



5 May 2023

Dr. Edgardo E. Tulin

Tuklas Lunas Laboratory
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Through: **Ma. Theresa P. Loreto**
Director, ARIC
Tuklas Lunas Development Center
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Dear **Sir Tulin**,

Greetings!

I am **Krista Abbymae B. Moral**, a fourth-year BS Biotechnology student from the Department of Biotechnology of the Visayas State University. I am writing this letter to ask permission from your department to use the following equipment for my thesis experiment. The title of my proposed thesis outline is "**Enhancement of Bioethanol Production Levels of Common Vegetative Wastes with the Addition of Blend Crude Cellulase Enzyme from *Aspergillus niger* 3080**". This study will investigate the production of ethanol through mixed vegetative peels as substrate using the microorganism *A. niger* as catalyst to degrade cellulose and *Saccharomyces cerevisiae* to convert these sugars into ethanol.

This is the following **equipment** I would like to ask to use in your laboratory for the conduct of my experiment:

1. Shaker Incubator

I will use the shaker incubator starting on May 5, 2023. I will be using the shaker incubator for the incubation of my enzyme extraction solution containing an active bacterial culture of *A. niger* with the temperature of 37° C for 24 hours.

I will be operating in your laboratory with my thesis adviser assisting me throughout the process.

The research experiment is expected to take approximately three (3) months. Rest assured that all the laboratory policies will be abided and that the equipment will be handled with care.