THE EFFECT OF MODIFICATION OF CULTURE MEDIA ON CALLUS INDUCTION OF ARABICA COFFEE (*Coffea arabica* L.) ANDUNGSARI 1 CLONE *IN VITRO*

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ABSTRACT

Coffee is one of the most widely cultivated plantation commodities in Indonesia and plays an important role in the economic sector of Indonesia. Arabica coffee has a more neutral taste, a strong coffee aroma, and high caffeine. Because many people like it, farmers want to increase the productivity of Arabica coffee plants. However, it is the provision of superior and quality seeds that is a problem. One good alternative to overcome these problems requires vegetative propagation through tissue culture techniques. This study aimed to determine the effect of culture media modification on callus induction of Arabica coffee (*Coffea arabica* L.) clone Andungsari 1 in vitro, carried out in July – October 2021 at the Jember State Polytechnic Tissue Culture Laboratory. The experimental design used for this study was a non - factorial , completely randomized design (CRD) consisting of 4 treatments. Each treatment consisted of 6 replications. Each replication consisted of 1 unit bottle containing one explant. The treatments consisted of BI 1 = MS 0 Full, BI 2 = MS Modified Vitamin B5 + 2 ppm 2,4 D + 1 ppm Kinetin, BI 3 = IKP 1 ppm 2.4 D + 1 ppm 2-iP, BI 4 = IKE 1 ppm 2.4 D + 4 ppm BAP. The results of the research that has been carried out indicate that the modification of the media had no effect on callus induction of Arabica coffee.

Keywords : Media, Arabica Coffee Explants, Tissue Culture