

## ABSTRACT

Purple waxy corn (*Zea mays ceratina* L.) is one of the functional food crops with high nutritional value due to its high anthocyanin content. However, its productivity is still relatively low because of poor soil fertility and limited nutrient availability. The application of soil amendments and organic fertilizers is considered an environmentally friendly approach to improve soil quality and enhance crop productivity. This study aimed to determine the effect of rice husk charcoal and *moringa* leaf liquid organic fertilizer (LOF) on the growth and yield of purple waxy corn (*Zea mays ceratina* L.). The study was conducted using a factorial Randomized Block Design with three replications. Rice husk charcoal treatments consisted of 0, 4, and 6 ton/ha, while *moringa* leaf LOF treatments consisted of 0, 150, and 300 ml/L. Observed parameters included plant height, stem diameter, number of leaves, cob weight, cob length, number of cobs, total soluble solids, and yield. Results showed that rice husk charcoal significantly affected the number of leaves at 21 and 35 days after planting. *Moringa* leaf LOF significantly affected cob length with husk. The interaction between rice husk charcoal and *moringa* leaf LOF had a highly significant effect on cob length without husk. The best treatment combination was 4 ton/ha rice husk charcoal and 150 ml/L *moringa* leaf LOF, producing the highest cob length without husk of 17.96 cm. However, most observed parameters showed no significant effect.

**Keywords:** cob length, cytokinin hormone, vegetative growth.