

**RESPONSE OF GROWTH AND YIELD OF BABY CUCUMBER PLANTS
(*Cucumis sativus* L.) TO GA3 CONCENTRATION AND NPK FERTILIZER
DOSAGE**

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ABSTRACT

Cucumber plants have experienced a decline in production and tend to fluctuate from year to year. The low cucumber production may be due to less intensive and inefficient cultivation practices. This study aims to determine the appropriate concentration of gibberellin (GA3) and the correct NPK fertilizer dosage for cucumber plant growth and yield. The method used in this research is a field experiment arranged using a two-factor Randomized Complete Block Design (RCBD). The first factor is the concentration of GA3, consisting of three levels: 150, 200, and 250 ppm. The second factor is the dosage of NPK fertilizer, consisting of three levels: 200, 250 and 300 kg/ha. The data were analyzed using Analysis of Variance (ANOVA) at a 5% significance level and further tested with Duncan's Multiple Range Test (DMRT) at a 5% significance level. The research results showed no interaction between GA3 treatment and NPK fertilizer for all parameters. GA3 concentrations of 150 ppm to 250 ppm had the same effect on growth and yield, except that 200 ppm GA3 gave the best results in terms of flower emergence time. NPK fertilizer at a dose of 250 kg/ha gave the best results in terms of the number of leaves at 19 days after planting (DAP), fruit length at the first harvest, and fruit diameter at the first harvest.

Keywords: *Cucumber, GA3, NPK*