

CHAPTER V. CONCLUSION AND SUGGESTIONS

5.1. Conclusion

Based on the research results, the findings are as follows:

1. Plant Growth Promoting Microorganisms, organic fertilizer, and inorganic fertilizer showed that different nutrient sources had varying effects on the growth and yield of sweet corn. Inorganic fertilizer produced the best vegetative growth and highest yield, including greater plant height, stem diameter, and cob weight. PGPM and organic fertilizer improved plant performance, but were less effective than inorganic fertilizer.
2. The most effective treatment for enhancing sweet corn growth productivity was the combination of 50% organic fertilizer + 50% inorganic fertilizer + PGPM. This treatment produced growth and yield comparable to the full inorganic fertilizer application while reducing chemical fertilizer use.

5.2. Suggestion

Based on the findings of this study, it is recommended that integrating nutrient management with organic and inorganic fertilizers, including PGPM, can increase crop productivity while reducing chemical dependency. It is also suggested to conduct field scale trials to confirm the effectiveness of this combination under open field conditions. Continuous monitoring of soil properties and microbial activity is recommended to evaluate the long-term impact of integrated fertilization on soil health and productivity.