Pengaruh Proporsi Bunga dan Waktu Penyerbukan Terhadap Produksi dan Mutu Benih Mentimun *(Cucumis Sativus* L.*)* Hibrida Kode Produksi 0746

Effect of Proportion Flowers and Pollination Time on Seed Production and Quality of Cucumber (Cucumber sativus L.) Hybrid Prodution code 0746.
Advisored by Ir. Suwardi, M.P

Juli Anis Eka Saputri
Study Prgram of Seed Production Technique
Majoring of Agriculture Production Departement
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

ABSTRACT

Cucumber (Cucumis sativus L.) is one of the vegetable plants that has high economic value. One of the problems of decreasing seed quality caused by various factors, such as plant diseases, pest attacks, climate change, and suboptimal cultivation activities. One alternative that can be considered to increase cucumber seed production is the use of the right proportion of male flowers during pollination. In addition to the proportion of flowers, pollination time in cucumber plants also affects seed production. The time of pollination can determine the amount of pollen that will stick to the stigma. The study "The Effect of Pollination Time and Flower Proportion on Cucumber Seed Production and Quality (Cucumis sativus L.) code 0746." was conducted in July - September Pakem Hamlet, Ahmad Yani Street, Wringentelu Village, Puger District, Jember Regency, Seed Production Engineering Laboratory, and Jember State Polytechnic Seed Processing Laboratory. The experimental design used in this study was a factorial Randomized Block Design (RCBD) consisting of 2 factors, namely flower proportion (B) and pollination time (W). So there are 9 treatment combinations, each experiment was repeated 3 times. The results of the study concluded that the flower proportion treatment (B) had a highly significant effect on several parameters: number of seeds per fruit (155 seeds), seed weight per fruit (4.2 g), number of fruits per plant (5 fruits), number of seeds per plant (802 seeds), seed weight per plant (21.91 g), seed yield per hectare (773 kg), 1000-seed weight (28.456 g), seed germination rate (98.67%), and seedling uniformity (97.67%). The pollination time treatment (W) also had a highly significant effect on the number of seeds per fruit (161 seeds), seed weight per fruit (4.47 g), number of fruits per plant (5 fruits), number of viable seeds per plant (835 seeds), number of viable seeds per fruit (161 seeds), number of seeds per plant (835 seeds), seed weight per plant (22.32 g), seed yield per hectare (773 kg), 1000-seed weight (28.678 g), and seedling uniformity (99.56%). The interaction between flower proportion (B) and pollination time (W) had a highly significant effect on the number of seeds per fruit (183 seeds), viable seed weight per fruit (4.87 g), number of seeds per plant (985.67 seeds), viable seed weight per plant (26.510 g), seed yield per hectare (773 kg), seed germination rate (99.67%), seedling growth rate (24.280%), and seedling uniformity (99.67%).