

THE EFFECT OF VARIOUS STERILIZATION TECHNIQUES ON THE
SUCCESS OF TISSUE CULTURE OF COCONUT EMBRYOS
(*Cocos nucifera* L.) IN VITRO

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ABSTRACT

Coconut (*Cocos nucifera* L.) is a plantation plant in the form of a straight-trunked tree from the palmae family. This plant is a versatile plant or a plant that has high economic value. To develop coconut cultivation, it is necessary to provide quality seeds in sufficient quantities. Tissue culture is expected to be able to meet the needs of quality seeds. Things that need to be considered in coconut tissue culture are about sterilization techniques that will be used to support the success of the tissue culture process. This research was carried out in September 2020 to the Jember State Polytechnic Tissue Culture Laboratory. The experimental design used was a non-factorial Complete Randomized Design consisting of 4 treatments, namely (A) 70% Alcohol Spraying, (B) 0.5% NaOCL Solution Immersion, (C) Soaking with 0.15 mg / l HgCL₂ solution (D) Soaking using 70% alcohol solution and bleach. The data obtained will be analyzed using quantitative analytical descriptive. Various sterilization techniques that have been used in this study cannot be declared to have a real effect. This is because the contamination that occurs leads more to human error. For sterilization using 70% alcohol and commercial alcohol & bleach is able to suppress the growth of contamination-causing fungi better than other treatments.

Keywords: Tissue Culture, Coconut, Sterilization