COCONUT EMBRIO CULTURE TECHNIQUE (*Cocos nucifera* L.)
THROUGH ADDITIONAL CONCENTRATIONS OF REGULATORY SUBSTANCES GROWING *Benzyl Amino Purine* IN VITRO
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ABSTRACT

Coconut (*Cocos nucifera* L.) is one of the mainstay commodities of the country's foreign exchange earning plantations. National coconut production experienced a decline in production in the 2016-2020 period. One of the causes of low coconut productivity is thought to be due to cultivation using random seeds and coconut age is older. Seeing these obstacles in coconut production, it is necessary to improve by utilizing biotechnology. One way is with coconut embryo culture techniques. To increase the regeneration power of explants in embryo culture, it is necessary to add BAP growth regulators which function as stimulants for shoot growth, as a stimulant for physiological processes and cell metabolism. The purpose of this study was to determine the effect of BAP concentration on coconut (*Cocos nucifera* L.) embryo culture on Y3 media in vitro. This research was conducted in October 2019 - January 2020 at the Jember State Polytechnic Network Culture Laboratory. This study used a non-factorial Completely Randomized Design (CRD) consisting of 4 treatments, BAP concentration levels (1 ppm, 1.5 ppm, 2 ppm, 2.5 ppm). Each treatment consisted of 6 replications, each replication consisting of 1 bottle, each bottle containing 1 explant, so there were 24 experimental units. The results showed that the growth regulators of BAP had no significant effect on coconut embryo culture.

**Keywords:** *Cocos nucifera* L., *Growth Regulating Substance BAP*, *Embryo culture*