

**INDUCTION OF CALLUS FROM *Phaleria Macrocarpa***

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## ABSTRACT

### INDUCTION OF CALLUS FROM *Phaleria Macrocarpa*

*Phaleria macrocarpa* is herb plants in which each part of the plant has pharmaceutical value. *Phaleria macrocarpa* is known to cure diabetic, cancer and hypertension. The main objectives of this study are to determine the percentage of clear culture of *Phaleria macrocarpa* leaves after surface sterilization and to observe effects of different media treatments for callus induction. Surface sterilization of leaves explants using 20% Clorox produced 23.33% of clean culture. The remaining cultures were contaminated with fungi (53.33%) and bacteria (23.33%). Bacterial contamination was first observed after 3 days of culture whereas fungi contamination was first observed after 5 days of culture. The callus initiation was first observed after 3 weeks in treatment 1 (MS 0+1.0 mg/L NAA), treatment 3 (MS 0+3.0 mg/L NAA), treatment 2 (MS 0+2.0mg/L NAA) and treatment 6 (MS 0+3.0 mg/L NAA+0.5 mg/L BAP). Unfortunately, the other treatments which are treatment 4 (MS 0+1.0 mg/L NAA+0.5 mg/L BAP) and treatment 5 (MS 0+2.0 mg/L NAA+0.5 mg/L BAP) were contaminated. Thus no callus observation can be made. As a conclusion, from 60 explants of all treatment, only 15% responded to callus induction.