

Uji Aplikasi PGPR (*Plant Growth Promoting Rizobacteria*) dan Jumlah Buah Terhadap Produksi dan Mutu Benih Mentimun (*Cucumis sativus L*) (PGPR Application Test (*Plant Growth Promoting Rizobacteria*) and Number Of Fruits On Cucumber Seed Production and Quality (*Cucumis sativus L.*)) Supervised by : Dr. Ir. Nantil Bambang Eko S., M.Si.

Nur Firdausiah

*Study Program of Seed Production Technique
Department of Agricultural Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian*

ABSTRACT

*This study aims to determine the appropriate combination of PGPR (*Plant Growth Promoting Rhizobacteria*) and to determine the effect of maintaining the number of fruits on the production and quality of cucumber seeds. This research was conducted in November 2022 – January 2023 in Peji Lengkong Village, Mumbulsari District, Jember Regency, East Java Province at an altitude of 89 meters above sea level and temperatures between 23°C-32°C. Using a factorial Randomized Block Design (RBD) with 2 treatment factors. The first factor was the application of PGPR with 4 level of P0 = without PGPR (control), P1 = 12,5 ml/L, P2 = 15 ml/L, P3 = 17,5 ml/L, and second factor is maintenance of the number of fruit planted with 4 level of B0 = without maintenance of fruit plantations (control), B1 = maintenance of 3 fruit trees, B2 = maintenance of 4 fruit trees, B3 = maintenance of 5 fruit plants. Data were analyzed using the ANNOVA test (Analysis of Vriance) and follow-up test (DMRT) with an error rate of 5%. .the results showed that the PGPR (P) gives very significantly different result (**) in parameters of observing cucumber seed production per hectare, seed weight planted and number of fruit planted. Maintaenance of the number of fruit (B) gave highly significant results (**) on the parameters observed of cucumber seed production per hectare, seed weight planted, number of extra plantings and weight 1000 the interaction between the PGPR application and the maintenance of the number of pods did not significantly affect all observed parameters.*

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