GROWTH AND YIELD OF SWEET CORN (Zea mays Saccharata Sturt) AT VARIOUS PLANTING SPACING AND NPK FERTILIZER DOSAGE

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ABSTRACT

Consumer demand for sweet corn continuesly to increase, so it is necessary to increase sweet corn production through improved cultivation techniques by paying attention to plant spacing and NPK fertilizer application. The study aims to assess the appropriate spacing and dosage of NPK fertilizer in sweet corn, determine the best spacing and dosage of NPK fertilizer on the growth and yield of sweet corn plants. The research used a factorial Randomized Complete Block Design (RCBD) field experiment with 3 replications. The first factor is the plant spacing of 3 levels, namely, 70 cm x 20 cm, 70 cm x 30 cm, 70 cm x 40 cm. The second factor is the dosage of NPK fertilizer as much as 3 levels, namely, 400, 450, 500 kg/ha. Data were analyzed with 5% variance and further tested by DMRT at the 5% level. The results showed that there was an interaction between the treatment of plant spacing and the dosage of NPK fertilizer on the parameters of the number of leaves at the age of 35 DAP, the weight of the cob per hectare, and the weight of the cob with husk. The spacing of 70 x 40 cm gave good growth and yield on the parameters of stem diameter, cob length and fresh weight of stalk. The NPK fertilizer dosage of 450 kg/ha gave the best growth on the number of leaves at 45 DAP compared to the NPK fertilizer dosage of 500 kg/ha.

Keywords: Sweet Corn, Planting Distance, NPK Fertilizer