

**SYNERGY TECHNOLOGY APPLICATIONS MICROBIA
ON THE GROWTH AND PRODUCTION OF SUGAR
SUGAR CROP (*Saccharum Officinarum* L.) IN THE
TRACT GARDEN PG PRAJEKAN PTPN XI**

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ABSTRACT

Sugarcane plant (*Saccharum Officinarum* L.) was included in the annual plantation commodities in the gramineae or grass family. The need for sugar was increased, but the sugar industry was still unable to meet this sugar need. This was due to less than optimal absorbed of nutrients which resulted in a decreased in crop yields. Technology was needed to increase the productivity of sugar cane plants. The aim research was determine the effect of the application of synergy technology microbes (filter cake fertilizer, PGPR sugarcane roots and soil exploration of sugarcane fields, and amino acid fertilizer) on sugarcane growth and production (*Saccharum Officinarum* L.) at the PG Prajekan Traktakan Garden PTPN XI. This research was conducted using the T-test method. The results of this research show that the application of microbial synergy technology shows differences in the number of tillers, stem height, stem diameter, sugar cane brix, sugar cane yield, and productivity. However, it did not make a difference to the chlorophyll analysis.

Keywords: Sugarcane, filter cake fertilizer, PGPR sugarcane roots, PGPR soil exploration of sugarcane fields, amino acid fertilizer.