

## ABSTRACT

Sweet corn (*Zea mays saccharata* Sturt) is one of the preferred horticultural crops because of its good taste, carbohydrate content, protein, vitamins and relatively high sugar content but low fat content. Maize production in Indonesia is not yet sufficient to meet consumption needs due to insufficient nutrient-rich land, One way to maximize it is by giving *eco-enzyme* and npk fertilizer. This research was conducted in the experimental garden of Malikussaleh Meteorological Station, Badan Meteorologi Klimatologi dan Geofisika, Muara Batu sub-district, North Aceh district, for 3 months, from July to September 2023. This research was conducted in the form of a field experiment with treatments arranged using a factorial Randomised Group Design. Consisting of two factors. The first factor *Eco-enzyme* (E) consists of 3 levels, namely:  $E_0 = 0$  ml (control)  $E_1 = 22,5$  ml/liter dan  $E_2 = 27,5$  ml/liter. The second factor is NPK (N) consists of 3 levels, namely :  $N_0 = 0$  g/plant,  $N_1 = 5,6$  g/plant and  $N_2 = 8,4$  g/plant. The results showed that the application of *Eco-enzyme* at  $E_2$  and NPK at  $N_2$  influenced the growth and yield of sweet corn plants. There was an interaction between eco-enzyme and NPK treatments at the  $N_2$  (8.4 g/plant) and  $E_2$  (27.5 ml/liter) levels on plant height, number of leaves, stem diameter, cob weight, cob length without cob, production (tons).

**Keywords:** Corn cob, organic fertilizers and compound fertilizers