

Pengaruh Perendaman Hormon Alami Air Kelapa (*Cocos nucifera* L.) dan Jarak Tanam terhadap Pertumbuhan dan Produksi Benih Jagung Komposit (*Zea mays* L.) *The Effect of Immersing The Natural Hormones of Coconut Water (*Cocos nucifera* L.) and Spacing On The Growth and Production of Composite Corn Seeds (*Zea mays* L.)* Supervisor Ir. Hari Prasetyo, MP

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ABSTRACT

Corn is included in the group of food crops which is a food source that contains protein and is a food that has the second carbohydrate content after paddy or rice. In an effort to increase plant growth and development, natural hormones can be given coconut water and the use of proper spacing. This research was conducted in Kemuning Lor Village, Panti District, Jember from August to November 2022. The experimental design used was a randomized block design (RBD) with 2 factors. Each factor consists of 3 levels which are repeated 3 times. The first factor is coconut water concentration which consists of 0% (P1), 50% (P2), 75% (P3). The second factor is planting distance which consists of 75 cm x 25 cm (J1), 80 cm x 20 cm (J2), 80 cm x 30 cm (J3). Data were analyzed using the ANOVA and further testing using the DMRT 5% if there was a significant difference in the treatment. The results showed that the natural hormone immersion treatment of coconut water had a highly significant different effect on the parameters of plant height 30, 45 (DAP), number of leaves 15, 30 (DAP), dry seed weight per cob, and potential seed production per hectare. The natural hormone immersion treatment of coconut water had a significantly different effect on the parameters of plant height at 15 (DAP), number of leaves at 45 (DAP), dry seed weight per plant, weight of 1000 seeds, and potential seed production per plot. The spacing treatment had a highly significant effect on the parameters of the number of leaves at 45 (DAP), the weight of dry seeds per cob, the potential for seed production per plot and the potential for seed production per hectare. The spacing treatment had a significantly different effect on the parameters of plant height at 45 (DAP), number of leaves at 30 (DAP), plant dry seed weight and 1000 seed weight.

Keywords : *Corn, Natural Hormone, Plant Spacing*