Pengaruh Aplikasi *Plant Growth Promoter Rizobacter* (PGPR) dan Pemangkasan Pucuk Terhadap Produksi dan Mutu Benih Kacang Hijau (*Vigna radiata L.*.)

(*Application of Plant Growth Promoter Rizobacter (PGPR) and Shoot Pruning on Production and Seed Quality of mung bean (Vigna radiata L.))*

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ABSTRACT

One of the efforts in increasing the production and quality of mung bean seeds can be done with the application of Plant Growth Promoter Rhizobacter (PGPR) and Pruning Shoots. This research was conducted to determine the effect of Plant Growth Promoter Rhizobacter (PGPR) and Pruning Shoots on increasing the production and quality of mung bean seeds (Vigna radiata L.). This research was conducted in September - December 2023, located in Tegal Gede Village, Sumbersari District, Jember Regency, East Java. The experimental design used was a factorial Randomised Block Design (RBD) consisting of two factors and repeated 3 times. The first factor was Plant Growth Promoter Rhizobacter (PGPR) concentration, consisting of 5 ml/l (R1), 10 ml/l (R2), and 15 ml/l (R3). The second factor is Shoot Pruning (P), consisting of 15 days after planting (P1), 20 days after planting (P2), and 25 days after planting (P3). The results obtained were then analysed using the ANOVA (Analysis of Variance) and then the LSD (*Least Significant Difference*). *The results showed that the treatment of Plant Growth Promoter Rhizobacter (PGPR) application with a concentration of 10 ml/l (R2) gave the best results and significantly different from the parameters of pod weight per plant (40.67 g), seed weight per plant (36.59 g), seed weight per plant (26.91 g), number of seeds per plant (242.35), and potential production per hectare (2.24 tons). While the 25 days after planting shoot pruning treatment (P3) gave the best results and was significantly different from the parameters of pod weight per plant (47.05 g), pod weight per plot (1060.11 g), seed weight per plant (42.71 g), seed weight per plant (30.95 g), seed weight per plot (878.55 g), number of seeds per plant (275.28), potential production per hectare (2.58 tons) and actual production per hectare (3.26 tons).*

Key Word : *Mung bean,* PGPR*, Shoot pruning, Seed production*