Aplikasi Pupuk Dasar Fosfor dan Pemangkasan Pucuk Terhadap Produksi dan Mutu Benih Mentimun (*Cucumis Sativus* L.). *Application of Phosphorus Basic Fertilizer and Pruning Bud to the Production and Quality of Cucumber Seeds (Cucumis Sativus L.).* Advisor by Dr. Ir. Rahmat Ali Syaban, M.Si and Ahmad Muhlis, SP

Siti Kamelia
Study Program of Seed Production Technique
Department of Agriculture
Program Studi Teknik Produksi Benih
Juruasan Produksi Peetanian

ABSTRACT

Low production of cucumbers is a problem while the demand market is high. This study aims to determine the effect of phosphorus fertilizer and optimal bud pruning in order to increase the production and quality of cucumber seeds. This research was conducted in October 2018 to December 2018 in the village of Tegalharjo, Glenmore, Regency of Banyuwangi and at the laboratory of PT. EWSI Jember. The experimental design used was randomized block design with 3 replications and 27 experimental units. The first factor was application of SP 36 phosphorus fertilizer (P) which consits of three dosage levels, 30 grams SP 36 per plant (P1), 40 grams SP 36 per plant (P2), and 50 grams SP 36 per plant (P3). The second factor was pruning (T) which consists of 3 levels, pruning all branches and maintained the main stem (T1), pruning of 6th segment on the main stem and maintained 2 branches (T2), pruning of 6th segment on the main stem and maintained 3 branches (T3). The data was analyzed by f test (ANOVA) and Duncan's Multiple Range Test (DMRT) 5%. The result of this research showed that there were no interaction between 2 factors to all parameters. The application of phosporous fertilizer SP 36 at dose 50 grams per plant had a significant effect on filled out seed, weight of 1000 seeds, seed germination, growth simultaneity, and growth speed. Pruning of 6th segment on the main stem gave a significant effect to the number of fruits and pruning of all branches and maintained the main stem gave significant effect to filled out seed.

***Keywords**: Cucumber, Pruning, SP36*