

Synergy of Selective Detasseling Application in Corn (*Zea mays* L.) with Dense Population

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ABSTRACT

*Corn (*Zea mays* L.) is one of the important food crops after rice. The demand for corn continues to increase along with the population. One way to meet the increasing demand for maize is by increasing maize production with Detasseling technology (male plant extraction) and a dense population. This study aims to determine the effect of the Detasseling application and the use of dense populations on the growth and production of maize. The research was conducted from October, 2019 to January, 2020 in Antirogo Village, Jember Regency. The study used a factorial randomized block design (RBD) with 2 factors, namely Detasseling and dense population, 8 treatment combinations and 3 replications. The Detasseling factor consisted of 4 levels, namely non-detasseling, 40 DAS Detasseling, 45 DAS Detasseling, and 50 DAS Detasseling. Meanwhile, the density factor consisted of 2 levels, namely the spacings of 70 x 5 cm and 70 x 10 cm. Data were analyzed using ANOVA and further tested with DMRT. The results showed that the treatment of dense population with spacing had a significant effect on the parameters of dry cob weight per sampel of 122.89 g and dry grain weight per plot of 10.67 kg. Detasseling treatment had no significant effect on all treatments because the highest average produced was the non-Detasseling treatment or without male flower removal. Furthermore, the interaction between the two treatments, namely male flower extraction (Detasseling) and dense population, affected the dry weight per sample of 106.46 g.*

Keywords: *Corn, Detasseling, Dense Population*