VISAYAS STATE UNIVERSITY

ECOLOGICAL FARM AND RESOURCE MANAGEMENT INSTITUTE
Visca, Baybay City, Leyte, PHILIPPINES
Telephone: (053) 565 0600; local: 1040
Website: www.vsu.edu.ph

VSU RESEARCH QUARTERLY REPORT OF ACCOMPLISHMENT FORM
[January 1 to March 31, 2022]

I. Program/Project/Study Objectives

Project Title: **Characterization and Quality Assessment of Locally Made Biofertilizers**

Study 1	:	Microbial and Molecular Analysis of Biofertilizers Developed at VSU (RTPiamonte)
Study 2	:	Physico-Chemical and Biochemical Characterization of Locally made Biofertilizers in VSU- EcoFARMI (for 2022) (RBArmecin)
Study 3	:	Field Evaluation of Locally Made Biofertilizers to a Selected Crops (RTPiamonte and RBArmecin) (for Phase 2)

Objectives

General Objective:

To evaluate the quality, characteristics, and effectiveness of different biofertilizer products developed at VSU

Specific objectives:

Study 1

1. To determine the temporal variation in microbial population density in biofertilizers developed at VSU.
2. To characterize the microbial isolates obtained from the biofertilizer products of VSU.
3. To profile the microbial species richness of the biofertilizer products of VSU using molecular approach.

Study 2

1. To determine the temporal variation in physico-chemical and biochemical composition of biofertilizer products of VSU.

Study 3

1. To evaluate the efficacy of biofertilizer products of VSU in the field (for Phase 2).

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

III. Highlights of accomplishments within the quarter

Study 1: *Microbial and Molecular Analysis of Biofertilizers Developed at VSU*

a. Targets for the quarter
   - Microbial population density analysis for LABS, EM and VSU vermicast.
   - Isolation of potential microorganisms from LABS, EM and VSU vermicast.

- Cultural microbial colony characterization of microbial isolates from LABS, EM and VSU vermicast.
- Procurement of PCR reagents for molecular identification of microbial isolates derived from different VSU biofertilizers.

b. Highlights of accomplishments
- The microbial load (colony count) of LABS, EM and VSU vermicast biofertilizers was determined.
- Isolated microbes from LABS, EM and VSU vermicast biofertilizers into pure culture.
- Characterized the pure culture isolates as to its colony form, margin, color, and density.
- Procured PCR reagents for molecular identification of microbial isolates derived from different VSU biofertilizers.

Study 2: *Temporal Variation in Physico-Chemical and Bio-Chemical Composition of Locally made Biofertilizers*

a. Targets for the quarter
- Sample preparation and collection
- Biochemical and nutrient analysis

b. Highlights of accomplishments
- IMO2 and IMO6 biofertilizers were prepared and samples were collected.
- Conducted some biochemical and nutrient analyses on LABS, EM and VSU vermicast biofertilizers.

Other Project Accomplishments:
- Prepared and submitted the First Quarterly Progress Report 2022

IV. Issues, Problems and Recommendations

Submitted by:

ROBELYN T. PIAMONTE
Project Leader

Recommending Approval:

DHENBER C. LUSANTA
OIC Director, Eco-FARMI

Approval:

ROSA OPHELIA D. VELARDE
Director for Research