

ABSTRACT

Glutinous maize is a native Sulawesi variety that can be used as food. As national maize production declines, especially glutinous maize, efforts need to be made to increase maize production so that it can meet consumption needs and not depend on imports. The rate of population growth leads to an increasing demand for maize. Efforts to boost maize production can be made through proper defoliation and detasseling. This research was conducted in Tambon Tunong, Dewantara, North Aceh, and at the Agroecotechnology Laboratory, Faculty of Agriculture, Universitas Malikussaleh, from October to December 2024. The aim of this research was to determine the effects of defoliation and detasseling on the growth and yield of glutinous maize plants. This research used a Factorial Randomized Block Design (RBD) with 3 replications. The first factor defoliation (D) consists of (D0) control, (D1) defoliation 53 Days After Planting (DAP), (D2) defoliation 58 Days After Planting (DAP). The second factor detasseling (S) consists of (S0) control, (S1) detasseling 53 Days After Planting (DAP), (S2) detasseling 58 Days After Planting (DAP). The results showed that defoliation treatment had a very significant effect on the variables of weight of cob with husk, cob weight per plot, production (tons/ha) and significantly affected the variables of weight of cob without husk, length of cob with husk, length of cob without husk, and diameter of cob without husk. Detasseling treatment it has significantly affected the variables of cob weight, cob length, cob length without husk, cob diameter, cob weight per plot, and production (tons/ha). There was a significant interaction between defoliation and detasseling treatments on the variables of cob weight (defoliation 58 DAP and detasseling 53 DAP), cob length (defoliation 53 DAP and detasseling 58 DAP), cob weight per plot, and production (tons/ha) (defoliation 58 DAP and detasseling 58 DAP).

Keywords: *Assimilate, Cultivation techniques, Production.*