

# **THE EFFECT OF PRUNING AND PLANTING SPACING ON THE GROWTH AND YIELD OF JAPANESE CUCUMBER (*Cucumis sativus* L.)**

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## **ABSTRACT**

The need for cucumber continues to increase in line with the increasing population and public awareness about human health. Efforts can be made by manipulating growth by pruning and plant spacing, so as to obtain the right type of pruning and plant spacing and be able to increase cucumber crop yields. The experiment was conducted from July to October 2024 in Jongke Tengah Village, Sendangadi, Mlati, Sleman, Yogyakarta. This research is a field experiment designed using a factorial experiment using a Randomised Complete Block Design (RCBD) consisting of 2 factors. The pruning treatment consisted of no pruning, shoot pruning, 3-branch pruning, and a combination of shoot and 3-branch pruning. Meanwhile, the planting distance treatment was 60 cm x 30 cm and 60 cm x 40 cm. Data were analysed using analysis of variance (ANOVA) at the 5% level followed by DMRT at the 5% level to determine differences between treatments. The results showed that there was an interaction between pruning treatment and plant spacing on the number of flowers in the growth and production of cucumber plants. The shoot pruning treatment gave the best results on the parameter of the number of fruits per experimental plot. Plant spacing treatment of 60 cm x 40 cm was the most suitable treatment on the parameters of fruit diameter and fruit length.

**Keywords :** Cucumber, Production, Pruning, Planting Distance