EFFECT OF BOKASHI FERTILIZER AND GIBBERELLIN HORMONE (GA_3) TO THE GROWTH AND YIELD OF PURPLE EGGPLANT (*Solanum melongena* L.)

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ABSTRACT

Purple eggplant is a vegetable crop that has economic value and has the potential to be developed. Efforts to increase purple eggplant productivity can be done by providing bokashi fertilizer which contains macro nutrients to increase soil fertility and the hormone gibberellin as an activator of plant cell division. The research aims to determine the dose of bokashi fertilizer and the concentration of the gibberellin hormone which has the best influence on the growth and yield of purple eggplant plants. The research method used a Complete Randomized Block Design (RAKL) with two factors and one control. The first factor is the dose of bokashi fertilizer with levels of 0.6 kg/plant, 1.2 kg/plant, and 1.8 kg/plant. The second factor is the concentration of the gibberellin hormone at levels of 50 ppm, 100 ppm and 150 ppm. The control treatment was without bokashi fertilizer and gibberellin hormone. The research data were analyzed using ANOVA at the 5% level and orthogonal contrast test then followed by the DMRT test at the 5% level. The results of the study showed that there was no interaction between the treatment dose of bokashi fertilizer and the concentration of the gibberellin hormone on all observation parameters. Treatment with a bokashi fertilizer dose of 1.2 kg/plant (B2) gave the best results in all observed parameters, except the age at which flowering begins. Treatment with a gibberellin hormone concentration of 100 ppm (G2) gave the best results at plant height 35 DAP, stem diameter 28 and 35 DAP, age at start of flowering, fruit diameter, and harvest index.

Keywords: *Eggplant, bokashi fertilizer, giberellin hormone.*