

EFFECT OF CHICKEN MANURE DOSAGE AND GIBBERELIN CONCENTRATION ON GROWTH AND YIELD OF BABY CUCUMBER PLANTS

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ABSTRACT

Cucumber production in Indonesia is currently still relatively low due to a less intensive and efficient cultivation system. The large number of cucumber flowers that fall also makes the cucumber yield less than optimal. The aim of this study was to determine the effect of chicken manure doses and gibberellin concentrations on the growth and yield of cucumber plants. The study used a completely randomized design (CRD) field trial method consisting of two factors with 3 replications. The first factor is the dose of chicken manure 15, 20 and 25 tons/ha. The second factor is the concentration of gibberellin 100, 200 and 300 ppm. The results of the study were analyzed using ANOVA, to find out the significant differences between the treatments followed by the Duncan Multiple Range Test (DMRT) at 5% test level. The test between treatment and control was tested by Orthogonal Contrast. The results showed that there was an interaction between the doses of chicken manure and the concentration of gibberellins on the parameters of the number of flowers, the number of fruits per plant, the weight of the fruit per fruit, and the weight of the fruit per plant. Treatment of chicken manure doses of 20 tons/ha showed the best results on the parameters of the number of flowers, number of fruits per plant, fruit weight per fruit, and fruit weight per plant. Treatment with gibberellin concentration of 200 ppm showed the best results on the parameters of flower emergence time, number of flowers, number of fruits per plant, fruit weight per fruit, and fruit weight per plant.

Keywords: cucumber, chicken manure, gibberellin