

**EFFECT OF GIBBERELLINS AND NITROGEN (N) FERTILIZERS ON  
EARLY GROWTH OF BUDSET SUGARCANE SEEDLINGS (*Saccharum  
Officinarum* L.)**

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**ABSTRACT**

*This study aims to determine the effect of giving growth regulators gibberellins and nitrogen fertilizer on the initial growth of budset sugarcane seedlings. This study was conducted at the Jember State Polytechnic greenhouse from January 2022 to May 2022. This study used a factorial randomized design with two factors. The first factors consists of 3 levels and the second factor consists of 3 levels. Each treatment combination was repeated 3 times. The first factor is the growth regulator of giberelin which includes G1 (50 ppm), G2 (75 ppm), ang G3 (100 ppm). The second factor is the application of nitrogen fertilizer which includes N1 (225 kg), N2 (250 kg) and N3(275 kg). The data obtained were analyzed by ANOVA at the level of 5 %. The result showe that the concentration of gibberellin and the dose of nitrogen fertilizer on the initial growth of budset sugarcane seedlings had no significant effect on plant height (cm), stem diameter (mm), number of tillers, wet weight (grams) and dry weight (grams).*

***Keyword : sugarcane budset, gibberellins ZPT, nitrogen fertilizer***