

**APPLICATION OF PGPR BAMBOO ROOTS AND COW MANURE
BOKASHI FERTILIZER ON THE GROWTH AND YIELD OF PURPLE
EGGPLANT (*Solanum melongena* L.)**

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ABSTRACT

Eggplant (*Solanum melongena* L.) is one of the important vegetable commodities as a food ingredient for most Indonesian people. This study aims to determine the interaction of bamboo root PGPR and cow manure bokashi fertilizer, compare treatments with controls, determine the concentration of bamboo root PGPR and the best dose of bokashi fertilizer. The study was conducted in Bawuran, Pleret, Bantul, Yogyakarta in July - October 2022. The study used a Completely Randomized Design with two factors and one control. The first factor is bamboo root PGPR with a concentration of 15 mL/Liter, 20 mL/Liter, and 25 mL/Liter. The second factor is the dose of cow dung bokashi fertilizer, namely 10 tons/ha, 15 tons/ha, and 20 tons/ha. Plus control using NPK fertilizer with a dose of 2.5 g/plant. The data obtained were analyzed using Sidik Ragam ANOVA, followed by a DMRT test at a level of 5%, to determine the real difference between treatment and control tested using Orthogonal Contrast. The results showed that there was an interaction on the number of fruits per plant. The combination of treatments was better than the control on the parameters of stem diameter 28 hst, number of leaves 28 hst, flowering age, number of fruits per plant, fruit length, fruit diameter, fruit weight per plant, fruit weight per plot, and fruit weight per hectare. The concentration of bamboo root PGPR 20 mL/Liter gave the best results on the parameters of flowering age and number of fruits per plant. The dose of cow manure bokashi fertilizer 15 tons/ha gave the best results on the parameters of the number of fruits per plant.

Keywords : *Eggplant, PGPR bamboo roots, Cow manure bokashi fertilizer*