

Pengaruh Jarak Tanam Dan Jenis Mulsa Terhadap Produksi Dan Mutu Benih Tanaman Mentimun PMSKE 0405 (*Cucumis sativus* L.). *The Effect Of Plant Standing And Type Of Mulch On The Production And Quality Of PMSKE 0405 Cucumber Seed (*Cucumis sativus* L.).* Supervisor by: Ir. Sri Rahayu, MP.

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ABSTRACT

*Cucumber is one of the horticultural crops and belongs to the gourd family (*Cucurbitaceae*) which is much loved by the public because it has many benefits both for consumption, health, or as a health product. One of the efforts to meet the national demand for cucumbers independently is to modify plant cultivation techniques. This research was conducted aiming to determine the effect of spacing and type of mulch on the production and quality of cucumber seeds. This research was conducted in February - April 2022 in Grujugan Kidul Village, Grujugan District, Bondowoso Regency. This study uses RCBD (Randomized Complete Block Design) Factorial which consist of 2 factor with 2 factors and was repeated 3 times. The first factor is spacing with 3 levels, namely spacing of 30x60 cm (J_1), spacing of 40x60 cm (J_2), and spacing of 50x60 cm (J_3). The second factor was the type of mulch with 3 levels, namely without mulch/control (M_1), rice straw mulch (M_2), and silver black plastic mulch (M_3). The data obtained was then tested using ANOVA and BNT 5%. The results of this study showed that the spacing treatment had a significant effect on the parameter of the simultaneity of seed growth with an average of 98%, and had a very significantly different effect on the parameter of seed production per hectare with an average of 1174.07 Ton/ha. The type of mulch treatment had a very significantly different effect on the parameters of the number of fruit planted with an average of 7.33 fruit, the number of good seeds planted with an average of 1137.86 grains, the weight of good seed planting with an average of 29, 47 grams, and seed production per hectare with an average of 1014.51 Ton/ha. The spacing treatment had no significant effect on the parameters of plant height, fruit weight, 1000 grain weight, germination rate and seed growth rate. The interaction between spacing and the type of mulch had no significant effect on all observed parameters.*

Key words: *Cucumber, spacing, type of mulch, production, and seed quality*