GROWTH AND YIELD RESPONSES OF GELATIK EGGPLANT (Solanum melongena L.) ON VARIOUS ANIMAL MANURE FERTILIZERS AND PACLOBUTRAZOL APPLICATION

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ABSTRACT

Eggplant (Solanum melongena L.) is a seasonal vegetable crop. Farmers apply inorganic fertilizer excessively, which affects soil fertility and decreases eggplant productivity. The research aimed to determine the use of different types of animal manure fertilizer and paclobutrazol concentration to increase the growth and yield of the best eggplant plants. This research was carried out at Faculty of Agriculture Experimental Garden UPN "Veteran" Yogyakarta in April - July 2023. The research method used Split-Plot Design repeated three times. The type of animal manure fertilizer was the main plot, consisting of 3 levels: cow, goat, and chicken manure. Paclobutrazol concentration as sub plot, consisting of 5 levels, namely 0 ppm, 50 ppm, 100 ppm, 150 ppm, and 200 ppm. Observations were analysed using analysis of variance (ANOVA) at 5% level and further tested with DMRT test at 5% level. The results showed there was no interaction between the type of animal manure fertilizer and paclobutrazol concentration. Chicken manure fertilizer was significantly better in the parameters of plant height 21 DAP. Paclobutrazol concentrations of 150 ppm and 200 ppm gave the best results on fruit number and fruit weight per treatment unit.

Keyword: Eggplant, Animal Manure, Paclobutrazol