Prospects of rubber (*Hevea brasiliensis* Muell. Arg.) as a timber species: a comparison with commonly grown timber species

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Timber production in the country is not sufficient to meet the demand hence commercial planting of timber crops is a necessity. Multipurpose tree species such as rubber (*Hevea brasiliensis*) undoubtedly play an important role in this context providing wide range of benefits to the growers. This study was aimed to compare the timber production of rubber with that of other commonly grown species in the country. Rubber and six different alternative timber species, i.e. Albizzia (*Albizzia moluccana*), Alstonia (*Alstonia macrophylla*), Eucalyptus (*Eucalyptus* spp.), Pine (*Pinus* spp.), Teak (*Tectona grandis*) and Mahogany (*Swietenia macrophylla*) were chosen for the study. Relevant data on rubber and alstonia were collected from three commercial estates in Sri Lanka whilst those on other species were obtained from the yield tables developed by the forestry department of Sri Lanka. The planting density of rubber was 500 trees whilst that of other timber species was ca. 1000 trees per hectare. Except in rubber, periodical thinning was a common practice in cultivation of other timber species. The optimum lifespan of rubber has been identified as 30 years for latex production whilst that of teak, mahogany, pine, eucalyptus, alstonia and albizzia was 50, 45, 35, 25, 20 and 15 years, respectively.

In general, the rate of girth expansion was highest in albizzia and then in eucalyptus and rubber. In terms of basal area covered by the crop, rubber has taken up the first place through its lifespan except first five years where albizzia was dominating. Based on the pattern of girth expansion, timber volume per tree was highest in albizzia, followed by eucalyptus and rubber during first 20 years of crop growth. Albizzia was fully harvested after 15years of growth and thereafter, timber volume per tree was highest in eucalyptus whilst that of rubber, mahogany and pine was comparable. Albizzia showed the highest value for the cumulative timber production per hectare and then eucalyptus, pine, rubber, mahogany and teak, respectively in first 20 years. At the end of 30 years, timber production per hectare of rubber was 200 m^3/ha.

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