

STANDARDIZATION OF SURFACE STERILIZATION TREATMENT DURING *IN VITRO* REGENERATION OF *SIMAROUBA GLAUCA*

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ABSTRACT

Simarouba Glauca is an agro climatic plant having wide range of economical importance and new generation biofuel source, but it has a very small population in India. In order to increase its number it is necessary to propagate this plant through in vitro regeneration methods. Woody plants generally contains high amount of secondary metabolites and phenolic substances which inhibits the regeneration. Frequent sub culturing and incubation in dark are the simplest methods to reduce the browning effect up to some extent, but use of HgCl_2 showed higher rate of survival of the explants. Various concentrations of Mercuric Chloride have been used in this study. Pre- treatment of 2.5% Ascorbic acid along with the 0.1% HgCl_2 treatment for 2-3 minutes gave the effective results.

KEYWORDS: *Simarouba Glauca*, Regeneration, Phenolics, Ascorbic Acid