

APPLICATION OF MERCURIC CHLORIDE AND CHARCOAL IN MICRO-PROPAGATION OF TEAK (*TECTONA GRANDIS*)

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ABSTRACT: Effect of HgCl₂ for different concentrations (0.05, 0.1, and 0.15%) with different time intervals (5, 10, and 15 minutes) for bud break, browning, and preventing fungal and bacterial contamination was studied during 2013-14. The study also carried the effect of charcoal on bud break, browning, fungal contamination and bacterial contamination with four treatments of four replications. We found that treatment of HgCl₂ 0.1% treated for 5 minutes showed better bud break while fungal and bacterial contaminations was lesser for 0.1 and 0.15 %. Fungal and bacterial contaminations were lower when treated with 1.5% HgCl₂ for 15 minutes. The combination of charcoal with HgCl₂ has a significant effect on bud break and browning. In the case of charcoal treatments, 0.5 g l⁻¹ charcoals with 0.01% HgCl₂ showed more rate of bud break, while fungal and bacterial contaminations were lesser in 1.5 g l⁻¹ charcoal with 0.15% HgCl₂.

Keywords: *Fungal and bacterial contamination, meristem, nodal segments, plant propagation*

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