

**Efektivitas Pupuk Phospor dan PGPR (*Plant Growth Promoting Rhizobacteria*) terhadap Produksi dan Mutu Benih Kedelai (*Glycine max* (L.) Merrill) Edamame. *The Effectiveness of Phospor and PGPR (Plant Growth Promoting Rhizobacteria) Fertilizers on The Production and Quality of Edamame Soybean (Glycine max (L.) Merrill) Seed***

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***ABSTRACT***

*Production and quality of edamame soybean (Glycine max (L.) Merrill) seed was still low, there needs of efforts to increase the production of seeds in a good quality, one of them was by improving the cultivation techniques using application of Phospor and PGPR (Plant Growth Promoting Rhizobacteria) fertilizers. The purpose of this research was to know the production and quality of Edamame soybean seed with different dosage of Phospor fertilization and concentration of PGPR application. This research was conducted from September to January 2016 by using Randomized Complete Block Design (RAK) with 2 factors. The first factor was Phospor fertilization with dosage of 280 Kg / Ha (P1), 420 Kg / Ha (P2) and 560 Kg / Ha (P3). The second factor was the concentration of PGPR application consisting of 0 ml / l (G0), 10 ml / l (G1), 12.5 ml / l (G2), and 15 ml / l (G3). The parameters measured were plant height, number of pods, weight of dry pods, weight of dry seeds, seed production per Ha, seed germination, seed growth rate, and simultaneity of seed growth. The result showed that the best treatment was Phospor fertilization with dosage of 560 Kg / Ha (P3) combined with PGPR application of 15 ml / l (G3) concentration which gave significant effect to the weight of seed per plant parameter.*

***Key words*** : Soybean, Phospor Fertilizer, PGPR