

**GROWTH AND YIELD OF OKRA (*Abelmoscus esculentus* L.) ON
VARIOUS TYPES OF ANIMAL MANURE AND CONCENTRATION
PLANT GROWTH PROMOTING RHIZOBACTERIA**

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ABSTRACT

Okra was a multipurpose plant that had many benefits, especially in the health sector. The study aims to obtain the best type of animal manure fertilizer and PGPR concentration for the growth and yield of okra. The study was conducted in the rice fields of Sinduharjo village, Ngaglik, Sleman. The study used a Split Plot Design. The Main Plot was the type of animal manure fertilizer consisting of 3 levels, namely cow manure, goat manure and chicken manure. The Subplot was concentration of PGPR consisting of four levels, namely 0, 15, 30 and 45 ml/L. Data were analyzed using analysis of variance (ANOVA), followed by the Duncan Multiple Range Test (DMRT) at the 5% level to determine the effect between treatments. The results showed that there was an interaction on the stem diameter at 60 DAP, fruit length and fruit diameter. Application of chicken manure fertilizer gave the best results at plant height of 45 DAP and 60 DAP, number of leaves 15 DAP, stem diameter 45 DAP, fruit weight per plant, fruit weight per plot and converted fruit weight per hectare. Application of goat manure fertilizer and chicken manure fertilizer gave the best results at plant height of 15 DAP and 30 DAP, stem diameter 15 DAP and 30 DAP and number of fruits per plot. PGPR concentration did not have a significantly different effect on the plant growth and yield.

Keywords: okra, animal manure, PGPR