

PENGARUH KONSENTRASI PERENDAMAN ZPT EKSTRAK DAUN KELOR TERHADAP PERKECAMBAHAN BUD SET TEBU VARIETAS BULULAWANG (*Saccharum officinarum* L.)

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ABSTRACT

*This study aimed to evaluate the effect of various concentrations of moringa leaf extract on the germination and early growth of *Saccharum officinarum* L. (Bululawang variety) bud set seedlings. This effort addresses the need for superior planting materials to support Indonesia's sugarcane productivity. A field experiment was carried out in March 2025 at Politeknik Negeri Jember, structured as a non-factorial Randomized Block Design (RBD). The treatments consisted of soaking the seedlings in moringa leaf extract at six concentrations: K0 (0 g/L, control), K1 (50 g/L), K2 (100 g/L), K3 (150 g/L), K4 (200 g/L), and K5 (250 g/L). Key parameters such as germination rate, germination speed, seedling height, and root volume were observed. Statistical analysis was performed using ANOVA, followed by a 5% LSD post-hoc test. The results revealed that the K1 treatment (50 g/L) yielded the best germination rate (%), while the K2 treatment (100 g/L) had the most significant positive impact on increasing seedling height.*

Keywords: Budset. Sugarcane, moringa