EFFECT OF APPLICATION BASISCROP (BACTERIAL SYNERGY FOR INCREASING SUGARCANE GROWTH AND PRODUCTION) ON VEGETATIVE GROWTH OF SUGAR CANE

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ABSTRACT

It is hoped that using appropriate varieties and providing the right nutrients can be an alternative to increasing sugarcane production. Plant growth promoting rhizobacteria (PGPR) are beneficial microbes that live freely in the rhizosphere, which directly or indirectly have a positive effect on plant growth and development. PGPR plays a role in increasing soil fertility and minimizing environmental damage. This research was carried out. This research was carried out in September - January 2024 at the Jember State Polytechnic Land. The analytical method used is using the independent T test, by carrying out 3 treatments and each treatment contains 30 units. The results of the research showed that the effect of reducing the application of inorganic fertilizer and the application of basiscrop (BC fertilizer, amino acids, Blotong fertilizer) had a very significant effect in the 4th month on plant height and stem diameter in the vegetative growth phase of sugarcane. The effect of reducing the application of inorganic fertilizer and increasing the application of basiscrop (BC fertilizer, Amino Acids, Blotong Fertilizer) greatly influences the wet weight and root volume, but affects the dry weight of the roots in the vegetative growth phase of sugarcane.

Keywords: Sugarcane, Production, Plant growth promoting rhizobacteria (PGPR), inorganic fertilizer