

**THE EFFECT OF CONCENTRATION AND INTERVAL OF PGPR (*Plant Growth Promoting Rhizobacteria*) SUGARCANE ROOTS ON THE GROWTH OF SUGARCANE SEEDS BUD SET (*Saccharum officinarum L.*) VARIETY PS 862**

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**ABSTRACT**

*Sugarcane (*Saccharum officinarum L.*) is a type of grass plant that can grow in tropical climates. Sugarcane is almost cultivated in all parts of Indonesia, especially on the islands of Java and Sumatra. There is a problem, especially in sugarcane plantations, namely the low productivity of sugarcane. One of the ways to increase sugarcane productivity is by giving PGPR. This study aims to determine the concentration and interval of administration of sugarcane root PGPR (*Plant Growth Promoting Rhizobacteria*) on the growth of bud set sugarcane seedlings (*Saccharum officinarum L.*) PS 862 variety. Jember. This study used a factorial randomized block design with PGPR concentration factors and PGPR administration intervals, there were 8 treatment combinations and 3 replications. The PGPR concentration factor consisted of 4 levels (control, 50 ml/l, 100 ml/l, 150 ml/l). The interval factor for giving PGPR consists of 2 levels, namely (1 week, 2 weeks). Data analysis using ANOVA followed by a 5% BNJ follow-up test. The results showed that the concentration treatment was not significantly different from all observation parameters. The interval treatment for PGPR was very significantly different from the parameter for observing the number of leaves.*

*Key words* : PGPR, interval, bud set