



**QUARTERLY RESEARCH PROGRESS REPORT**  
**QUARTER: FOURTH QUARTER (October - December, 2022)**

**Research Title: *Field Evaluation of Bio-hardened Abaca with Plant Growth Promoting Microorganisms (PGPM) as Biofertilizers***

**I. Program/Project/Study Objectives**

**Project Objectives:**

1. To evaluate the growth and yield performance of bio-hardened tissue-cultured abaca plantlets under field condition;
2. To assess the diversity of microbial population in the rhizosphere of field grown tissue-cultured abaca plantlets;
3. To determine the nutrient uptake of field grown abaca applied with PGPM; and
4. To document the farmers acceptability of the field evaluation trial

**II. Relevance to VSU & College's Thrust and Priorities:**

**III. Highlights of accomplishments within the quarter**

**A. Targets for the quarter**

- Regular observation of abaca plants
- Six (6) growth parameters gathered
- Weeding operations on the treatment plots
- Harvested of abaca plants
- Encoded data

**B. Highlights of accomplishments**

- Observed and documented the performance of abaca on the field
- Gathered monthly data: plant height (cm), number of leaves, leaf length (cm), leaf width (cm), base circumference (cm), and number of suckers of abaca on the field
- Performed weeding operations on treatments plots, and ring weeding on farmers practice treatment
- Harvested of abaca plants
- Encoded and arranged the data of abaca