Pengaruh Pemberian Pupuk Phospat Dan Konsentrasi Giberelin (Ga₃) Terhadap Produksi Benih Tanaman Gambas (*Luffa Acutangula* (L.) *Roxb*) (Effect of Phosphate Fertilizer and Concentration of Gibberellin (Ga₃) on Seed Production of Gambas Plant (Luffa Acutangula (L.) Roxb)) Supervised by Dr. Ir. N. Bambang Eko S. Msi

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ABSTRACT

Application of Phosphate fertilizer and Giberellin concentration as a cultivation technique that can be done to increase the production of luffa seeds to meet the needs of seeds in Indonesia. This research was carried out from September 2022 to March 2023, rice fields at Jl. Toba Lake 7, Sumbersari, Kab. Jember. Using a factorial randomized block design (RBD) with 3 replications. The first factor was phosphate fertilizer (0, 25 and 30 g/tan) and the second factor was the concentration of gibberellin (Ga3) (0.200 and 300 ppm). Data were analyzed using Analysis of Variance (ANOVA) at 5% and 1% levels, then tested with Ducan's Multiple Range Test (DMRT) at 5% level. The results showed that phosphate fertilizer (sp36) had a very significant effect on the number of branches 21 and 35 after an average of 4.27 and 5.56, the age of male flowering with an average of 24.89 (dap), and the number of seeds per fruit with average 30.37 (items). Treatment of gibberellin concentration (Ga3) had a highly significant different effect on the parameter number of branches with an average of 5.24 and 6.13, the age of female flowering with an average of 24.22 (dap), fruit length with an average of 27.90 (cm), and fruit diameter with an average of 4.57(cm)

Key words: Gambas Plant, Phosphate Fertilizer, Concentration of Giberellin (Ga3)