

Photoperiodism and 2,4-D Concentration On Improvement Of Iles-iles In Vitro Plant Callus Quality

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ABSTRACT

Iles-iles plants are plants that contain many benefits in the field of Indonesian food. Cultivation that takes a long time makes Indonesian farmers less interested in this crop, there needs to be an alternative to the cultivation of Iles-iles quickly, namely with tissue culture. This study aims to study photoperiodism and 2,4-D concentration of Iles-iles induction plants in vitro. This research was conducted at the Culture Laboratory of the State Polytechnic Network in December 2018 to July 2019. The method used in this study was the factorial experimental group design (RBD). The first factor is exposure time (0 hours, 4 hours, 8 hours, 12 hours and 16 hours) and the second factor is 2,4-D concentration (0.5 mg / l and 1 mg / l). Data were analyzed using ANOVA then further analyzed using 5% DMRT. The results showed that the best photoperiodism was 16 hours and 1 mg / l 2,4-D in the current callus. The best photoperiodism treatment was 16 hours and 0.5 mg / l 2,4-D in callus diameter of Iles-iles plants.

Keywords: *Callus Induction, Iles-iles, Photoperiodism, 2,4-D*