

**THE EFFECT OF CULTURE MEDIA ON INDUCTION OF PALM OIL
CALLUS (*ELAEIS GUINEENSIS JACQ.*)
SIMALUNGUN VARIETY IN VITRO**

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ABSTRACT

*Oil palm is a type of plantation crop that occupies an important position in the agricultural sector in general, and the plantation sector in particular. This is because of the many crops that produce oil or fat, oil palm produces the largest economic value per hectare in the world. Increasing the area of oil palm plantations will have an impact on the seeds needed. Availability of seeds is one of the important factors in oil palm productivity. . Conventional propagation technology cannot produce many seeds in a relatively short time. One alternative technology that can be used is tissue culture technology. This study aims to determine the effect of culture media on callus induction of oil palm (*Elaeis guineensis jacq*) simalungun variety in vitro which was carried out in July- September 2022 at the Jember State Polytechnic Network Culture Laboratory. The experimental design used for this study was a completely randomized design (CRD) with 3 treatments. Each treatment consisted of 6 replications. Each replication consisted of 3 bottles containing 1 explant. The treatments consisted of P1 = MS 0 Full; P2 = MS Modified Vitamin B5 + 2 ppm 2,4D + 1 ppm Kinetin; P3 = IKE + 1 ppm 2,4D + 4 ppm BAP. The results of the research that has been carried out have significantly different effects on live explants and contaminated explants. While the parameters of callus emergence day, callus type, callus fresh weight had no significant effect.*

Keywords: media, oil palm explants, tissue culture