ABSTRACT

Sweet corn (*Zea mays* Saccharata Sturt L.) is a horticultural crop that is widely consumed both fresh and in processed form. The problem with sweet corn plants is that sweet corn production is not sufficient to meet market needs, so effort need to be made to increase sweet corn production. One effort to increase sweet corn production is to use NPK fertilizer and Biochar. The aim of this research is to see the effect of NPK fertilizer and Biochar on the growth and production of sweet corn plants. This research used a factorial Randomized Block Design (RBD) with three replications. The first factor is NPK fertilizer which consist of N_0 (0 g/plant), N_1 (5.6 g/plant), and N_2 (8,4 g/plant). The second factor is Biochar which consist of B_0 (0 kg/plot), B_1 (3.4 kg/plot), and B_2 (6.9 kg/plot). The result of the research showed that giving NPK fertilizer and Biochar affect plant height, number of leaves, stem diameter, weight of cobs with husks and without husks, diameter of cobs with husks and without husks, length of cobs with husks and without husks, number of rows of seeds per cob, ton production per Ha of cobs with husks and without husks, and dissolved solids. The best provision of NPK fertilizer for the growth and production of sweet corn plants is N_2 (8,4 g/plant). The best provision of Biochar for the growth and production of sweet corn plants is B_2 (6.9 kg/plot). There is an interaction between the application of NPK fertilizer and Biochar on the variables of plant heighat, number of leaves and length of cobs with husks and without husks.

Keywords: *NPK fertilizer, Biochar and sweet corn.*