

Progeny Testing of *Melia composita* CPTs for Better Planting Material

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Abstract—Twenty four candidate plus trees (CPTs) of Burma dek were selected through intensive survey from Haryana and bordering states. Selection was based on the characters of economic interest viz. straightness, self pruning ability, clear bole height, low branching habit, disease resistance, etc. Assession MCP1 from Punjab was observed to have the maximum height (17.5 m) while assession MPN1 from Pantnagar was recorded to have maximum clear bole height (10.2 m). Highly significant and positive correlation ($r= 0.522$) was obtained between age and other morphological character viz. height, clear bole height and GBH. Progenies of CPTs were also assessed for field emergence (%), seedling height, basal diameter, clear stem height, no. of branches per seedling and root shoot ratio and significant variation was obtained among the species within the character. The progeny performance of MCPN1 from Utrakhand was found extraordinarily well having superior values for most of the characters. Progeny performance of plus trees MCPAU1, MCP1, MCPAU3, MCPAU5 and MCK1 were also equally good obtaining good rank in all the observations. The findings of the present study may be helpful in identifying candidate plus trees in a scientific manner.

Keywords: Candidate Plus Tree, Burma dek, substantial variability, progeny.