

**Micropropagation Leaf Petioles of Iles-Iles (*Amorphophallus muelleri* Blume)
by In Vitro with Addition of Plant Growth Regulator BAP and NAA**

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ABSTRACT

*Iles-iles (*Amorphophallus muelleri* Blume) is a tuber plant of the Araceae which has potential to be developed into food diversification. Cultivated of iles-iles need long time, so needed an alternative cultivated with tissue culture. The research aims to know concentration of plant growth regulator BAP and NAA exactly for micropropagation leaf petioles of iles-iles. The research was conducted for seven months from August 2016 to February 2017. The place of research was in the Tissue Culture Laboratory, State Polytechnic of Jember. This study uses a completely randomize design (CRD) with 2 factors, each factors contain 2 level, and 6 replications. The first factor is pgr BAP consists of three levels: 1, 2, and 3 mg/L. The second factor is pgr NAA consist of three levels: 0.1, 0.2, and 0.3 mg/L. Data were analyzed by using Analysis of Variance, LSD level 5% and 1%. The experiment showed that the addition of 1 ppm and 2 ppm BAP gave effect in parameters time of callus induction, quantity of callus and time of root induction. Treatment 0,1 ppm NAA gave effect in parameter shoot height at 63 HST. The interaction between 1 ppm BAP and 0,1 ppm NAA gave effect in parameters shoot total at 63 DAP and shoot height at 63 DAP. The experiment showed that implementation of different plant growth regulator between BAP and NAA caused response on micropropagation leaf petioles of iles-iles especially in shoot formation.*

Keywords: *Amorphophallus muelleri* B, BAP, micropropagation, NAA, plant growth regulator