mahogany is a good timber for door and window frames and sashes but sapwood of this species is susceptible for powder-post beetle and termite attack. Jak is a durable traditional species but felling and usage of this species has been controlled. Eucalyptus is also a durable timber that can be used in construction. Out of two Eucalyptus species *E. microcorys* is a better timber in terms of its higher density and resistance to splitting compared with *E. grandis*.

Wooden products sector includes furniture and export oriented wooden products such as toys and wooden components. Albizia, alstonia, lunumidella, pine, rubber and mahogany are some of the potential timbers that can be used in manufacturing these products. Albizia and lunumidella are used in the manufacture of wooden panels. However most of these species are not durable, hence they should be used in interior environments not exposed to water.

It is essential to treat non-durable timbers with preservative chemicals before use. For heavy construction and for exterior applications they should be treated by pressure impregnation methods using CCA (Copper chorme arsenate). For interior wooden products boron treatment would be adequate. However, results indicated that vacuum pressure impregnation method or low cost hot and cold open tank method are more successful in treatment of boron compounds compared with commonly used diffusion methods. Results show low density species such as albizia, lunumidella, pine, alstonia and rubber can be easily treated with diffusion methods. However treatability of heavy density timbers such as *E. grandis* and *E. microcorys* are low. It is also essential to season these timbers properly before being used.

While our short term timber requirements are satisfied with imported species such as kempus, tualang and balau, it is essential to plan for the local fast growing tree species discussed in this paper to supply the required timber essential for the construction and wooden products sector.