

**APPLICATION OF VARIOUS GIBBERELIN AND PACLOBUTRAZOL
CONCENTRATIONS ON THE GROWTH AND YIELD OF
CUCUMBER (*Cucumis sativus* L.)**

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ABSTRACT

The application of gibberellin and paclobutrazol ZPT is an effort to increase the growth and yield of cucumbers. This research aims to determine the appropriate concentration of gibberellin and paclobutrazol on the growth and yield of cucumber plants. The research is a field experiment using the RAKL method in two-factor factorial polybags. The first factor is gibberellin concentration (100ppm, 200ppm, 300ppm), the second factor is paclobutrazol concentration (125ppm, 250ppm, 375ppm) and the control uses NPK16:16:16. An orthogonal contrast test at 5% level was carried out to determine the difference between the treatment combination and the control, then tested for significant differences between treatments using ANOVA at 5% level, followed by using DMRT at 5% level. The results showed that the combination of treatments with a gibberellin concentration of 200 ppm and paclobutrazol 375 ppm gave better growth and yield compared to the control in terms of plant height, flower emergence time, number of female flowers, number of flowers that became fruit, fruit weight per fruit, fruit weight per plot, number of fruit per plant, and fruit weight per plant, there was an interaction between treatments of 200 ppm gibberellin concentration and 375 ppm paclobutrazol on the number of female flowers, number of flowers that became fruit, number of fruit per plant, and fruit weight per plant. The gibberellin concentration of 200 ppm shows the right concentration at the time of flower emergence, the paclobutrazol concentration of 375 ppm shows the right concentration for fruit weight per experimental unit and plant height.

Keywords: cucumber, paclobutrazol, gibberellin, concentration, erina F1