Application of PGPR (*Plant Growth Promoting Rizobacteria*) and Maintenance of Fruit Amount on Cucumber Seed Quality. Advisor : Dwi Rahmawati, SP, MP.,

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ABSTRAK

The purpose of this study is to find an appropriate combination of PGPR giving and to know the effect that the maintenance of the amount of fruits has on the quality of cucumber seeds. The study was looked after in June 2021-august 2021 at Politeknik Negeri Jember, East Java at an altitude of 89 masl and a temperature between $23C^{\circ} - 32C^{\circ}$ using a factorial Randomized Block Design (RAK) with 2 treatment combinations. The first factor is the application of PGPR with 4 levels P0 = No PGPR (control), P1 = 5 ml/L PGPR, P2 = 7 ml/L PGPR, P3 = 9 ml/L PGPR. The second factor is the maintenance of the number of fruit planted with 4 levels B0 = No maintenance of the number of fruit planted (control), B1 = Maintenance of 1 fruit, B2 = Maintenance of 2 pieces of planting, B3 = Maintenance of 3 pieces of planting. The data obtained was analyzed for variance / ANOVA (*Analysis Of Variance*), if the research showed significantly different results, it would be further tested with the DMRT (*Duncan Multiple Range Test*) test.

The application of PGPR gave very significantly different results (**) on the observation parameters of fruit weight per plant and seed weight of 1000 grains. Maintenance of the number of fruits (B1) gave very significant results (**) on the observation parameters of fruit weight per plant, number of pithy seeds, and seed weight of 1000 grains. The interaction between the application of PGPR and the maintenance of the number of fruits did not have a significant effect on all observation parameters.

Keywords: Application of PGPR Giving, Maintenance of Number of Fruits