

THE EFFECT OF COMBINATION OF A SINGLE INORGANIC FERTILIZER WITH GLOW GREEN FERTILIZER ON SUGARCANE (*Saccharum officinarum* L.) ORIGIN OF BULULAWANG MULE VARIETY

Supervised by: Abdurrahman Salim, S.Si., M.Si.

Teguh Tri Wahyu Dian Pradana
Plantation Cultivation Study Program
Department of Agricultural Production, Jember State Polytechnic

ABSTRACT

Sugarcane (*Saccharum officinarum* L.) is a plant for raw material for making sugar. The increase in sugar consumption in Indonesia, which continues to increase along with the increase in population, still cannot be met by several sugar industries in Indonesia. One of the causes of the low national sugar production is the low productivity of sugar cane. Therefore, a solution is needed, namely the application of a single inorganic fertilizer with Glow Green fertilizer so that the productivity of sugarcane plants can increase. This research activity aims to determine the effect of a single inorganic fertilizer combination with Glow Green fertilizer on sugarcane (*Saccharum officinarum* L.) from Bululawang mule variety. This research was carried out from August 2021 to February 2022 at the P3GI Experimental Garden (Indonesian Sugar Plantation Research Center) Jatiroto. This study used a non-factorial Randomized Block Design (RAK) with a total of 6 treatments, including 5 levels of single dose of inorganic fertilizer (without application, 25%, 50%, 75% and 100%) and 2 levels of concentration of Glow Green fertilizer (without application and 6 ml/l). Data analysis using ANOVA followed by a 5% BNJ follow-up test. The results showed that the treatment of single inorganic fertilizer with Glow Green fertilizer showed significantly different results on the parameters of observing the number of stems, plant height, and number of internodes and not significantly different in the parameters of observing the number of clumps, stem diameter, and nutrient uptake N, P, and K leaves.