



QUARTERLY RESEARCH PROGRESS REPORT
QUARTER: 1st

**Research Title: CHARACTERIZATION AND QUALITY ASESMENT OF
LOCALLY MADE BIOFERTILIZERS**

I. Project Objectives:

General:

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

Specific:

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

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

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

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

III. Highlights of accomplishments within the quarter

A. Targets for the quarter

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

- Characterize microbial isolates from VSU biofertilizer products;
- Submit samples to Kinovett Scientific Solutions for species identification;

- Identify microbial isolates from VSU biofertilizer products.

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

- Consolidate data of physico-chemical composition of biofertilizers developed at VSU;

B. Highlights of accomplishments

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

- Culturally and morphologically characterized pure cultures of bacteria and fungi isolated from VSU biofertilizer products.
- Submitted 30 pure culture isolates (5 fungi and 25 bacteria) from VSU biofertilizer products to Kinovett Scientific Solutions for species identification;
- Analyzed and interpreted biological data using DNA subway and NCBI BLAST. Twenty-eight pure culture isolates were identified.

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

- Consolidated data of physico-chemical composition of biofertilizers developed at VSU;

IV. Physical Report of Operation

A. Research Program

	Particulars/Name and Brief Description of Utilized/ Commercialized Technologies	Number
Outcome Indicator		
1. Number of research outputs utilized by the industry or by other beneficiaries	None	
Output Indicator		
1. Number of research outputs completed within the year	None	
2. Percentage of research outputs published in internationally-referred or CHED recognized journal within the year	None	

B. Technologies/Information patented and commercialized

Technology Invention(s) New Information	Invention Patent Number	Date of Issue	Utilization of Invention		Name of Commercial Product
			Development	Service	
A. Technology Invention(s)	NA				
B. New Information	NA				

C. Research papers published (Identify if articles were for Research, Extension, Innovation or MSc/ PhD Studies)

	Title	Author (s)	Date/Year/Publication/ Publisher	Remarks (If Research, Extension, Innovation, Thesis, MSc/PhD)
a. Refereed Journal	None			
Institutional				
National				
International				
b. Semi-popular pub'l'n (newsletter, etc.)				
c. Popularized pub'l'n (technoguides, etc.)				
d. Book Chapter/s				
e. Books				

D. Citation

Research Output as Cited by Other Researcher(s) in Journal Activities									
Title of Research Output/ Published Journal Articles/ Book	Title of Journal & Vol. Issue/ Year	Keywords	Researcher (s)	Citation Details					
				Author(s) Who Cited the Research Output	Title of Article Where the Research Output Was Cited	Title of Journal	Vol. / Issue / Page No.	City/ Year Published	Publisher
None									

V. Issues, Problems, and Recommendations

Submitted by : **ROBELYN T. PIAMONTE**
Project Leader

Endorsed by : **JEROME O. ARRIBADO**
Center Director

Date Submitted : _____

Received by OVPREI-RPO: _____

Date Received : _____