

## ABSTRACT

Glutinous corn (*Zea mays ceratina* L.), also known as waxy corn, is a special type of corn that is increasingly needed by consumers and industries. The problem with glutinous corn is that production is still low, so efforts need to be made to increase the production of glutinous corn. One of the efforts to increase the production of glutinous corn is the use of 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 glutinous corn plants. This research was carried out in the experiential garden of the Faculty of Agriculture, Malikussaleh University. This research was conducted for 3 months starting from March to July 2023. This research used a factorial Randomized Block Design (RBD) with three replications. The first factor is NPK fertilizer which consist of N0 (0 g/plant), N1 (5.6 g/plant), and N2 (8,4 g/plant). The second factor is Biochar which consist of B0 (0 kg/plot), B1 (3.4 kg/plot), and B2 (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, and ton production per Ha of cobs with husks and without husks. The best provision of NPK fertilizer for the growth and production of Glutinous corn plants is N2 (8,4 g/plant). The best provision of Biochar for the growth and production of Glutinous corn plants is B2 (6.9 kg/plot). There is an interaction between the application of NPK fertilizer and Biochar on the variables of number of leaves weight of cobs without husks and diameter of cobs without husks,

**Keywords:** *NPK fertilizer, Biochar and Glutinous Corn.*