

**RESPONS OF GROWTH AND YIELD OF BEANS (*Phaseolus vulgaris* L.)
ON APPLICATION PGPR CONCENTRATION AND TOP PRUNING
TIME**

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ABSTRACT

The productivity beans (*Phaseolus vulgaris* L.) can be improved through care and cultivation techniques, such as application concentration of PGPR and pruning time. The research aims to determine the concentration of PGPR and the correct time for pruning shoots on the growth and yield of upright bean plants. The study will be conducted at Zena Florist, Tegalsari, Kec. Ngemplak, Kabupaten Sleman, Daerah Istimewa Yogyakarta in May 2023 – Agustus 2023. The research method used a Randomized Complete Group Block Design (CRD) consisting of two factors. The first factor is PGPR concentration which consisted of 15 ml/L, 20 ml/L and 25 ml/L. The second factor is top pruning time consisted of 3 treatment levels, namely 14 DAP and 28 DAP, 14 DAP and 35 DAP, and 14 DAP and 42 DAP. This resulted in 9 treatment combinations, each repeated 3 times. The research results were analyzed using ANOVA, to determine real differences, the Duncan Multiple Range Test (DMRT) was carried out at a level of 5%. The research results showed that there was an interaction between PGPR concentration treatment and pruning time on stem diameter parameter at 42 days after planting, time of flower emergence, and number of pods per plant. Treatment with a PGPR concentration of 20 ml/L and 25 ml/l gave equally good result. The pruning time of 14 and 35 DAP gave the best results in dry weight of plant.

Keywords: PGPR, pruning time, *Phaseolus vulgaris* L.