

THE EFFECT OF stem length, stem weight, number of segments and
stem diameter on the weight of sugarcane sap
(*Saccharum officinarum L.*)
(CASE STUDY IN PG. PRAJEKAN, PRAJEKAN DISTRICT,
BONDOWOSO)

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

Sony Setiawan

Plantation Plant Cultivation Study Program
Department of Agricultural Production, Jember State Polytechnic

ABSTRACT

Sugarcane (*Saccharum officinarum L.*) is a type of plantation crop that has a one-season or life cycle once a year. The characteristic of the sugarcane plant is that the stems of the plant contain glucose. It is hoped that the cooperation pattern system between the Sugar Factory and the People's Sugarcane farmers will be collaborative so that there is mutual benefit between the two parties. This research uses data that is already available in Pg. Prejekan, includes data on stem length, stem weight, number of segments and sap weight. The data were analyzed using the multiple linear regression method. The results of this research show that stem length, stem weight, number of segments and stem diameter simultaneously have a significant influence. Judging from the results of the anova calculation, F 816.894 is greater than F Table 5% which is 2.553. The conclusion of this study shows that each variable of stem length, stem weight, number of segments and stem diameter simultaneously has a significant influence. The variables of stem length, number of segments, and stem diameter partially had no effect on the sap weight variable. whereas it is different from the stem weight variable which shows that it partially has a significant effect on the sap weight variable

Keywords : Stem length, stem weight, number of segments, stem diameter, sap weight