

ABSTRACT

In recent years, sweet corn production in Indonesia, especially in Aceh province, has experienced a significant decline in production. The lack of availability of nutrients in the soil due to intensive crop cultivation has caused the availability of these nutrients to decrease. The aim of this research is to determine the application of NPK fertilizer and liquid organic fertilizer with coconut water for the growth and yield of sweet corn plants. The method used in this research was a 2 Factorial Randomized Block Design with 3 replications. The NPK fertilizer factor consists of 3 levels, namely control, 22 g/polybag, 44 g/polybag. Factors Liquid organic fertilizer for coconut water consists of 4 levels, namely control, 100 ml/l, 150 ml/l, 200 ml/l. The variables observed were plant height, stem diameter, number of leaves, days of male flowering, days of female flowering, length of cobs without husks, weight of cobs with husks, weight of cobs without husks, diameter of cobs with husks, diameter of cobs without husks and number of rows per cob. Providing NPK fertilizer at a dose of 44 g/polybag showed the best results in increasing the growth and yield of sweet corn. In the analysis of the variety of applications of liquid coconut water organic fertilizer, the results showed that it had a very significant effect on the variables length of cobs without husks, weight of cobs with husks, weight of cobs without husks, and had a significant effect on the variables of plant height at 2 weeks after planting, number of leaves at 3 weeks after planting, diameter of cobs with husks and cob diameter without husk.

Keywords: coconut water, fertilizer NPK, sweet corn.