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EVALUATION OF GROWTH CHARACTERISTICS OF CLONES AND QUALITY SEEDLINGS OF *TECTONA GRANDIS*

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ABSTRACT : Teak is one of the most valuable timber species and India has maximum teak plantations in the world, and there is a huge demand for teak wood in National and International markets. Clonal plantation plays a vital role in enhancement of productivity in many tree species and horticultural crops. In the present study attempt has been made for the establishment of teak clonal plantations and plantations with genetically improved planting stock to augment productivity. Superior teak trees have been selected in different parts of Kerala multiplied through juvenile coppice shoots and established a vegetative multiplication garden which is used for multiplication of clones for planting programme. A clonal trial of teak has been established in Salem, Tamil Nadu, and early evaluation showed that clones exhibited better growth performance than seedlings of local seed source. About 1000 ha of clonal seed orchards (CSO) of teak have been established in the teak growing states for the production of genetically improved seeds for planting programme. However the seed production is poor in most of the CSO. Therefore, the CSO seedlings have been multiplied vegetatively and a teak trial with improved planting stock has been established in Karunya, Tamil Nadu and evaluated the growth performance. The height and GBH were higher in the CSO and plus tree seedlings compared to control. It is suggested that teak plantations may be established with outstanding clones and genetically improved planting stock and thereby enhance the productivity.

Key words: *Clones, Clonal plantations, Clonal seed orchard, Productivity, Teak*