

# **The Effect of Planting Spacing and Number of Seeds per Hole on the Growth and Production of Edamame Soybean Plants**

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## ***ABSTRACT***

The edamame soybean plant is a plant originating from Japan and usually lives in the tropics. The need for edamame soybeans is increasing and the supply of edamame seeds in Indonesia is still constrained, so that the price of seeds is quite high, it is necessary to modify edamame cultivation, namely by establishing an appropriate and efficient planting strategy for edamame plants. The purpose of this study was to determine the best spacing and the number of seeds per hole on the growth and yield of edamame soybeans. The research was conducted in Baratan Village, Patrang District, Jember Regency. In November 2022 - January 2023. With an altitude of 89 masl which has an average temperature of 24 °C to 30 °C. The soil type is regusol soil. This study used a randomized block design (RBD) with two factors with three repetitions. The first factor is the spacing which consists of 20 cm x 15 cm, 25 cm x 20 cm, 20 cm x 10 cm x 40 cm, and 15 cm x 15 cm x 30 cm. While the second factor is the number of seeds per hole consisting of 1 seed per hole and 2 seeds per hole. The results showed that there was a significant difference in spacing, the treatment of spacing was significantly different in observing the number of productive branches, the number of empty pods per sample, the weight of the pods per sample, the weight of the empty pods per sample. The effect of spacing of 20 cm x 15 cm is the best spacing because it shows the highest pod weight per sample, namely 73.5 g/plant. The treatment of the number of seeds per hole had no significant different effect on all treatments as well as the interaction of the treatments was not significantly different.

**Keywords** : *Modification, Increase, Yield, Pods..*