

ABSTRACT

Sweet corn (*Zea mays saccharata*) is one of the commodities belonging to the C4 plant, which has a sweeter taste than ordinary corn and has a shorter production life. Sweet corn is a commodity that can provide benefits for farmers because it can be sold at a higher price than regular corn. This study aims to determine the response of growth and yield of sweet corn to the application of cow manure and NPK fertilizer. This research was conducted in April - July 2022. This research was carried out in Tambon Tunong Village, Dewantara District, North Aceh Regency and the Laboratory of the Faculty of Agriculture, University of Malikussaleh. This study used a 2-factor randomized block design (RBD) with three replications. The first faktor is cow manure which consists of 3 levels, namely: K0 (0 gram/plot), K1 (2000 gram/plot) and K2 (4000 gram/plot). The second faktor is NPK fertilizer which consists of 3 levels, namely: N0 (0 gram/plot), N1 (20 gram/plot) and N2 (60 grams/plot). The results showed that the cow manure treatment had a significant effect on the plant height variable and was highly significant on the number of leaves. The NPK fertilizer treatment had a significant effect on the variables of plant height, number of leaves, chlorophyll content and diameter of cob without cob and had a very significant effect on the variables of plant height, number of leaves, cob length, cob length without cob, cob diameter, cob weight, cob weight without husked percobbed.

Keywords: sweet corn, cow manure, NPK fertilizer.