Evaluation of Grafting Technique for *Garcinia quaesita* Pierre. (Garcinia) by Using Different Wrapping Materials at Different Maturity Stages of Root Stock

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Garcinia, which is commonly named as *Goraka* (*Garcinia queasita* Pierre.) has growing demand at present due to its remarkable medicinal value with anti-obesity properties**.** Limited cultivations are exist due to unavailability of quality planting materials. Seed propagation is possible, but low germination percentages, recalcitrant nature of the seeds, long juvenile of the seedlings, seasonal flowering behavior and polygamously dioecious nature are main limitations. This study was conducted to identify the best maturity stage of rootstock and the best wrapping material for grafting of Garcinia in plant propagation. Three different maturity stages; three, five and seven months old seedlings in stem diameter of 1.5, 2.5 and 3.5 cm, respectively were selected along with four different types of the wrapping materials; Polysack twine, Parafilm, Normal polythene (100 guage) and Cling film. Cleft grafting and Complete Randomized Block Design (factorial) were used in three humid chambers with eight replicates. The data were analyzed using two-way ANOVA. Relationship between maturity stage and wrapping material on success rate of Garcinia was determined. There was no any interaction effect between maturity stage and wrapping material on success percentage of grafted plants. The maturity stage was significantly affected on success percentage and survival rate of grafted plants the highest success percentage was observed in five months old seedlings as rootstock and it could be recommended as the best maturity stage for grafting of Garcinia.

Keywords: Garcinia, Cleft grafting, Maturity stage, Rootstock, Wrapping material