



QUARTERLY RESEARCH PROGRESS REPORT
QUARTER: 2nd (April-June 2023)

**Research Title: PERFORMANCE OF THREE ONION VARIETIES
UNDER THREE AGRO-ECOSYSTEM**

I. Project Objectives:

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

III. Highlights of accomplishments within the quarter

A. Targets for the quarter

- Grow healthy onion
- Control weeds especially sedges
- Develop protocol suited for the VSU environment

B. Highlights of accomplishments

- Onion plants were terminated due to poor performance caused by uncontrolled growth of sedges (April 2023), *see figure 1 and 2*
- Re-sowing of seeds (May 12, 2023), *see figure 3*
- Land preparation and basal fertilizer application (June 9 – June 16, 2023), *see figure 4*
- 1st herbicide application, Machete (June 17 & 19, 2023), *see figure 5*
- Transplanted new seedlings (June 20, 2023), *see figure 6*
- Plant height data gathered (June 27, 2023)
- 2nd herbicide application, Onecide (June 27, 2023)
- 3rd herbicide application, Goal (June 30, 2023)
- Watering was done whenever necessary
- Hand weeding is maintained every Friday

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		
Output Indicator		

1. Number of research outputs completed within the year		
2. Percentage of research outputs published in internationally-referred or CHED recognized journal within the year		

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)					
B. New Information					

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				
Institutional				
National				
International				
b. Semi-popular publ'n (newsletter, etc.)				
c. Popularized publ'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

V. Issues, Problems, and Recommendations

- Recommended herbicide of the Nueva Ecija farmers is not appropriate due to differences of weeds species,
- thus excessive growth of sedges competes with the growth of the young onions
- Hand weeding at early stage of the onions greatly disturbs the plant that resulted to poor growth
- Herbicides for onion needs to be purchased online

Recommendations

- It is recommended to use post and pre-emergent herbicide to onion plants at early stages of growth to minimize disturbance to plant
- It is better to plant onions under protected structure
- Seedlings are produced through seedbed
- Do not overgrow seedling before transplanting

Photo Documentation



Figure 1. Terminated under protected structure onion (2 months old)



Figure 2. Terminated open field onion (2 months old)



Figure 3. Re-sown onions



Figure 4. Land preparation



Figure 5. Basal fertilizer application



Figure 7. Herbicide application



Figure 6. Transplanting of Onion



Figure 7. Newly transplanted onions var. Golden Pinoy, Pirate, Superex



Figure 8. Two-week old onion var. Golden Pinoy, Pirate, Superex

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