

**THE EFFECT OF SOAKING TIME FOR NATURAL GROWTH  
REGULATORS (ZPT) ON THE GROWTH OF SUGARCANE  
SEEDLINGS (*SACCHARUM OFFICINARUM L.*) BULULAWANG  
VARIETIES**

**Guided by Ir. Titien Fatimah, MP**

Ahmad Fadil

Plantation Plant Cultivation Study Program

Department of Agricultural Production

***ABSTRACT***

Sugarcane (*Saccharum officinarum*) is a commodity plant whose stems are taken to be used for sugar. It is necessary to improve the seed cultivation system in an effective, efficient and environmentally friendly manner to stimulate the growth of sugarcane seedlings, one of which is by using natural growth regulators (ZPT). This study aims to determine the growth of sugarcane seedlings based on the treatment of the soaking time of Shallots PGR with different soaking durations. This research was conducted in Ranulogong Village, Randuagung District, Lumajang Regency from May to July 2021. This study used a non-factorial Randomized Block Design (RAK) with 6 treatment levels and 4 replications. The treatments were T0 = without immersion (control), T1 = 30 minutes of immersion, T2 = 60 minutes of immersion, T3 = 90 minutes of immersion. Observational data were analyzed by analysis of variance / ANOVA using the BNT test at a level of 5%. The treatment of soaking time for natural PGR of shallots on the growth of sugarcane (*Saccharum officinarum*) seedlings of Bululawang variety obtained non-significantly different results on the number of leaves and plant height parameters and for root length parameters, the results were significantly different. The duration of immersion of natural PGR that gave the best growth response on the overall observation parameters was the immersion time of T1 (30 minutes).

**Keywords:** Sugarcane seeds, Shallot Extract, Soaking time.