

THE EFFECT OF EGG SHELL AND NPK FERTILIZER ON THE GROWTH AND YIELD OF BABY CUCUMBERS

By: Shafira Athameyvia

Supervised by: Ellen Rosyelina Sasmita and Ari Wijayani

ABSTRACT

Low cucumber production is closely related to less than optimal cultivation. One effort to increase yields is through providing the right nutrients. The research aims to determine the interaction between giving egg shells and NPK fertilizer on the growth and yield of baby cucumbers. The research used a Complete Randomized Block Design (RAKL) field trial method. The first factor is the application of egg shells 25 g/plant, 45 g/plant, 65 g/plant, the second factor is the application of NPK fertilizer 200 kg/ha, 300 kg/ha, 400 kg/ha. Plants without treatment served as controls. Data were analyzed with *Analysis of Variance* (ANOVA) level 5%, when there is a real influence the test is continued *Duncan's Multiple Range Test* (DMRT) level 5%. Orthogonal Contrast Test to determine the real difference between the treatment and control combinations. The results of the study showed that there was no interaction between the treatment of egg shells and NPK fertilizer on all parameters. Giving egg shells at a dose of 45 g/plant showed the best results in the parameters of number of leaves, number of fruit per plant, fruit weight per plant, fruit weight per plot and fruit weight per hectare. Providing NPK fertilizer was not able to increase the growth and yield of baby cucumber plants in all parameters.

Keywords : Cucumber, Egg Shell, NPK Fertilizer