ABSTRACT

Glutinous corn is one of the potential food commodited that has amylopectin content and a delicious sticky texture. This study aims to determine the effect of several varieties of glutinous corn and the provision of growth regulators on the growth and yield of glutinous corn. This study was conducted in Reuleut Timu Village, Muara Batu District, North Aceh Utara, from December 2024 to March 2025. The experiment was conducted using the Randomized Block Design (RBD) method with two factors and three replications. The first factor was the variety consisted of (V1) URI, (V2) Rasanya F1, (V3) Jantan F1, and (V4) Jutawan F1. The second factor was a plant growth regulator consisted of 3 levels, namely (Z0) 0 ml/l water, (Z1) 6 ml/l water, and (Z2) 12 ml/l water. The variables observed were plant height, number of leaves, stem diameter, leaf chlorophyll, length of cob with husk, length of cob without cob, weight of cob per plant, weight of cob without cob per plant, number of rows per cob, and production. The results of the study showed that the variety treatment had a very significant effect on the variables of plant height, number of leaves, leaf chlorophyll, weight of cob with husk per plant, weight of cob without husk per plant, number of rows per ear and production. The best variety was (V1) Jutawan F1. The provision of growth regulators had a very significant effect on the variables of plant height, leaf chlorophyll, and length of cob with husk. The best growth regulator was (Z2) 12 ml/l of water. There was an interaction between glutinous corn varieties and growth regulators on the variables of plant height and leaf chlorophyll.

Keywords: Waxy corn, varieties, starch, plant growth regulators.