

Proporsi Bunga Jantan Dalam Penyerbukan Serta Pengaruh Jenis Mulsa Terhadap Produksi dan Mutu Benih Mentimun (*Cucumis stivus* L.). (The Proportion of Male Flowers in Pollination and the Influence of Mulch Types on the Production and Quality of Cucumber Seeds (*Cucumis sativus* L.). Supervisor Ir. Suwardi, MP and Ir. Subandi.)

Achmad Rafikul Wafa
Study Program of Seed Production Technique
Department of Agricultural Production

ABSTRACT

*Cucumber is a popular vegetable in Indonesia, as time goes by the cucumber's demand is increasing, but its production continues to decline. One condition that influenced the decline in cucumber production was the low use of superior seeds during cultivation. Constraints experienced in the construction of superior seeds such as hybrid seeds are the arrangement of pollen less than the greatest because of the condition of male plants on the ground. so, necessary to research pollen for hybridization. The aim of this study was to decide the proportion of male flowers in pollination and mulch types in the production and quality of cucumber seeds (*Cucumis sativus* L.). This research uses the factorial randomized block design (RBD) method, by treating the proportion of flowers B1 (1 male flower for 1 female flower), B2 (1 male flower for 2 female flowers, and B3 (1 male flower for 3 female flowers) and treatment types of mulch M0 (without mulch), M1 (black silver mulch), and M2 (silver white mulch), we replicated 3 times for each treatment. The result showed that in the treatment the proportion of flowers differed very on the limits of the number of samples, the weight of the fruit of the sample, the weight of the seed of the sample, and the weight of the seed plots, the highest yield was from treatment B1 (1 male flower for 1 female flower) with the mean the results of the number of sample fruits (3.3 fruits), sample weight of fruits (922.2 grams), the weight of seed samples (7.6 grams), and weight of seed plots (111 grams), and the effect was not significant on fruit diameter treatment, fruit length, be rat 100 seeds, germination power, growth speed (KCT), and simultaneous growth (KST). In the management of different mulch, the limits of the number of samples, sample weight, sample weight, seed weight per plot, weight 100 seeds, germination power, growth speed (KCT), and growth simultaneity (KST), the highest results got from the treatment of M2 (silver white mulch) with the average yield of sample fruits (3.4 pieces), the weight of sample fruits (1022.2 grams), the weight of seed samples (7.88 grams), the weight of seed plots (135 grams), and power germination (97.8%), and in the treatment of M1 (silver black mulch) with an average yield of 100 seed weight (2.338 gram), growth speed (KCT) (24.3%), and simultaneity of growth (KST) (88%), and not different effect on the limits of fruit diameter and fruit length.*

keywords: Cucumber Production, Flower Proportion, Mulch, Seed Production Techniques.