

THE EFFORT IN INCREASING EDAMAME SOYBEAN PRODUCTION (*Glycine max* L. Merril) WITH MODIFICATION OF PLANTING DISTANCE AND ADDITION OF P-FERTILIZER

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ABSTRACT

Edamame is a food crop commodity that is a great demand product in the international market. Edamame soybean production averages around 10-12 tons/ha, this figure is not sufficient to meet market needs. Consumer demand from year to year consumption of edamame soybeans has increased. One of the efforts to increase edamame soybean production is by modifying the spacing and P-fertilization which can increase crop productions and seasons. This Research using Randomized Complete Block Design with two factors, namely spacing and dose of P-fertilizer, 9 treatment combinations, and 3 replications. The spacing factor consists of 3 levels, they are 30cm x 15cm, 25cm x 25cm, and 20cm x 12.5cm x 40cm. While the P-fertilization factor consisted of 3 levels, they are 10 g/plot, 12.5 g/plot, and 15 g/plot. The result shows that the modification of the 30 cm x 15 cm spacing had a significantly different effect with an average of 78.73 cm. While the treatment with a dose of 125 kg/ha of P-fertilizer gave a significantly different effect on the number of productive branches, the number of root nodules, the number of pods per-main book, the weight of wet pods containing 1 seed with an average of 164 grams. The combination treatment of 20 cm x 12.5 cm x 40 cm and a dose of 125 kg/ha of P fertilizer also interacted and gave a significant effect on the weight of pod content 1 with an average of 178.66 grams.

Keywords : *Edamame, Plant Distance, SP-36*