

**GROWTH OF POTATO MICROSTECTS (*Solanum tuberosum* L.) WITH
THE ADDITION OF COCONUT WATER AND THIAMIN
CONCENTRATION *IN VITRO***

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ABSTRACT

Potato is a horticultural crop that can be used as an alternative source of carbohydrates. Tissue culture is a potato plant propagation technique that is often used because it can produce quality and virus-free seeds, in large quantities and in a short time. This study aims to determine the best concentration of coconut water and thiamine to increase the growth of potato microcuttings *in vitro*. The study used a two-factor RAL experimental method, Factor I was the concentration of coconut water 50, 100, and 150 ml/L. Factor II was the concentration of thiamine 8, 10, and 12 mg/L. Data were analyzed using analysis of variance at the $\alpha=5\%$ level, and continued with Duncan's Multiple Range Test (DMRT) at the $\alpha=5\%$ level. The results showed that there was an interaction between the combination of coconut water and thiamine treatments on the parameters of the number of branches and the number of leaves. Treatment with a coconut water concentration of 50 mL/L was a better treatment for increasing the fresh weight of plantlets compared to coconut water at a concentration of 150 mL/L. Thiamin treatment at all concentrations showed equally good results for all parameters.

Keywords: Potato, Coconut Water, Thiamine