

**THE EFFECT OF CONCENTRATION OF YOUNG COCONUT WATER
ON SEED GENERATION, GROWTH AND YIELD OF CUCUMBER
PLANTS (*Cucumis sativus* L.) HERCULES AND MERCY VARIETIES**

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ABSTRACT

Cucumber production often experiences problems due to seeds having low viability. Young coconut water is one of the natural ingredients for seed invigoration. This research aims to determine the effect of giving young coconut water and varieties on seed germination, growth and yield of cucumber plants. The experimental method used was a factorial *Completely Randomized Design* (CRD). The first factor is the concentration of young coconut water, namely, 0, 100, 200, and 300 ml/liter. The second factor is the Hercules variety and the Mercy variety. The experimental results were analyzed for diversity using *Analysis of Variance* (ANOVA) at 5% level. To find out a significant difference, continue with *Duncan's Multiple Range Test* (DMRT) and Orthogonal Polynomial Test at the 5% level. The results showed that there was no interaction between the young coconut water concentration treatment and the variety. The optimal concentration of young coconut water for seed germination is 237.5 ml/L to increase germination, the optimal concentration for plant growth is 283 ml/L to increase the number of leaves at 21 HST, the optimal concentration for plant yield is, 216.67 ml/L to increase fruit number and fruit diameter. The Mercy variety provides better results in seed germination and plant growth, while the Hercules variety provides better results in plant yields.

Keywords: Young coconut water, varieties, cucumber, invigoration.