

Pengaruh Jarak Tanam dan Sistem Olah Tanah Terhadap Produksi Benih Jagung Komposit Varietas Lamuru (*Zea mays L.*). (The Effect of Planting Spacing and Tillage System on Seed Production of Composite Maize Lamuru Variety (*Zea mays L.*)) Supervisor: Dr. Ir. Nurul Sjamsijah, MP.

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ABSTRACT

One of the efforts to increase the production of lamuru varieties of corn seeds is with improved cultivation techniques for corn plants. How to fix it by modifying the spacing and tillage system. This study aims to determine the effect of spacing and soil tillage systems on the production of lamuru varieties of maize seeds. This research was conducted in the Jember State Polytechnic research field from August to November 2022. The research used factorial Randomized Complete Block Design (RCBD) method with 3 replications. The data will be analyzed using ANOVA and followed by the DMRT test at the 5% level. The first factor is the spacing (80×20 cm), (80×25 cm), and (80×30 cm). The second factor is the tillage system, with intervals without tillage, minimum tillage and maximum tillage. The results showed that the treatment spacing (80 × 30cm) had a highly significant effect on the parameters of the weight of the cobs planted (308.73 gram), the weight of seeds per ear (178.07 gram), the number of seeds per ear (493.33 gram).), weight of 1000 seeds (386.53 gram), seed production per plot (2785.79 grams) and production per hectare (6.64 ton/ha). The perfect tillage system had a highly significant effect on the parameters of the number of seeds per cob (494.26 gram), the weight of 1000 seeds (338.11 gram), seed production per plot (2972.24 gram), and production per hectare. (7.08 ton/ha).

Key word: *Zea mays L., planting distance, tillage system*